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GOVERNMENT ... LIBRARY.
Section .....
No. .....

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

OL. VI.] MADRAS, SATURDAY, JANUARY 5, 1901. [

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, ie 11th instant. Season reports should be sent direct to ie Printers, Messrs. HIGGINBOTHAM & Co.

Coorg.

POLLI BETTA, Xmas Day.—*Weather.*—Mostly cloudy. Some very hreatening looking clouds last evening. Nothing came of hem, however. It is just comfortably cool now, without eing chill. *Crop.*—Contract picking progressing favourably. Crops better than it was supposed they would be. Last lossom time seems to have been a good season. *Labour.*—ufficient. *Health.*—A number of cases of fever prevalent. *Prices of grains.*—There has been some easement in prices.

IN THE TWENTIETH CENTURY.

ONLY during the last quarter of the Nineteenth Century ave British-grown Teas made great progress; during the ame period British-grown Coffee has, we regret to say, ade no advance in competition with Brazilian and other oreign sorts. There have been forward movements in regard o Pepper and some other products; Cinchona has latterly xhibited fairer prospects. Yet, on the whole, the curtain rings own on the old century amidst a dulness and depression mong Indian planting products that almost appals the bserver interested in the welfare of the planting industry. Vith but one or two exceptions—and these relating perhaps ore to native-grown products than to those cultivated by he European planter—prices are low, so low that there is but ttle inducement to the grower of products that appear to be verywhere in over-supply. Tea has shown a bad average ately. In a measure, this may be attributed to the presence i the market of an unusually large proportion of low sorts; ut that does not explain the whole reduction in price. Supply as increased more rapidly than demand. Part of the proceeds of sales has been expended in trying to develop old and up new markets. The effort has been attended with so success; but consumption has not overtaken production, and the general level of prices has fallen. China's competition has been met successfully, yet is still strong, while in Japan there is as much activity and enthusiasm as in Ceylon, and in various markets Japan teas have to be reckoned with as formidable rivals. The century closes at a moment of depression, yet, as regards Tea at least, it may still be said that there is hope of a recovery, and there is, in very many instances, a profit still being reaped from it.

The position in regard to South Indian Coffee is very different. Put aside a few well known marks, a few that have made for themselves a special market or are steadily taken off by the same dealers year after year, and what remains? A succession of low prices, lower of late. Moreover, we fear that Indian Coffee has lost some of its old prestige; and we would even go the length of saying that in some markets—such for instance, as the United States—it has never acquired the prestige that is its due. This must be largely attributed to unfortunate circumstances that tie the hands of many coffee-planters in India. It is partly due, however, to a deficiency of enterprise. A few days ago, one of our subscribers wrote us remarking that *Planting Opinion* had become more of a Tea than a Coffee organ. For some weeks past, true. But why? A few months ago we ran Coffee, and Tea had to take a back seat for a time. Latterly, tea-planters have been all alive. British-grown teas have been spoken of and written about in all parts of the Empire. There has been a little war between dealers and importers in England, another in regard to warehouse rates, etc. There has been discussion of quality, and packing, and railway and steam freights. A suggestion that green tea should receive more attention and black less, has caused a lengthy controversy in the newspapers. Every paper connected with planting has had to take note of these things; and, as for ourselves, Tea has necessarily pushed Coffee into a corner for a time: not through any desire of ours, but for the simple reason that tea-men have been awake, while coffee-men have been sleeping.

Impartial critics will, we think, admit that this state of affairs was foreshadowed months ago in the columns of this paper. We have repeatedly warned coffee-planters of the need for following similar tactics to those adopted by their

Tea rivals: the development of old markets, the opening out of new; the advertising of Indian coffee, so that it may make a firm stand against its foreign competitors. How little effect our words had for a long time is well known. Recently, the word has been taken up by some of the leading men of the community—Tea-men as well as Coffee—and the new century opens at a time when there is reasonable ground for the hope that Coffee-men mean to bestir themselves at last. Our remarks from time to time, the notes we make, and the extracts we take from other papers, must be mainly influenced by what is going on around us, not by what we think ought to be going on. If there be a boom in Coffee, or a strong effort to push it ahead of Tea, our pages will soon occupy themselves more with Coffee than they have done just lately. Coffee-planters can help us at all " if they have the will. Meanwhile, we wish all planters " Co. Prosperous New Year, and we venture to express the " hat Indian products will make great progress during " Century that has just opened. For Tea, Coffee, Pepper, " Cona, Cardamoms and Ginger, not to speak of several " products that are under trial, there is hope, provided " ose concerned work vigorously and do not neglect the lesson caught in the fable of the Bundle of Faggots.

A TANJORE ENTERPRISE.

We would call our readers' special attention to an advertisement in our present issue relative to the Tanjore 4 per cent. Railway Loan, for which tenders are invited by the District Board of that place. It may be, in these days of depression, that few planters have funds to spare for investments of the kind referred to. Yet the enterprise is one that deserves strong support, not only because of its intrinsic merits, but because it inaugurates what we trust will prove to be a new era in local enterprise in Southern India. Tanjore is bound to succeed with its Railway, and its success should encourage District Boards elsewhere to follow an admirable example. There is no reason why something of the same kind as Tanjore has undertaken should not be done in various planting centres which are greatly in need of improved communication. The District Board has made an excellent move in declaring its readiness to receive and consider on their merits offers to exchange Government 3½ per cent. paper for its 4 per cent. Debentures. By this arrangement the investor will be saved the trouble and expense of selling out his stock in the way of brokerage, commission, etc. He will also receive a readily saleable security in exchange for one that must at present be regarded as difficult to dispose of. No doubt the 3½% loan is payable at par in 1904, but it may not then be practicable to obtain as safe and profitable an investment as that which now offers. We would also specially point out that to investors who so desire the half-yearly interest and the final discharge of the Debenture Bond will be remitted free of cost by means of Remittance Transfer Receipts on any Government Treasury in the Madras Presidency. This is a convenience that will be widely appreciated in the Mofussil. The fame of the Tanjore Bull is world-wide, and we trust that "bull" influences will be appropriately brought to bear in the floating of the loan under reference, and afterwards with respect to the debentures.

BOARD OF TRADE RETURNS.

NOVEMBER, 1900.

The following figures are taken from the official t showing the imports, consumption, and exports o undermentioned articles for the eleven months ending ember 30, in the present and two previous years, com from the Board of Trade Returns, with stock in U. K November 30 :—

Coffee.—Imports reduced, home consumption incre The falling-off in exports puts stock on almost the old l representing about six months' supply for home and exp

—		1898.	1899.	190
Import	cwts.	900,857	974,072	734
Home Consumption	,,	233,767	248,220	261
Export	,,	520,513	634,463	440,
Stock	,,	342,000	362,000	347,

Cocoa (Raw).—Largely increased imports, consum and stock; export again showing a decrease.

—		1898.	1899.	190
Imported ...	lbs.	39,976,477	42,409,540	49,178
Home Consumption	,,	29,306,400	32,151,998	34,825
Export	,,	9,258,715	10,422,486	8,647
Stock	,,	16,424,000	14,618,000	17,625

Cocoa (Prepared).—Home consumption and export panded; stocks dwindled down to about half-a-mon requirements!

—		1898.	1899.	1900
Imported ...	lbs.	7,372,436	4,775,039	7,086
Home Consumption	,,	5,957,742	5,028,142	6,250
Export ...	,,	631,831	688,562	838
Stock	,,	1,188,000	326,000	290

Tea.—Imports steadily increasing, and stocks hea despite a considerably larger demand for export and h consumption. The statistical position of the product is very strong.

—		1898.	1899.	1900.
Import	lbs.	242,256,981	259,250,678	268,106,(
Home Consumption	,,	206,373,440	224,780,128	231,312,4
Export	,,	33,454,872	29,710,845	40,034,7
Stock	,,	91,198,000	101,141,000	108,525,(

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nic son's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf pe unable to procure the Ear Drums, may have them free.

Address—No. 989 D, THE NICHOLSON INSTITUTE, Longcott, Gunnersbur *Lon*

[w. 26-5-00—26-5-1901.]

THE BRITISH TEA DUTY.

At a meeting of the Planters' Association of Ceylon at Kandy, on the 29th ultimo, the following resolution was unanimously adopted :—

That this Association would urge on Her Majesty's Government a reduction, at as early a date as is compatible with the financial needs of the Empire, of the import duty on tea in Great Britain, which is now equal to nearly 100 per cent. *ad valorem*, whereby consumption is checked, and the stability of the tea planting enterprise in this colony seriously threatened.

The resolution is discreetly worded. From motives of loyalty, the planting community abstained from offering strong opposition to the recent enhancement of the British tea duty ; from motives of policy they have now to put on record their opinion that that duty ought to be reduced "at as early a date as is compatible with the financial needs of the Empire" This will prevent any future Chancellor of the Exchequer from representing that the Government was never informed by planters of the need for a reduction. We trust that the Indian planters will join in and support Ceylon. It is pleasing to note that just while representations are being made anent the British duty, similar representations are being made also in the United States. There, however, abolition of the 10-cents duty is asked for. We trust it may be obtained ; but fear that there also delay will be unavoidable.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

The General Committee of the Indian Tea Association, Calcutta, states in its Monthly Return of Sailings and Daily Customs Entries of Tea from Calcutta, and of Exports of Ceylon Tea for four years up to 3rd December, 1900 :—

Exports of Indian Tea from Calcutta.

	1900. Lbs.	1899. Lbs.	1898 Lbs.
Sailings to Great Britain in November	22,859,800	22,256,719	21,791,996
Sailings to Great Britain from 1st April to 30th November ..	120,804,306	116,682,331	108,709,973
Sailings to Australia and New Zealand in November	711,247	500	1,231,448
Sailings to Australia and New Zealand from 1st April to 30th November	7,669,813	5,438,277	4,337,059
Sailings to America in November ..	337,599	896,488	640,196
Sailings to America from 1st April to 30th November	3,232,082	4,480,472	2,336,432
Sailings to other places in November	1,875,507	1,030,288	1,100,852
Sailings to other places from 1st April to 30th November ...	7,144,888	6,314,865	6,835,874
Total Sailings from 1st April to 30th November	138,851,089	132,915,945	122,219,338

			Lbs
Daily Customs Entries for Export to Great Britain from 1st April to 30th November ...	...	1900 ...	125,466,967
Do.	do.	do. ...	1899 ... 118,954,267

Exports of Tea from Ceylon.

Total Exports from 1st January to 3rd December,			1900 ...	132,210,647
Do.	do.	do.	1899 ...	116,599,700
Do.	do.	do.	1898 ...	108,154,184
Do.	do.	do.	1897 ...	104,412,441

Statement showing the Exports of Tea to Sundry Ports during the month of November, 1900.

	Lbs.		
FOREIGN PORTS.			
Trieste	620		
Stockholm	15,200		
Copenhagen	1,000		
Marseilles	540		
Bremerhaven	13,950		
Hamburg	61,686		
Genoa	440		
Naples	1,060		
Odessa	110,345		
Constantinople	160,956		
Berbera	5,236		
Cape Town	19,780		
Zanzibar	1,140		
Mombassa	550		
Mauritius	100		
Port Said	7,065		
Suez	14,665		
Aden	21,260		
Hong-Kong	342,420 *		
Shanghai	20		
Bunder Abbas	4,430		
Bushire	9,780		
Jeddah	1,290		
Sourabaya	200		
Singapore	4,740		
Batoum	35,821		
Baghdad	13,022		
Beyrouth	1,870		
Bussora	82,604		
Jaffa	808		
Samsoum	6,620		
Smyrna	9,325		
Trebizonde	370,319		
Mersina	350		
			1,319,212 lbs
Bombay	529,731	...	
Kurrachee	2,500	...	
Other Indian Ports	24,064	...	
			556,295 ,,
Total			1,875,507 ,,

NOTES.

Coffee in London. Prices unchanged—Mysore B. 57s.

Cinchona in London. Cable advices report a flat market. Price per unit 1⅜d. Stock 10,000 packages.

Rubbishy Tea. The best prices lately offered in London for some of the rubbish shipped home as Tea was 1½d to 2d. per lb.

Ceylon Green Tea Grant (New Scheme). The total amount of Ceylon Green Teas on which the Grant was paid up to the 14th ultimo was 224,342 lbs., leaving 775,657 lbs. still available for Grant.

Tea in the U. K. A recent return by the Board of Trade to the House of Commons shows that England now drinks more tea than all the other European countries and the United States put together.

Tea growing in Victoria. The *Sydney Herald* of December 4th says :—"It is the intention of the Minister of Agriculture to test the suitability of Victoria for

* It is understood that the bulk of this tea consists of transhipments for the United States and Canada.

growing tea, and an application will be made to the Indian Government for a small quantity of seed."

Rubbishy Teas. The Ceylon Chamber of Commerce has taken up the recent remark of the *Globe*, about certain alleged rubbishy teas. The Chamber's letter to the Bengal Chamber of Commerce is given in our present issue and deserves to be studied.

Java Cinchona. The exports of Java bark for November were 1,490,000 Amsterdam lbs. against 1,362,000 Amsterdam lbs. last year, and 1,220,000 Amsterdam lbs. in 1898. The total for the eleven months is 9,533,600 Amsterdam lbs., against 10,764,000 Amsterdam lbs. last year, and 10,115,000 Amsterdam lbs. in 1898.

Coffee in the U. S. Sales on the Pacific Coast to end of October, as reported by Mr. C. E. Bickford, were 147,251 bags, against 152,283 bags last year. Stock of Central American in first hands, November 7,13,072 bags, of which 9,731 bags were Guatemala. Strictly good Guatemala, 12c.; good unwashed Salvador, 10½c.; good Costa Rica, 11¾c.

Japan Tea in the U. S. Shipments of tea from Yokohama and Kobe, season 1900, were 32,806,295 pounds to and including October 14, against 35,523,512 pounds same time in 1899. Total settlements to October 22, were 302,314 piculs; same time, 1899, 327,161 piculs. Stocks, October 22, 3,187 piculs, against 9,394 piculs same time 1899.

Colombo Tea Sales. At the sale on 19th ultimo about 14,746 pkgs.=1,071,447 lbs. were offered, of which about 8,392 pkgs.=544,528 lbs. were sold. Prices were very irregular, and buyers showed a disinclination to operate. The quality of many of the teas offering is still very inferior, though a slight improvement was noticeable from not a few estates.

Phosphates in Christmas Island. Sir John Murray, K.C.B., is exporting phosphates from his 100-year-lease property, Christmas Island, there being great deposits there. He proposes to open up the island agriculturally in due time, and, no doubt, his recent visits to Ceylon and India are in connection with the supply of these phosphates to various markets.

The French Tariff. "The enhancement of the French Import duties on Indian coffee, pepper, etc., has been postponed for six months till the end of June, 1901." This is the latest announcement. The contradictory pieces of information that have been received lately are very puzzling; but, at any rate, there is to be no change in the French Import Tariff on tea, coffee, etc., just at present.

The Tea Duty in the U. S. The tea trade in America is about to take active steps to have the 10 cents duty on tea removed. The *American Grocer* remarks:—"It ought never to have gone on, unless with coffee, and as a war tax, to be removed at the earliest possible moment." The Philadelphia importers are moving in the matter, and have appealed to the National Board of Trade and Transportation for aid.

Coffee in Sao Paolo. The *Brazilian Review* of 13th N ember, 1900, states:—This y coffee crop in São Manoel do Paraiso is reported to greatly exceeded its estimated yield of 37,500 kilos. while flowering promises a larger crop still, next year. In Carlos do Pinhal the prospects of the future crop have su ed from the southerly winds lately prevailing. A co cleaning mill in Bello Monte has been destroyed by fire.

The Amsterdam Cinchona Auctions. At the December auction, the was divided as follows:—*Succiru* 89,948 kilogrammes; *Ledgeri* 498,776 kilagrommes; *Hybrid* and other kinds, 88,693 k grammes. Of the total thus formed, root bark for 76,764 kilogrammes. The richest parcel of bark consiste 9 bales of *Ledgeriana*, which contained an equivalen 9·94 per cent. of sulphate of quinine.

Tea Exports from India. The exports of tea from I from 1st April up to December to the United Kingdom total 137½ millions lbs., and t other Countries 19½ millions lb. The comparison with vious years is as follows:—

1st April to 17th Dec.	To U.K.	To all other Countries.	Tota
1900 ...	137,500,000	19,500,000	157,000
1899 ...	130,802,934	17,650,086	148,453
1898 ...	116,587,565	13,420,240	130,007

Coffee in Tonkin. The Planters' Association, of Ton recently discussed the question coffee cultivation in that quarter. Enterprise there is, the *China Overland Trade Report*, that line is still in an exp mental stage. The best soil and climate for coffee in region remain still to be ascertained. The plantations sta have met with small success. One main drawback to en prise lies in the prevalence of typhoons. The climat Cochin-China has been found to be too damp for Arab coffee, but the Liberian kind thrives there, On the o hand, the Arabian berry takes readily to the dry climat Tonkin.

London Tea Sales. A telegram dated 20th ultimo, f Messrs. Gow, Wilson and Stan reports that the market generally was weak. The price fair liquoring Ceylon Pekoe Souchong was 5½d (same as previous week), and the average price of Ceylon tea sold garden account was 7⅛d. (a farthing down), as against and 7⅞d. respectively in the corresponding week last y *Reuter* reports good to fine Ceylon tea firm, and commo medium rather easier: 30,000 packages of Ceylon tea offered for sale, of which 26,000 were disposed of; whil the 43,000 packages of Indian Tea offered, only 333, found purchasers.

A Botanical Acquisition. Botanists will be interested to l that the important cryptogamic barium of M. Bescherelle, a well-known French bota has just been acquired by purchase for the Departmen Botany in the British Museum. This herbarium, whic one of the most complete of its kind in the world, con chiefly of mosses, lichens and liverworts, collected in g part in the French colonies, where M. Bescherelle has p tically had a monopoly in this respect for the last thirty ye The *Manchester Guardian* understands that there are 15

ecimens of mosses, and nearly 4,000 specimens of liverworts this fine collection.

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e Advantages of Forestry.

"It is now universally acknowledged that the system of forest management which had its origin, and is en to this day chiefly, if not almost exclusively, carried out the Continent of Europe, has passed beyond the experiental stage, and has fully justified its claim to be regarded at once thoroughly scientific and eminently practical." says the *Timber News*, adding that as the secret of the stem's success lies largely, if not wholly, in the fact that hough men may come and men may go" the system "goes for ever," the primary cause of that success must be ught in the systematic forest training, which, with the oroughness which is characteristic of the German nation, s been provided by State institutions throughout that untry.

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xperiments with Manures.

The Cylinder Method is used quite extensively at New Jersey experiment station to compare the action of rious fertilizers upon different crops. The cylinders are iron or earthenware, about 1 ft. in diameter and 3 ft. deep. ney are set in the ground level with the surface. By this ethod the fertilizers can be applied with great exactness and e conditions kept under control. At present there are 120 linders in use to determine the effect of chemical nitrates s compared with or ganic nitrates, that is to say, nitrogen rived from manures. Pot experiments are another novelty. ne earthenware pots of uniform size are kept on a large ck on wheels so that the whole apparatus can be moved out doors on suitable days and moved back into greenhouses hen the weather is unfavourable. In this way uniform nditions can be secured for a long period of time. This is plan of experiment derived from the German experiment rms, and is being tried also at the experiment station in ass. and in other States.

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lcutta Tea Sales.

About 17,000 packages were printed for the Calcutta Tea Sale of 21st timo, of which 14,500 were sold, and 2,500 withdrawn, or gistered. There is little change to report in the market, ood teas, with point and flavour, being wanted at fair alues; while "coarse plucking" rubbish is almost unsaleble at any price. The bidding for some Pekoes of this class ll as low as seven pice per lb., and not wanted at that. ny parcels with flavour and quality did well. This was the osing auction of the year, the next sale being fixed for riday, 4th January, 1901. It is more than likely, says the *ndian Daily News*, "that the market will open very firm fter the Christmas holidays for good teas. Such are wanted, nd will be paid for, but there seems no prospect of improvement for the rubbish before referred to. Without exaggeraon, some of the stuff offered yesterday as tea is not worthy the name, and it is, perhaps, a good thing for the industry enerally, that the price, now obtainable for such, shows a eavy loss on bare cost of production."

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msterdam Bark Sales.

The Amsterdam correspondent of the *Chemist and Druggist* telegraphed 6th ultimo:—There were added to the auctions held here -day, a further 314 bales (23,042 kilos.) of Java bark, containing 1,000 kilos. of quinine sulphate, so that the total amount catalogued was 7,396 bales, 8 baskets, and 247 cases containing 677,417 kilos., representing an equivalent of 33,221 kilos. quinine sulphate, of which 91,588 kilos. were druggists' bark (2,245 kilos. q.s.) and 585,829 kilos. manufacturing bark (30,976 kilos. q.s.), with an average percentage for the manufacturing bark of 5·29 per cent., against 5·39 per cent. for the November auctions, and an average of 5·38 per cent. for the ten Amsterdam auctions of 1899. Of the above 7,651 packages offered, 7,645 packages were sold at an average unit of 8c. per ½ kilo. against 10·90c. per ½ kilo. paid at the November auction. The following were the approximate quantities of quinine purchased by the principal buyers:—English and American factories, who purchased the equivalent of 10,630 kilos.; the Brunswick factory, 7,412 kilos.; the Mannheim and Amsterdam factories, 7,938 kilos.; the Frankfort-on-Main and Stuttgart factories, 4,316 kilos.; and various buyers, 2,913 kilos. The prices paid for the manufacturing-bark ranged from 8¼c. to 80½c. per ½ kilo.; and for druggists'-bark from 8¼c. to 43¾c. per ½ kilo. The tone was steady at the decline.

Notes from the Straits.

Mr. Stanley Arden, recently appointed Superintendent of Government Experimental Plantations in the Federated Malay States, wrote lately to a friend in Ceylon:—"Since my arrival, my time has been taken up with travelling in this and the neighbouring States, so as to gain a knowledge of the chief requirements of local agriculture. Everywhere, I have been, coffee is by far the largest crop grown. Its cultivation, however, is being gradually abandoned, not by any means on account of disease, but because of low-prices. Many planters go in largely for rubber planting, which with coconut cultivation is well suited to large portions of land here. In many cases rubber *Hevea* and coconuts may be seen planted among the coffee, thus ousting the latter as did cinchona and tea in Ceylon. Tea would no doubt grow well here on the higher lands, but evidently the present price of labour would not make its cultivation profitable. The Agricultural labourers are nearly all Tamils imported from India, the natives being quite in the shade and devote their time to fishing, boating and other indolent pursuits." Under date, 12th December, Mr. Stanley Arden writes:—"I have been touring ever since I reached the Federal Malay States, and consequently have got a fair knowledge of the country and agriculture generally. The 'Para' Rubber out here is looking very well and in a few years Coffee will be a thing of the past. Most planters are planting in 'Para' and Coconuts among the Coffee, so that the latter will soon be almost entirely supplanted. 'Rambong' (Gutta Percha?) is also doing very well with us."

LETTERS TO THE EDITOR.

FOXEY COFFEE

DEAR SIR,—Can you, or any of your numerous readers, very kindly give me any information as to the cause of foxiness in coffee, and suggest any possible cure? Are you aware of any books or pamphlets dealing with this subject?

PERCY G. TIPPING.

[We trust that some of our readers will give their opinions on this subject, though it is one that has been much discussed in the past.—ED., *P O.*]

GENERAL ARTICLES.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Money and Exchange.—*Rio, 10th November*, 1900.—Ninety days' rate on London opened on Monday at 10½d. rose to 10 25/32 on Tuesday and closed to-day at 10 7/16 and 10 15/32d.

The re-appearance of the Bank of the Republic, which re-opened its doors on Monday last, under the auspices of the new management was the signal for quite a little flutter in the exchange market that succeeded in pushing the rate to 10 25/32d. So far as we can judge the methods of the *Republica* under Government direction are not very different from those of other banks. to make money out of exchange, honestly if they can, without too curious enquiries as to buyers or sellers or bothering about committentes or anything else. Nor could anything else be expected; for can the Etheopian change his skin or the leopard his spots, except by moving, like Mr. Petersen, from one to another? Never. As a sample of what the *Republica* could do if it chose, a rise of ½d. would have been satisfactory enough had not the rate relapsed again almost to starting point. The market evidently was not yet ready for a bull movement, ready bills being particularly scarce last week, in consequence of the dull coffee market. sales at Rio and Santos only amounting to 107,000 bags compared with 222,000 the previous week and an average of 180,000 per week ever since the 1st July. The value of the coffee "sailed" during the week from Rio and Santos amounted to only £265,951 compared with £762,885 the previous week; this brings the total value since the 1st July up to £9,091,160 as against £6,646,447 last year. Taking the quantity remaining to be shipped up to 31st December at the same figure as last year's the value will be about £4,000,000, making with the rubber, that is expected in large quantities this month, a total value of about £7,000,000. . . .

Home office and Branches, and as most of the exchange must have been taken here or at Santos it seems probable that the real requirements of the market will not exceed 1 1/2 million sterling per month. At that rate coffee and rubber bills together will be more than sufficient during the next two months to not only supply all market requirements but to liquidate the whole of the debit to Home Office and start a new "bull" deal with the balance, as last year, if anyone have the courage enough to do so at the tail end of the season. What the *Republica* should do, is to provide for the lean months, when there is little coffee left and we are wholly dependent on rubber bills, by buying now to sell again in February or March. That would be far more useful and advantageous to the market than pushing rates up and letting them drop again, however profitable it may be to the Bank. . . .

The market clearly does not want all the bills that coffee and rubber can supply during the next two months; and if the balance is not absorbed by the Banks for liquidation purposes an advance of rates seems unavoidable.

Rio, November 17th, 1900.—Ninety days' rate on London opened on Monday, 12th at 10 15/32d. and closed this evening at 10 1/2d.

The tendency during the week has been towards steadiness if not decidedly upward, to which no doubt heavy coffee sales, over 200,000 bags at Rio and Santos during the past week, powerfully contributed on the one hand, whilst the slump in foreign prices took the heart out of the market on the other. Although the present fall seems too sudden to be wholly natural, it seems as if we are again in for a steady decline to 8$000. As, however, that rate may be looked on as the minimum at which coffee can be marketed, whatever exchange go to, it will not much matter to farmers, as with the prospect of over-supply next year, the minimum is certain to be maintained and in that case, as it cannot hurt coffee anyhow, the higher exchange go the better for other interests. Supposing 9$000 be reached on the present basis of 10 1/2d the f.o.b value would work out at about 36$000 per bag and would give for a crop of 12,000,000 bags about £21,000,000 as against some £18,000,000 for the current crop. What seems requisite is to let coffee slide and look after exchange; otherwise, one must react on the other and carry rates down again as in 1897. If exchange instead of falling were to rise, although the currency value of coffee would be smaller than this year's its sterling equivalent would be greater, as it is improbable that local prices can be pushed below 8$000 to 9$000 per arroba.

The prospect of exchange next year depends greatly on the steps taken to anticipate the almost certain bear movement that will e should the coming crop prove as large as is generally anticipa

In January next 25% instead of 15% of duties will be paid in and remitted, tending therefore to depress rates, against wi however, must be placed smaller imports than last year and b coffee values. There seems good reason, therefore, to expect a st or rising rate especially as rubber is late this year and will, there last longer. About March, however, if the rumours of a monster be confirmed, houses will commence selling coffee and excha ahead and the latter may be expected to boom until about when covering will begin. Unless some provision have been viously made by the Bancoda Republica it is certain that a for able bear movement will result when shippers' hands are full of to play with for months ahead and coffee prices probably falling There are only two alternatives to follow in such a dilemma burn paper money wholesale about June next year, or for the b to be prepared to draw liberally and lock up the paper to sus the rate. Unless something is done coffee prices will be fo down to the minimum of 8$000 or less and exchange follow Naturally all this will be put down to the renewal of sp payments; but forewarned is forearmed. Unless something done it matters little whether specie payments of the debt renewed or no, exchange will fall next year if coffee entries re 11,000,000 or 12,000,000 bags, as is anticipated.

Rubber is now coming-in in earnest and within a short time l from the north will be plentiful. The value of coffee sailed dur the past week was £503,875 as against £264,153 the previous we Up to 16th instant the value sailed since 1st July amounted £9,672,712 as against £7,048,183 last year.

There seems little expectation of a boom in imports next mon such as occurred the last two years and that the course of payme will not next year be disturbed by being concentrated in the quarter as in 1899 and 1898. The action of the Bancoda Repub as a controlling factor in the exchange market has been already though we trust the management will give more attention to problem of maintaining stability of exchange than merely mak money. Unless something is done to steady exchange next Spr all the profits of the Bank will not make up for the certain loss slump to 7d or 8d.

Coffee.—Entries during the week ended 9th instant, took anot spurt, being 59,571 over those of the previous week and 54,214 m than during the corresponding week last year, the increase be exclusively at Santos. Whether or no such large entries can be k up is much debated, some stating that coffee is being held b and others that is has been pushed forward.

Anyhow it is reasonable now to expect some falling off, wee entries after this date to the close of last year having rarely rea ed 200,000 and only exceeded that figure on three occasions.

Crop entries up to the 9th instant show an excess of 119.181 co pared with the previous year, entries at Rio being 351,212 bags l and at Santos 480,393 bags more than last year's.

Santos, Nov. 10th, 1900.—A sudden and unexpected change the fall set in during the week under review; it was so irresisti that neither dealers nor exporters could do anything to stem it, t reasons given are too large receipts and absence of orders from co suming quarters. We quote 6$600 to 7$ for *superior*. The form price was reached yesterday, Friday, when the market showed desolate appearance, to day, however, better feeling is coming assisted by a lower rate of exchange and a few orders from consu ing quarters, but whether this improvement can be kept up gain in strength, will depend very much on orders from the oth side and the necessity of dealers to sell. In absence of orders the was no special demand and whatever changed hands was cheap a therefore, bought on this merit only. Arrivals are still large, esp cially from the Sorocabana which figures in the daily receipts wi about 7,000 to 8,000 bags. On account of this there is a decid falling off in quality and more hard dark coffees are for sale. Shi ments still keep up fairly well with arrivals and stock here do not show any increase so far. With regard to the next crop heard from some districts that heavy winds, which were al experienced here at the coast, did damage, tearing off the prima fruit. How far the damage goes cannot be ascertained as al gether from January onward a safer opinion can be formed abo the probable outturn. There were orders here from Europe f *Good Average* at 36s. to 36s. 6d. and for *Superior* at 37s to 37s. but we do not know of any acceptances. These qualities stand here at about one shilling higher.

Another correspondent writes from Santos "Commissarios are ery bullish, but exchange is sickening them a bit as they are holding far too much coffee and have allowed clients up-country to hold o much likewise, fully 40,000 bags being held back from here. he current crop is far from finished yet and estimates will, I elieve, prove to have been far too low, whilst the coming crop is rward and promising to be a "whopper." If, too, coffee is being eld back at Rio, as some believe, unless prices advance abroad, of hich there seems little chance, sentiment will not be strong ough to keep prices up and, with a dragging market, lots of weak olders will be obliged to realise and pull prices down. For the oment, however, exchange stops the way."

São Paulo.—The flowering in the coffee plantations about Itapira very fine, and, should weather continue favourable, a full crop ay be looked for.

Heavy rain has fallen in Amparo during the last week. Ribeio Preto has also experienced a streak of bad weather.

Heavy rains have fallen in S. Roque.

In Cabreuva this year's coffee crop has yielded 25,000 bags, and is expected that next year's (1901) will be 50 % larger.

Boa Vista das Pedras has yielded a coffee crop of 7,500 bags stead of only 5,000, as estimated. It is expected, from the appearnce of the trees, that next year's crop will be double or treble e former figure.

On 14th instant, a formidable circular storm struck a place called osse near Mogy-mirim and caused great damage, houses being nroofed, trees blown down, and plantations and labourers' cotges destroyed.

Entries at Rio and Santos during the week ended 16th instant, ow a falling off of 48,889 bags compared with the previous week, ut are still 55,855 bags in excess of those of the corresponding eek last year. Up to the 16th instant the total entries at Rio and antos exceeded those on the same date of last year by 185,036 or out 3.3% and, should they continue on the same scale, total ntries for the current crop will reach 9,300,000 bags exclusive of ictoria and Bahia.

A correspondent writing from Porto Novo da Cunha, in Minas eraes, says that in the Rio Pardo, Aventureiro, S. Domingos, Anustura, Forte, and Leopoldina circumscriptions, at least 9/10ths of e crop has been already marketed, planters being too hard pressd to hold their coffees long. The flowering in these districts has een excellent, and berry is already well advanced and only very d weather early next year can prevent the yield being very large, rhaps twice the current crop.

PLANTERS AND SCIENCE.

Considerable interest attaches to the formation of a certain ew Planters' Society, details of which are given by *The lanter* as follows :—

At a meeting held at Luskerpore on the 10th instant, at which e following gentlemen were present, Messrs. Lennox, Aird, utherland, Sanderson, Alston, Campbell Ekins, Kilgour, Crawford d McLauchlin, it was proposed to form a Society in this district r the exchange of ideas, and generally for the advancement of ofessional knowledge.

Doctor Sutherland being called to the Chair, the following rules ere formulated and agreed to :—

CONSTITUTION.

The objects of the Society are to form in the district a regularly nstituted body of planters and others interested in tea culture, ho may take cognizance of, discuss and take steps in regard to any ofessional matters which possess general scientific interest apart om the objects of the Indian Tea Association and its branches, d also by discussion, reading of papers and other means to further e dissemination of professional knowledge.

RULES.

(1). The name of the Society shall be the Luskerpore Valley Society of anters.

(2). All residents in the Habiganj Sub-division shall be eligible as embers of the Society.

(3). The management of the Society shall be vested in a Committee mposed of a President, Honoray Secretary and three members, who all have power to manage and dispose of funds. Three to form a quorum. the absence of President the meeting will elect a Chairman.

(4). Every candidate for membership must be proposed by a member of the Society and seconded by another, and balloted for at the next ordinary meeting.

(5). The annual subscription shall be Rs. 2 and no member shall be allowed to vote at any meeting unless his subscription for the current year has been previously paid

(6). A general meeting shall be held annually in January or as soon after as possible, on such date as the Committee may decide, to receive the annual report of the Committee, the Statement of Secretary's Accounts made up to 31st December, to elect a Committee for the year and to discuss any other business of the Society.

(7). The Committee may convene a special general meeting of the members at any time and shall do so on a requisition signed by at least five members, stating the subject to be submitted for consideration.

(8). The rules of the Society may be added to, altered or amended at any ordinary or special meeting of the Society, provided that not less than half the total number of nembers are present and that notice has been given in writing to the Honorary Secretary at least three weeks before date of meeting. The Honorary Secretary, on receipt of such notification, shall lay the proposed alteration before the Committee, who shall place the matter before the members in such manner as may appear most suitable.

(9). Any member may introduce a friend to the ordinary meetings of the Society, but said friend may not be present during the transaction of private business.

(10). There shall be no drinking during the meetings.

Every person present having entered his name as a member of the Society it was proposed by Mr. M. H. Alston and seconded by Mr. W. Lennox that Dr. Sutherland be elected President, Mr. J. E. Aird, Honorary Secretary, and Messrs. A. Campbell, G. W. Ekins and G. Crawford, members of Committee for the ensuing year.

The Chairman having read a question for discussion as to the most suitable direction in which to build withering houses, it was decided, after an interesting discussion, that with regard to the prevailing winds in this district the best position was on a line lying South-East and North-West.

With a vote of thanks to the Chair the meeting then terminated.

THE RETAIL PRICE OF JAPAN TEA IN CANADA.

The stocks of Japan tea in Canada are, says the *Canadian Grocer*, lighter this fall than they have been for some years. From the opening of the season prices of Japan tea at the primary markets have been high. This has been chiefly caused by an abnormal demand from the United States, where the heavy stocks laid in before the duty was levied three years ago have been exhausted and where a large supply is now wanted.

It has been known also that the crop would be short; and now we are assured that the shortage will amount to 10 per cent. of the total output of 40,000,000 lbs. With this contingency in view. American buyers rushed prices up at the beginning of the season, and, although there have been numerous bears, values have been well maintained.

In Canada, particularly, has the bearish attitude predominated. Dealers have refused to buy, and, in consequence, we find to-day that all stocks of Japan tea are light. To September 15, 1900, we have imported into Canada :—

	Lbs.
From Yokohama	3,191,816
From Kobe	611,132
Total ...	3,802,948
Same time last year	7,304,845
Decrease ...	3,501,897

At the same time the increase of shipments into the United States amounts to 1,835,866 lbs. over last year, and at the present moment prices are ruling 3 to 5c. higher than last year's values on medium, and good mediums.

The question is naturally asked: If American buyers were eager to buy, why did Canadian dealers not also lay in stocks? Why did they wait in a rising market till the teas were all bought and till they could be held, as they are now being held, for further advances? The answer seems to be that, at the advance, medium Japans cannot be sold at 25c. per lb. to the Canadian consumer. When mediums were worth 14c. per lb. to the jobber, as they were last year, he could wholesale them at 18c., and the retailer could sell

them at 25c. per lb., for a reasonable profit. But now these teas are worth 17 and 18c. per lb. to the wholesaler. He must sell them for 21 or 22c., and the retailer, to sell them at a profit, has to charge 30c. The difficulty is to change the retail price from 25 to 30c. per lb. in face of the competition with package teas. Importers would like to see it done, and it perhaps would be a good thing for all concerned, except the consumer, if it could be worked satisfactorily.

As it was last year, there was nothing in the business for the importer or the shipper from Japan. This year the Japs have refused to consign to Canada.

Canadian importers had to hold teas over from last fall to this Spring for the advance, so they are not again taking the risk this year. With this increased price assured by the sale of tea at 30c., however, it is likely they will return to the trade. At the 30c. rate there would be an increased profit of 5c. to be distributed between importer, wholesaler, and retailer.

But the difficult thing is to get 30c. Ordinarily it would be easy to advance a 25c. article 5c., but when 25c. per lb. package teas are in competition the attempt to raise the price from 25 to 30c. is a difficult matter. As yet the wholesalers and retailers have not attempted to do so, for they are still working off their old supplies, but when these are exhausted the question must be decided.

THE EXCHANGE BURDEN AND THE PLANTERS' ASSOCIATION.

Q. writes in *Capital* :—

It has been pointed out how injuriously the currency legislation acts on the industries of India. It has been shown that the buyer of rupees is manifestly burdened by the over-valuation of the article he is buying. So plain is this that the question naturally arises: How did the producer and exporter, among whom are many Englishmen of position in the country, come to take on their own shoulders without strong protest, the increased burden of the sterling debt, in other words the exchange burden?

Unfortunately for the Government of India there is practically no public opinion in the country; the loss to the Government is great, for there is no such touchstone of the value of a measure as that of the opinion of a large number of educated men of all shades of opinions and beliefs. The Government that honestly follows the evident trend of educated public opinion will not easily go astray.

But the Indian Government is denied this aid to legislation on almost every question; on the currency legislation the Government received practically no outside help at all. All rupee sellers, every one with fixed rupee incomes, saw plainly the advantage to themselves of an over-valued rupee, and saw with pleasure the *legislation taking shape*, and had no criticism to offer. And the rupee buyers failed as a body to see the great disadvantage of the measure to themselves. Why was this? Partly because the currency question has been very generally misunderstood, and partly because the question is considered so difficult to understand that few attempt to attack it. The producer's argument very generally employed for accepting the measure was this: It is better to make fewer rupees of a fixed value, than a much greater number of rupees, the purchasing of which falls continually and indefinitely. The argument for a moment seems plausible; but it is based on that widely-accepted false premises that the rupee had, up to 1893, decreased in purchasing power.

The planter then was content to buy rupees at a much greater expenditure of produce, ignoring the fact that in buying labour he could reap little or no advantage from the more costly rupee. If the different Planters' Associations had clearly recognised that the rupee artificially over-valued to the extent of 25 per cent., would require 25 per cent. more of their produce to obtain it, while at the same time this rupee was not over-valued in reference to labour, which required as many of the dearer priced rupees in its purchase as before; if they had recognised all this, if, in short, they had been what they were not, political economists, it is impossible to suppose that they would have accepted the burden almost without protest.

I do not know if I have been clear, the simplest economical statement may become confused. But no one can overlook the fact that the planter, in order to pay for labour, etc., is forced to buy coined silver with his produce, and that Government reserves to itself the monopoly of coining and selling this silver, and charges the planter 25 per cent. over and above the cost of indispensable article. In short the possessor of rupees ga the possessor of produce loses, a condition of things most injur to health in the body politic.

The producer then, as a rule, failed to understand that he about to bear the burden which Government was shifting off own shoulders; and further it is clear that the Government ne really understood on whose shoulders the burden was falling; indeed it seems possible that the Government did not realise t the burden, which it was getting rid of, was bound to be borne some one. Nor is the Government of India a body of polit economists, and it did not attempt to solve the problem itself was left to the Secretary of State to solve. How did the Secret of State attempt the solution? By putting it before a numbe accepted political economists, or by asking the advice of those had made the study of similar questions the business of their liv No; he assembled a commission, none of the members of wh had made a special study of the matter or had claims to be c sidered experts in political economy.

There is one point, in reference to the currency question, which all seem to agree; it is that it is a difficult and comp question; and, inferentially, no one but an expert can be expec to solve it. If the question had been one relating to famine, a dealing, let us say, with the action of the monsoon, the air curre of Central Africa, the set of winds in the Indian Ocean, and cyclical period of sunspots, would a commission have been appoin consisting of members none of whom had made a life long or ev a special study of these phenomena, would not the advice of perts have been sought? And yet the currency problem is behind any other in requiring expert advice to deal with it.

The fundamental mistake, indeed, all along has been to attem to decide a really knotty and important question without exp advice; hence the economical mistakes which have been made.

In maintaining this artificially over-valued currency there is on one economical question of importance to consider, but it is esse tially a question for political economists, and one of the highe importance to the country. What has been the real question co fronting Government of India for some years? It is this: He best to meet the increaseing exchange burden, the increased burde to be more exact, of the sterling debt. This burden can only met in the last resort in two ways. By reducing expenditure, by increasing taxation. The first method we assume to be i possible to employ; the increased burden can only be met then increased taxation, and how best to increase taxation in t economical question set. It has practically been answered by produce and export tax. An expert would have at once condemn it as a wholly wrong answer and as the worst possible solution the difficulty.

It is implied that the problem was attacked in 1898 by a band amateur political economists; when we come to see how t Commission of 1898 dealt with the one important question of t effects of the legislation on Indian industries, no one will cavil the implication.

CUSTOMS ANALYSIS OF TEA.

The report of the Board on the examinations made by the analyst under Section 30 of the Sale of Food and Drugs Act, 187 of imported teas before they are taken out of bound, has just bee issued. The system continues to work satisfactorily, for out 565 samples of tea examined by public analysts during 1899 onl two were found to be adulterated. The report referred to state that the total number of samples analysed during the year wa 1,544, as follows: 37 samples green tea, faced; 34 green tea, unfaced 50 green tea, capers; 671 samples black tea, congou; 678 black tea dust: 74 black tea, siftings; Total 1,544. Of the total, 1,37 samples were, on analysis, considered satisfactory, and the importa tions represented by them were accordingly delivered on th certificate of the analyst. The remaining 171 samples represente teas of doubtful character, the results of analysis of which wer reported to the Board for their decision, with results that th whole of these, representing 3,019 packages, were restricted to ex portation or for the manufacture of caffeine. It may be assume that the teas of doubtful character here referred to were not India or Ceylon.—*H. and C. Mail.*

PLANTING IN MEXICO.

An ex-Ceylon Planter has sent the following interesting ommunication to the *Tropical Agriculturist* :—

In the *T. A.* for January (which went amissing and only reached e in August) and for July, I notice a couple of letters from Mr. . O. Darley, on "Planting in Mexico," also your note on the same, sking for information *re* labour, taxes, police, etc. In the July umber, Mr. Darley has given you some information, and I now ake the liberty of supplementing the same. It must be remembered hat Mr. Darley writes from the State of Tabasco, whereas I am in he State of Oaxaca, and, therefore, my remarks and statements ostly apply to this State, and to the district I am in. But at the ame time there is little or no difference between the States as re-ards taxation, communication, etc. I have now been nearly 18 onths in Mexico, and have had ample time and opportunity for oing fully into every matter that affects planting and give my ctual experience. I may preface my remarks by stating that I as planting in Ceylon from January, 1877, to May, 1880, in dapussellawa and Maturata, and from May, 1880, to December, 898, in Johore, the Federated Malay States, and West Coast of orneo. I arrived here at the end of March, 1899.

Soil and Lay of Land.—Beyond any doubt the soil of Tropical exico is exceedingly rich and of vast extent, and, in what I may all the low country, is of a rolling character with large areas of lmost level country, generally along the rivers, and between the purs of the main ranges, these spurs generally being of limestone ormation. Taken all round, however, the country is badly atered. For instance, in the whole of this Company's lands xtending to 111,000 acres, there are three large streams, mis-alled rivers, two of which form the North, East, South, and outh-Western boundaries, one running through the centre of the lock. There are only ten other small streams running into these, nd yet our land lies at the foot of the "Sierra Madre" mountain. oil suitable for almost any kind of tropical cultivation can be urchased for from $3 to $50 the acre, anywhere in the best part f Mexico. We sold for tobacco for the latter price here.

Climate and Rainfall.—Once outside the range of yellow fever vomito" which roughly is confined to a distance of about 60 miles nland from the sea, from Tampico to Coatzacoalcos, the climate or the Tropics is remarkably good and perfectly healthy. The ainy season begins about June and ends in September, but during October to end of December there is generally a fair amount of ain. From January to May the weather is fine with occasional howers. March, April, and May are the hot months, November, December, and January the cold; and even at this elevation, 615 eet, fires are often necessary at nights, and a couple of thick lankets. The rainfall has been systematically kept only since my rrival, but commencing from 1st July, and I append it—

1899.	Inches.	Rainy days.	Heaviest fall inches
July	21·30	19	3·40
August	25·48	17	4·30
September	17·31	11	6·00
October	5·05	5	2·00
November	3·52	2	2·72
December	3·55	5	1·58
1900			
January	3·23	9	1·30
February	1·83	2	·92
March	2·04	5	·72
April	1·30	2	1·00
May	6·80	6	2·50
June	13·83	11	3·75
July	25·51	25	2·77
August	18·94	12	3·45

On the 18th February, the thermometer registered in the office 55°, Fahr., at 11-30 A.M., about the lowest it has been since my rrival.

Communication all over Mexico is by means of railway, river, and racks. Metalled or unmetalled roads outside the cities (and few even there) do not exist. The rough jungle tracks, worn down by the feet of man and animals, that were in existence in, or perhaps before, Montezuma's time, are the only ones that are available, and as these go up hill and down dale, one can fancy what the travelling s like, especially in wet weather. As far as I am aware, the Government has not even commenced to think about road-making. I will confine myself to the Railways serving the tropical portions where plantations are mostly being opened. First there is the line from Vera Cruz to Alvavado, some 40 miles. It now belongs to Sir Weetman Pearson, a bad line, badly managed. Ordinarily it takes four hours to do the journey. Another line runs from Coatzacoalcos to Salina Cruz, across the Isthmus of Tehuantepec, and a branch line from the main line to the Sanguan river. Another line is now under construction from Mozorengo to Santa Lucrecia on the Tehuantepec railway. All these are either under the management of Sir Weetman Pearson or are being constructed by him. On paper, this seems to give ample communication, but one has only to look at the map to see what a small portion it serves, especially as there are no roads to serve as feeders. The lines, too, are chiefly strategical ones, as President Diaz does not intend to allow revolutions to grow unchecked. Now as to the rivers. Stern-wheel shallow-draft steamers run all the year round from Alvavado up the Papaloaparm river to Tuxtepec from Tlacotalpam (two hours' steaming above Alvavado) up the Tesechoacan river to Tesechoacan, and during the wet season up to and a little above Playa Vicente. There is also regular steamer communication, all the year round up the San Juan river from Tlacotalpam, up the Coatzacoalcos, and some of the other rivers in the more Southern States, but how far the boats can go during wet and dry seasons I do not know. What I do believe is that these rivers only serve a small part of the lands suitable for cultivation, and here again there are no roads as feeders. In the section I am in, during the dry season, we have to depend on canoes for transport, and as the "canoeros" as a body are a drunken lot, we are at their mercy. It has often taken three months to get goods up from Tlacotalpam to where I am (just above Playa Vicente) during the dry season. Freight from Tlacotalpam to here, by canoes, is paid for by the piece of 200 lbs. and costs $28 (twenty-eight) the ton up and $17 down if you have return cargo. By steamer it costs from $28 to $31 the ton, both ways, the distance by river being about 120 miles. Freight from Tlacotalpam to Vera Cruz has to be added, but I have not the figures by me. There are besides handling and storage charges first at Playa Vicente ($12\frac{1}{2}$ cts. a package) Tlacotalpam same, perhaps at Alvavado, and finally at Vera Cruz, and I am much better off than the vast majority in this section. The freight from Vera Cruz to London is about the same as from Singapore to London. The next "revolution" has got to come from the Government in the shape of roads and by that time our grandchildren will be old men and women. Private enterprise will, most likely, have to undertake road-making, and pay Government for doing so.

Labour.—All who have gone in for Tropical Agriculture in Mexico have, with a strange unanimity, avoided this most important question and for very obvious reasons. First, the large holders have lands for sale, and soon, if I am not mistaken, the small buyers will be sorry they ever bought. There are four classes of labourers employed in estates in Mexico:—1st labourers recruited from Oaxaca, Mexico, and other cities and surrounding villages on a 3, 4, 6, or 180 days' contract; 2nd Serranos, 3rd prisoners, 4th villagers living in the vicinity of plantations. The 2nd and 4th class are by far the best labourers, but will not go far afield for work, and will only leave their villages for crop time (generally end of October to end of December). In fact, unless the estate is in the hills or near their villages, this class of labour can only be depended upon for crop, but will not stay and work steadily all the year round. The 3rd class are taken out of the prisons on payment of $5 to $10 a head, and this forms a more or less regular income to certain Government officials, not leaving out the highest in each State. This labour has to be worked literally as prisoners, and as regards treatment, wages, etc., the slave was far better off. They are generally the greatest scoundrels in a country that produces a good many. I have seen them brought up on a steamer, bound together and guarded by armed police. They are invariably locked up at nights and when not working. There is a good deal of this class of labour used on the tobacco plantations. They cost anything from $15 to $35 landed on the estate per head and work from 3 to 12 months getting 25 cts. a day and food, but in the majority of cases get nothing when leaving, and if they do have a balance are given every opportunity to abscond. Personally, I have never worked this class in any of the estates under my charge. The 1st class is the one generally employed. My experience is with Oaxaquenos chiefly. They are recruited on a "180 days' work" contract, the longest term they will agree to. This is illegal, as

according to the Mexican constitution, no Mexican can contract his time In practice the law is not enforced, but still it exists. The average advance comes to $16 for a man, and $9 for a woman, all recoverable. The recruiter gets a commission of $10 for a man and $5 for a woman which is not recoverable. Wages: men 37 cts., women 20 cts., boys and girls 10 to 15 cts., a day, with food. My average rate of wages from June, 1899, to end of August this year, works out on all the five estates under my charge to 6,518 cents per working labourer *per diem*. This includes wages, food, commission, cooks, watchmen, water-carriers, cabos (kanganies), wages, and food, and loss on absconders. *Per contra* the credit balances of absconders, are also credited to the average. Working with class Nos. 2 and 4, the average would be perhaps 5 cents less, and in the Sierras perhaps 10 to 12 cents less. Nearer the coast the average would come to about 80 cts. As to the labourer himself, I will sum up his chief characteristics—laziness, stupidity, carelessness, drunkenness, callousness, self-conceit, and an utter absence of ambition and thrift are the chief, lying and dishonesty coming a good 9th and 10th. When he first arrives, his chief idea is to abscond, but when treated fairly, he soon settles down. I am not judging him from a European standpoint, but in comparison with Tamils, Sinhalese, Chinese, Malays, Javanese, Banjarese, and Dyaks, all of whom I have worked during my 21 years in the East. As regards work; in heavy weeding, he will do about 15 per cent. more than a Tamil, but not as good work; and in clearing with the "machete," he is as good as the Malay with his "parang"; but in every other repect he is 10 to 50 per cent. behind the Tamil as regards estate work. What can be expected from labour 10 per cent. of which are field hands, and the balance loafers, gaol-birds, tradesmen, artisans, clerks, etc. No wonder they have to be constantly watched, and often as not locked up when not working and at night. Beyond weeding and using the machete, they know nothing about estate work, and by the time you have taught them something of their work, their contract is up, and away they go, and you have to begin again. By taking advantage of his thriftlessness, I have kept a good many of the best men in the place for a year by advancing them goods from the estate shop, thus keeping them in debt and raising their wage to 50 cents a day. None, however, will stay beyond the end of crop, *i.e.*, 18 months from date of contract. When they get a craving for change, nothing will keep them. Labour, such as it is, is scarce, and some Americans are beginning to introduce Chinese at a cost of $75 to $100 a head and $1 a day wages without food. In the first place they are making a mistake by getting them through the San Francisco "Societies," and unless planters and Government combine aud get Chinese direct from China, they will end by being at the mercy of the "Societies," as the Sumatran planters were; but under existing circumstances such a combination is very unlikely to come about. The present labour is bad, expensive, and insufficient, and Chinese are the only ones that can be got. My experience of 18 years with them is that they work splendidly on contract; but on day wages, are very unreliable and do as little work as they can.

Taxes.—Mr. Darley says: "Taxes are low enough." This being a country with a Protective Tariff disproves the above. The import duties are heavy, running in some cases to 75 per cent. and 100 per cent. This fact makes living expensive, even plain living. But leaving out import duties, the following are the duties we pay in this state.

Income Tax on incomes over $15 a month 4·33 per cent. per annum.

Poll Tax on labourers (recoverable) 21 cents a month, payable by estate.

Tax on Gross Sales Estate Shop 1·90 per cent. per annum.

Land Tax $13 on every $1,000 value improved or unimproved land or other property.

Property Tax (re-adjusted every five years).

Cattle Tax, if over 10 are kept for breeding purposes. I do not know the tax.

Stamps on invoices or bills, 3 cts. on every $5 (or part of $5) value of goods bought.

Stamps on Cheques 5 cts. Do. on draft or bills $100 2 cts. $500 1 ct. for every $100 or fraction.

Stamps on Ledger $14·95, cash book $9·90, Journal 75 cts. all liable to Government Examination, a very good thing too.

Legal Rate of Interest 6 per cent. The usual rate charged is 12 per cent.

Export Duties on coffee remitted, cacao nil, Rubber nil, Tobacco nil, Vanilla nil, Sugar nil, and Aguardiente, none.

Import Duty has to be paid on all Tools, Machinery, Plo Harness, Bags, (if good ones are wanted) etc., that are used estate. (See enclosed letter from Mexico Commercial Compan

Police.—I maintain that Mexico is not well policed. I excep capital, towns and large villages. The nearest village to n some 25 miles off and has two policemen. Being in Vera state, they are useless to me. The capital of this district is a 60 miles off, and takes three days, over a fearful track, to re These are the nearest police that I can call upon. Since my ar there have been four murders (two of which were by my own charged men) that I have heard of, and one arrest, and this last entirely to my action. As to minor offences, such as brutal serious assaults, no notice is taken. Prisons are an absolute grace. Hanging is not allowed and imprisonment, no disg The worst punishment is to send a man to the Army. A crim or absconding labourer has only got to get into another state is practically free from punishment and arrest. Certainly e estate can have its own police, but has to pay $20 a month per feed and house both himself and his horse.

GOVERNMENT.—As in the United States, there is no "covenan Civil Service in Mexico, but unlike the United States, thoug mock form of voting is gone through. Practically all the Go nors of the States, the Federal officials and the members of Legislature are nominated and appointed by the President, a is lucky for Mexico that President Diaz still remains at the hea affairs. I consider him the ablest man in America. Every S official is under the thumb of the Governor, and as their appo ments only rests on favour, they with few exceptions do his bidd and all hasten to make "hay while the sun shines." They ar badly paid. Each State is sub-divided into districts at the hea which is the Jéfé Politico and with him the Juez, or Judge, responsible to the Governor. Each district again is divided municipalities under an "Alcalde" and "Agente Municipal," are responsible to the Jéfé and Juez. Until we got our "Alcalde" and "Agente Municipal," whom, of course, we ha pay, we were under two Indians who could neither read nor a word of Mexican. I will give two examples of the result. of my house servants in a drunken fit, broke into the dispen and drank some carbolic acid that was in a used whiskey bo One died and was buried next day. I notified these officials three days after they came down, and I was informed by Secretary that I was liable to a heavy fine for burying him be the officials had seen the body. Backsheesh smoothed everyth Case No. 2. One of my men whilst bathingin the river was drow though his wife and several others saw what was happening never said a word or tried to help. This is not singular, for all have a dread of anything that has to do with their court justice. On Monday evening his body was found half a mile d the river and on Tuesday morning I notified the officials, lea his body where it was found. Four days after they came d only to examine a skeleton, as in the meantime the carrion e had done the work for which it is protected in this country. machinery of the law is slow beyond all imagination, and jus to quote Kipling, is "to him who holds the longer purse regards the state courts. I have had a simple case on a pro going on now for a year and we are just as we started, the J having taken one year to discover that the case was a "civil" not a "commercial" one, and there is every appearance that decision was given under instructions. The Supreme Court o Republic is, I believe, beyond reproach. I quote the words o influential and well educated Mexican merchant to me:—"I matter of justice we are far behind in Mexico, and General seems to be more bent on material progress than upon m advancement."

Products.—Cultivation as understood in the East is quite known as yet in Mexico, unless amongst the few men of Eas experience. From what I have seen, there is a want of even mentary knowledge of planting. Once the plant is planted (as not "stuck in") three to four weedings or cutting down weeds with a machete a year is all the cultivation that is g The soil and climate do the rest. This want of knowledge is in my opinion to the following causes:—1st. The want of and education amongst the vast majority of Mexican planters. The bad and costly labour. 3rd. The richness and productiv of the soil. Whether in the face of costly transport and the la conditions, cultivation will pay, remains to be proved. What know is that at the present moment there are very few so

coffee and tobacco planters in Mexico, and a large number of estates of the former have been abandoned and of the latter put out of cultivation. Estimates coming from Mexican or American sources I entirely mistrust; first, because the Mexican as a rule only calculates the amount he spends on labour, and the American estimates come from men with land to sell. Crop estimates are more reliable, but even these should be discounted considerably. I have carefully worked out the cost of properly opening, cultivating and bringing into bearing the following products under existing circumstances in this section and append the same. If I have erred at all it is on the expenditure side, as of course, every planter has his own ideas of how a work should be done. I have taken the acreage of each estate as 500 opened.

Coffee.—To bring into bearing, say 4th year $300 per acre. Returns in full bearing 8 cwts. the acre. Cost of cultivation $120 the acre. I have seen absolutely no disease.

Tobacco.—The first year will cost $15 the arroba (25 lb. Spanish) value $18 the arroba. The 2nd year will cost $10 the arroba value $20 to $25 the arroba. Only under expert management. The yield here for the 1st crop is an average 2½ arrobas per 1,000 plants. The following year 1½ to 2 arrobas. This is far under the Sumatran yield.

Rubber.— Planted 14′ ×14′ will cost to bring into bearing (*i.e.*, full 8th year) and if regularly weeded $150 the acre.

Yield 8th year 1 lb. per tree cost per acre including gathering $95.
Yield 9th year 2 lb. per tree, cost per acre including gathering $150.
Yield 10th and following year 3 lb. per tree. cost per acre including gathering $200.

Cacao. - Will cost to bring into bearing $250 the acre. Yield in full bearing 8 cwts. the acre cost $100 per acre.

Sugar and Aguardiente.—It is generally calculated that in this part the same field will go on yielding from 10 to 22 years (a pretty wide margin) and the profits range from $600 to $800 the "hectara" (2½ acres) In my opinion, as I know nothing of sugar, a good deal of salt would mix well here.

Rice Dry.—This is a crop that for years to come will pay, I believe better than any other. Very little labour is required. There is a large local demand and prices are good. Rice costs us here 12 cents the pound.

Vanilla.—This is its home but I can gather no information about it. It grows wild in the forests here, as does Rubber. On the Tobacco lands, crops of maize and beans are raised, but I do not approve of this mode. There is a large local demand for Cacao. Mexico even importing it, hence the local high prices which Mr. Darley correctly quotes. There is also a good local demand for sugar, maize, beans. and tobacco. The local demand for Augardiente is enormous as the Mexican mozo or peon cannot do without his one, two or three "copitas" (glasses) a day, and they begin drinking as children and gulp it down almost raw without a wink. It is their one remedy for almost every ill. When, however, this local demand is met, and the planter has to compete in the open markets against countries with cheaper and better labour, cheaper transport and light taxes, how will he fare? Time alone will tell. In the meantime he has magnificent soil in his favour and a large and close market in the United States and Canada. It is true Americans are rushing in and taking up large tracts of lands. There are a few exceptions, but the majority are buying only for a deal. They will dispose of these lands in small blocks to would-be planters, and I prophesy that these will be "left." What Company can deal with 100,000 acres of land and over; certainly not open it themselves? In my immediate vicinity there are 588,000 acres of magnificent land for sale. The truth is there is still a large land boom on in Mexican tropical lands and, what goes hand in hand with land booms, a plethora of exaggerated estimates like the one you published on page 36 of the July *T. A.*

Life on a Plantation.—As I have said previously, living, even of the plainest, is very expensive, unless one lives like a Mexican on dry beef, chickens, beans, rice and tortillas and coffee. If you offer a Mexican tea, he will decline saying that he is not ill. Such a thing as a good cook or house servant is not to be found in Mexico, taking the standard of up-country in Ceylon or in the Malay Peninsula. A plain cook, generally Chinese, will demand $30 to $40 a month and food and a house servant of the same nationality $20 to $30 and food and get it too. Mexican cooks (women) get $12 to $15 and food and house servants $15 to $20 and food. The Mexican servant is the most hopeless, lazy, ignorant and dirty brute I have ever come across. He has no idea of waiting, or general house work, and the cook is of the same class. Their worst point is that they will not learn, they have too much self-conceit; and if you get one who is willing to learn, they will not stay long enough to be taught, and if they do, will only learn up to a certain point. I answered a cook's advertisement in the *Mexican Herald* and enclose his reply. $100 a month and food is not bad for a "Mussleman from Conpore" calling himself "Charles Shermen."

The other delights consist of insects called "rodadores" that torment and bite one all the day and all the year round, sand flies that do the same at night during the wet season, and mosquitoes (these only bad in some places). During the dry season one cannot walk through the grass without getting covered more or less with ticks and lice. Of sport of any kind there is none, nor recreation nor society. If one is surrounded only by Mexicans, all idea of civilized society and sociability has to be given up. To compensate for the life one would have to lead, would require larger profits than I am afraid any estate would yield.

For rubber and coconuts, Mexico and adjoining countries will have a formidable rival in the Malay States where labour is from 100 to 125 per cent cheaper and far and away better, transport better and cheaper by at least 100 per cent, taxes 2½ per cent *ad valorem* duty on produce. Anyone thinking of investing in Mexico, I should advise first of all to visit British Honduras. I see know reason why British Honduras should be worse than Mexico as regards soil and climate. It is a British colony and labour can be got from India under a five years' agreement and for 50 cts. a day without food, cost landed £10, a head, but irrecoverable.

TEA AND COFFEE.

A Parliamentary Return showing "The imports of tea and coffee into the principal countries of Europe and into the United States, together with statistical tables relating thereto for recent years, as far as the particulars can be stated" was issued on the 28th November 1900.

In an introduction, Mr. A. E. Bateman, of the Board of Trade, says :—

"In another publication recently issued by the Board of Trade, returns relating to the production and consumption of alcoholic beverages were given, and, in the present Return, the chief non-alcoholic beverages are dealt with in the same way. The non-alcoholic beverages referred to are tea and coffee, for, with regard to cocoa, the statistics of its production and consumption are in many cases altogether wanting; besides which cocoa is not by any means such an important article of trade as either tea or coffee.

The statements given in the present Return have in all cases been compiled from statistics issued by the Governments of the different countries referred to. With regard to tea, in the case of India and Japan, the statistics, both of production and of export, are fairly complete, whilst as regards Ceylon and China the exports only can be given.

With regard to coffee, the returns are less complete, statistical science being almost unknown in those States of Central and South America where coffee is chiefly produced. It has been found necessary, therefore, to deal in these cases with the statistics of importation into the principal countries of Europe and the United States where coffee is chiefly consumed.

It will be seen how very largely both tea and coffee have been increasing of late years as articles of consumption—more particularly as regards tea in the United Kingdom, and as regards coffee in the United States of America.

For purposes of comparison, figures have been added relative to the consumption of tea and coffee in the years 1898 and 1899 in the British colonies of Australasia and the Dominion of Canada. From these it will be remarked that, though the consumption of coffee is small in these colonies, the consumption of tea in proportion to the population is very large, particularly in the case of Australasia.

I hope, in subsequent issues of this paper, to deal more at length with the consumption of tea and coffee in the principal British colonies."

The Return contains much useful information. The following table showing the consumption of tea per head in various countries is interesting:—

Years.	United Kingdom.	Russian Empire.	German Empire.	Holland.	France.	United States.	Australasia.	Dominion of Canada.
	Lbs.	Lbs.	Lbs.	Lbs	Lbs.	Lbs.	Lbs.	Lbs.
1897 ...	5·81	0·76	0·10	1·35	0·04	1·55	...	...
1898 ...	5·86	0·82	0·11	1·39	0·05	0·91	7·40	3·80
1899 ...	5·98	...	0·11	1·39	0·05	0·96	7·70*	4·72

* Partly estimated.

From the above it will be seen that in the United Kingdom nearly 6 lbs. of tea per head of the population are consumed. Sixteen years ago the *per capita* consumption amounted to, approximately, 5 lbs. There is no other European country where such a *per capita* consumption is approached. Indeed, there is no other European country, with the exception of Holland, where the consumption of tea exceeds 1 lb. per head. In Russia and in the United States also, which are the other two large tea consuming countries, the consumption amounts to under 1 lb. per head; in France the total quantity of tea consumed is under 2,000,000 lbs., or ·05 lbs. per head of the population; and in Germany it is 6,000,000 lbs., or ·11 of a lb. per head of the population.

The following interesting table is taken from the BOARD OF TRADE Statement above referred to:—

Comparative statement shewing the Consumption of Tea in the undermentioned Countries in each year from 1884 to 1899.

(*Quantities Imported for Home Consumption*).

Year.	United Kingdom	Russian Empire.	German Empire.
	Lbs.	Lbs.	Lbs.
1884 ...	175,091,000	74,412,000	3,432,000
1885 ...	182,443,000	62,424,000	3,654,000
1886 ...	178,910,000	74,736,000	3,562,000
1887 ...	183,639,000	72,756,000	3,872,000
1888 ...	185,470,000	69,156,000	3,912,000
1889 ...	185,628,000	68,904,000	4,125,000
1890 ...	194,009,000	69,012,000	4,389,000
1891 ...	202,456,000	70,740,000	4,886,000
1892 ...	207,121,000	77,112,000	5,454,000
1893 ...	208,098,000	79,272,000	5,887,008
1894 ...	214,341,000	88,740,000	6,248,000
1895 ...	221,800,000	92,484,000	5,597,000
1896 ...	227,785,000	94,032,000	5,436,000
1897 ...	231,400,000	98,316,000	5,614,000
1898 ...	235,414,000	107,820,000	5,922,000
1899 ...	242,561,000	104,112,000*	6,039,000

Year.	Holland.	France.	United States (year ended 30th June.)
	Lbs.	Lbs.	Lbs.
1884 ...	3,894,000	1,168,000	60,062,000
1885 ...	4,770,000	1,056,000	66,374,000
1886 ...	5,095,000	1,217,000	78,873,000
1887 ...	5,388,000	1,225,000	87,481,000
1888 ...	5,333,000	1,115,000	83,945,000
1889 ...	5,203,000	1,190,000	79,192,000
1890 ...	5,599,000	1,351,000	83,495,000
1891 ...	5,889,000	1,346,000	82,396,000
1892 ...	5,859,000	1,448,000	89,611,000
1893 ...	6,120,000	1,503,000	88,131,000
1894 ...	6,580,000	1,542,000	91,802,000
1895 ...	6,437,000	1,604,000	96,437,000
1896 ...	6,589,000	1,685,000	93,340,000
1897 ...	6,747,000	1,705,000	112,908,000
1898 ...	7,071,000	1,837,000	67,697,000*
1899 ...	7,102,000	1,947,000	72,835,000

* Provisional figures.

* Duty imposed on Import from 13th June, 1898.

TEA.

In connection with the Nyasaland Agri-Horticul Association there was lately an essay competition, and winner was Mr. Henry Brown, of Mlanje. We reprin essay from the *Central African Times*:—

There are several products well suited for cultivation in B. C other than coffee, such as sugar, tobacco, arrowroot, ginger, turn cotton, chillies, etc. These I dispose of (although they may very well) because the land requires to be prepared for them e time a new crop is required, and they are not permanent prod *Cinchona* being a drug the market can be flooded any day the price reduced to a non-paying level.

Rubber.—It is long before the tree yields enough to pay a cheap substitute is likely to be found which will reduce the p

Vanilla and Pepper.—Although permanent occupiers of the the consumption is limited and they for various reasons are h suited to native gardens or small cultivators.

For the reasons given above I select tea as the most sui product other than coffee for the consideration of planters as in my opinion the best suited for European cultivation, bei permanent occupier of the land; consumption is likely to keep with the production and the price cannot go below that which yield a profit to the cultivator otherwise the production mu reduced; when the natural consequence of higher prices w ensue as it is consumed by the masses.

The general opinion of planters whom I have met in B. C. that tea requires a heavier rainfall than we have here. To d this idea however I would point out that tea has a wider rang cultivation and can be grown under more varied condition climate than any other product. Further, tea is grown as north as the Caucasus in Russia and in Natal, our near neigh in the South, and in both countries the cultivation of the plan passed the experimental stage.

Natal where tea has been successfully grown has a similar fall to the drier parts of Nyasaland, *viz.*, from 40 to 48 inches annum. In winter the temperature is at 6 a.m. from 50 t degrees fahr. and at 11 a.m. rises to 80 and 84 degrees. In sum at sunrise 44 degrees to 70 degrees are registered and at 11 a.m to 96 degrees, which is very similar to our own climate. Son the Indian districts where tea pays well have a very limited rai and badly distributed as there are four to five months during w no rainfalls at all. From official reports in the following districts the average for five years is as follows:—Dhubri, 7 Ganhabong 59.26 inches and Nowgong, 77.68.

The elevation at which tea can be grown is from sea level to and 6000 feet. At extreme elevations a comparatively dry cli is an advantage.

A period of rest for tea such as some of the Indian distr Natal, and Nyasaland have during the cold season (three to months,) when pruning can be done, is considered beneficial.

Experience of tropical agriculture in other countries as wel here should lead one to the conviction that B. C. A., judging f its soil and climate, is more suited to be a tea than a coffee pr cing country chiefly because there is a very limited area fit coffee growing. Coffee requires either primeval forest or very virgin soil to prove a paying investment. with even greater ad tages in cheap land and labour than we possess.

Coffee when planted on land that has been in cultivation wi 50 years or upon burnt grass land must be manured after the crop to keep up anything like a remunerative yield. This is the case with tea for it has been giving paying crops of leaf reclaimed abandoned and worn-out coffee estates and upon "chea and scrub land for many years past in Ceylon and India. unlike coffee and other products which might be grown in B. C is not therefore dependent upon surface soil to maintain fertility, neither does it require virgin land to ensure paying flus of leaf as the plant is a deep feeder and depends mostly on nour ment obtained from the sub-soil. It would be well to remem however that the soil cannot be too rich and the deeper and m pliable the land is the better the tea flourishes on it. Good d subsoil seems to be of more importance to the tea bush than surface soil and this fact is borne out by the success of tea on worn and washed, steep coffee estates in Ceylon, which have b in coffee 20 to 30 years and are at present yielding 500 to 700

f made tea per acre, and paying their owners as much as 20% nterest on their investment. Any soil in B. C. A. that would roduce leaf may be reckoned good enough for tea Tea does not uffer much from weeds and bad cultivation. I have known tea learings abandoned for a year or more and when cleaned up the ea seemed to have grown apace with the scrub and had only to be ut down and the flushes plucked as if nothing had happened to etard its growth. Indeed I see nothing to hinder Nyasaland from aking a place amongst the tea producing countries of the world.

There is another recommendation for tea cultivation, *viz.*, that it loes not depend much upon climate, and if a flush of leaf is lost rom want of labour or from any other cause, the cultivator has nly to wait for another flush which is sure to come in another ortnight or so. For at least eight months in the year leaf can be plucked. On the other hand with coffee unseasonable rain or drought may destroy the prospects of the planter for a whole year.

Tea, as far as I have observed, during the last eight years or more, has no enemies here likely to prevent the plant from giving paying crops.

There are no difficulties in connection with the curing of tea that cannot be overcome here the same as in other countries where the bush is grown.

Expensive machinery is not required until an estate produces tea enough to pay for it. On small gardens tea is rolled by hand on ordinary tables, and is fired over "choolas" with charcoal fires, or a flue drier. With the latter 20ft. long to take three rows of trays, as much as a thousand pounds of made tea per diem can be turned out. Hand rollers and driers can now be bought about as cheap as hand coffee pulpers. A market might be got in South Africa for all tea that Nyasaland can produce for many years to come.

Cost of production and profits.—I need not enter into details on this question but suffice it to say that B C. A. owing to the cheap labour available can produce a cheaper tea per pound than any other country, and can therefore compete favourably with other parts of the globe. Transport is no dearer when compared with the outlying districts of China, India and Ceylon.

Varieties.—Indigenous Assam and China are the only two distinct varieties. The chief characteristics of the former are that it has a single upright stem, large serrated leaves is delicate to rear, and does not stand extremes of cold or heat without a serious check in its growth.

The latter is a very hardy bush or a dwarfy character, small leaved, a slow grower, with stems springing up from the lateral roots. It stands great vicissitudes of climate and is able to withstand frost and snow in China.

It is more suited for a cold than a hot climate and flushes better in the former, but seeds too freely and to the detriment of its yield of leaf.

The hybrid is a plant obtained by cross fertilization between the Assam tree and China bush. This is considered the best and most profitable plant to cultivate at medium elevations and even at low and high altitudes In other countries it is preferred to the pure varieties. The hybrid shows every shade of gradiation between the parent trees. There is a very good hybrid in the country which flushes well.

This essay does not admit of my going into details of routine, cultivation, and curing of tea, which is more the subject for a tea planter's manual, but a few brief sentences may not be out of place.

Land for tea planting is cleared in the same way as for coffee, and the methods adopted are familiar to most planters.

Nurseries.—Select a damp spot, but not with sour soil; prepare the beds and sow the seed the same as coffee. Shade is not required but water freely in dry weather. Plants are fit to be put out in from six to nine months.

Lining.—The best distance for hybrid tea and that generally adopted is three by four feet, but in some countries four by five and even five by six feet is not uncommon. The hedge system of planting is favoured by some, and on steep land it is good for saving wash.

Holing.—It is not considered necessary to cut large pits for tea the same as for coffee. Pits should be of a greater depth than width, 12 by 15 inches is a common size and dibbling with a crowbar or stick is often, resorted to.

Planting.— The less the roots are disturbed in lifting tea plants from a nursery and the more carefully they are planted the better results will be obtained. Disturbing the roots and exposure to the atmosphere gives a greater check to tea than coffee plants. Planting at stake cannot be recommended in this country although in low, hot situations where the rainfall is great and wet weather can be depended upon for several months it does very well.

Plucking.—After about 18 months flushes of leaf can be taken and the yield of tea increases till the bush attains an age of six or seven years when it is considered in full bearing. Only two leaves and a bit of the third should be plucked to make a good quality of tea and the flush should be gathered before it gets too old. When allowed to run too long the leaves are hard and they make the tea in the cup bitter to the taste.

Withering.—The leaf should be spread thinly on mats in a shed and rolled when it sticks together in a lump when squeezed in the hand. Over withering, drying, or heating the leaf is bad.

Rolling.—This is performed on a table or in a rolling machine till the sap cells are well broken up and the juice exudes freely from the leaf.

Fermenting.—The tea is spread out about four inches thick or pressed into balls and allowed to attain a light or dark copper colour before breaking up for firing.

Firing.—This is done over a charcoal fire upon trays; with hot air in a drying machine; or by means of a flue till the moisture is all expelled.

Bulking and blending.—As the different making of tea differ in flavour, etc., the custom is to put each day's out-turn into a large air-tight box or bin and when full refire the whole, then turn it over with shovels on a clean floor till thoroughly mixed after which it can be sifted into the different grades and packed for market.

APPENDIX.

I omitted to mention cocoa in its place before cinchona. From what I know of cocoa cultivation, and judging from the appearance of the solitary plant as far as I know in existence in B. C. A. at Lauderdale estate, Mlanje, this tree is not to succeed well in Nyasaland. The plant at Lauderdale is now about five years old about four feet high, with a diameter of about three feet. A cocoa tree in its proper climate should be from six to eight feet in height with a spread of branches about five or six feet and in partial bearing at five years of age. For cocoa Nyasaland has too great extremes of cold and heat to thrive well. During the winter months the tree looks wretched and suffers much from cold and during the dry season from September to December the air appears too dry for the tree to flower freely or set any fruit.

THE MARKING OF TEA CHESTS.

Captain N. Harrison, Commander of the ss. *Clan Macdonald*, writes as follows :—

Having been in the Clan Line almost from the starting of that Company, I am rather a large tea carrier from this port: consequently I feel myself in a position to advise tea shippers, both in the interests of themselves and the ships, to have the tea chests marked TOP. This mark to be put on the proper side (that side which bears all round without tenons.) I feel pretty certain that the damage to chests and consequent loss of tea, etc., would be reduced at least 50 per cent. by this mode.

COLOMBO TEA SALES.

ANOTHER YEAR OF EXPANSION.

Below we give the figures of the weekly sales of tea in Colombo for 1900—from January 10th to December 19th. The number of weekly sales were fewer than usual. Besides an additional week's vacation at the New Year, and a week's holiday at Easter, an innovation was instituted on the 26th September in the shape of a tea tasters' holiday. This had little, if any, effect on the total offered and sold; and we have a new record to announce in not only an advance, but a greater advance than ever before. Who, in 1890 when 5,961,902 lbs. were sold in the auction room—would have ventured to prophesy that in 1900, 36,254,900 lbs. would be so disposed of. A year ago it required little pre-science to anticipate the greatly increased patronage of the local market which this year has witnessed. When in December last we were giving a similar table as to-day we remarked:—"We trust to see in 1900 a third of the

total output offered locally." This has been realised, notwithstanding that the estimate of export this year was recently raised to 142,000,000 lbs. Thus 47,333,333 lbs. were needed to constitute a third, and the actual figure is 47,669,583. The totals offered for the past three years are as follow:—

	Offered.
1898	36,175,644
1899	38,655,059
1900	47,669,583

We congratulate both producers and Colombo dealers on this development. The prices obtained in 1900 compare unfavourably with those of 1899, but that year stands out as displaying a temporary check to the uniform descent of previous years. The weekly averages this year compare closely, and on the whole favourably, with those of 1898—until the end of October, when the slump began which culminated this month in the lowest figures on record—two weeks with 29 cts. average, followed by two with 28 cts. The figures for each week and the year's totals are appended:—

COLOMBO SALES, 1900.

Date.	Offered Packages.	lbs.	Sold Packages.	lbs.	Avge. Cts.
Jan. 10 ...	23,544	1,836,949	20,132	1,584,609	35
,, 17 ...	17,436	1,363,978	14,819	1,156,304	36
,, 24 ...	14,346	1,163,010	10,184	819,479	34
,, 31 ...	9,129	727,976	6,965	544,833	34
Feb. 7 ...	7,948	615,950	6,666	512,501	35
,, 14 ...	9,509	759,512	7,820	355,797	34
,, 21 ...	14,893	1,171,477	11,176	879,140	35
,, 28 ...	9,502	740,148	6,828	538,660	34
March 7 ...	7,411	892,695	4,107	638,213	32
,, 14 ...	10,287	826,984	8,286	667,595	34
,, 21 ..	12,115	947,469	10,397	809,177	35
,, 28 ...	11,371	896,733	9,456	739,927	35
April 4 ..	11,839	875,968	10,308	764,622	36
,, 10 ...	13,960	1,006,712	11,027	782,748	36
,, 25 ...	21,368	1,640,060	19,658	1,447,035	35
May 2 ...	10.675	848,472	8,886	709,586	36
,, 9 ...	12,279	911,982	9,753	729,571	36
,, 16 ...	12,806	1,036,739	9,354	760,004	35
,, 23 ...	16,839	1,267,394	11,610	934,048	31
,, 30 ...	14.794	1,096,617	12,245	897,141	31
June 6 ...	12,545	1,010 906	9,376	775,810	30
,, 14 ...	11,686	938,279	9.849	787,553	32
,, 20 ...	11,926	917,103	8,474	646,080	32
,, 27 ...	15,530	1,196,389	11,713	898.980	30
July 4 ..	12,102	958,042	10,077	786,152	31
,, 11 ...	13,067	1,019,482	11,635	917,358	34
,, 18 ...	15,479	1,211.017	13,627	1,058,587	33
,, 25 ...	12,968	984,800	11,871	897,950	36
Aug. 1 ...	11,138	876,617	9,083	706,630	37
,, 8 ...	11,853	909,728	8,572	638,104	35
,, 15 ...	10,019	775.590	8,245	636,820	36
,, 22 ...	11,768	936,309	9,394	750,250	35
,, 29 ...	8,565	667,431	7,280	559,518	37
Sept. 5 ...	8,498	661,968	7,558	584,516	36
,, 12 ...	7,197	613.890	5,571	475,593	37
,, 19 ...	11,355	984,879	9,883	784,238	40
Oct. 3 ...	15,979	1,248,116	12,614	979,491	36
,, 10 ...	8,930	730,628	7,926	642,324	37
,, 17 ..	12,820	1,004,501	8,941	707,048	37
,, 24 ...	11,593	911,298	8,632	681.804	35
,, 31 ...	10,434	790,011	7,131	555,394	33
Nov. 7 ...	9,734	780.332	7,636	615,616	33
,, 14 ...	14,716	1,164,675	10,385	822,970	34
,, 21 ...	14,051	1,137,752	9,478	763,601	31
,, 28 ...	14,648	1,214,862	8,340	705,785	29
Dec. 5 ...	15,588	1,185,769	7,495	451,853	29
,, 12 ...	14,358	1,140,637	7,855	618,961	28
,, 19 ...	14.746	1,071,447	8.393	544,528	28
Totals ...	605,344	47,669,583	466,711	32,264,901	

The quantities annually *sold* in public auction in Colombo for the past ten years shape as follow:—

1891 ...	9,599,024	1896 ...	25,412,624
1892 ..	11,425,251	1897 ...	26,512,099
1893 ...	14,246,430	1898 ...	27,197,810
1894 ...	15,788,343	1899 ...	31,277,642
1895 ...	19,668,116	1900 ...	36,264,901

—*Times of Ceylon.*

A LIBEL ON CEYLON AND INDIAN TEAS.

The Ceylon Chamber of Commerce addressed the Ber Chamber of Commerce as follows on the 12th ultimo:—

DEAR SIR,—I am directed by my Committee to draw the atten of your Chamber to the enclosed Circular, to which a tranlatio attached.

This Circular was originally forwarded to our Ceylon Com sioner in Europe, Mr J. H. Renton, from Switzerland, with earnest appeal to have the statement publicly and authoritati contradicted. Its effect, we are assured, all over the Contin but especially in Holland (where you are aware Anglophob just now rampant), has been most damaging to the interest Indian and Ceylon planters. Mr. Renton referred the matte the Ceylon Association in London, and through the efforts of Secretary and other gentlemen the following facts have been elici

The editor of the *Globe* admits that the paragraph appeare his journal, and states that it was copied from the Calcutta *Eng man*. Further attemps to trace the origin of the article have fai probably owing to the anxiety of the London organ to suppres share in this gross and damaging libel.

My Committee has been urged by the London Association take the matter up officially, and they feel that the first step i request your Chamber to vigorously co-operate with them in trac the origin of the obnoxious article.

The allusion to "maunds," certainly seems to point to an Ind source, for we do not use the term here.

Requesting the favour of your early attention, and promis the ready support of my Committee to any scheme which m suggest itself to your Chamber for dealing with the matter.—I dear Sir, yours faithfully,

F. W. WALDOCK,
Secretary.

BULLETIN COMMERCIAL.

DE LA MAISON VD. J. VAN DER CHIJS AND ZOON'S.

Delft (Hollande), Nov., 190

(*Translation.*)

The Jingo paper, the *Globe*, has just published an instructive articl the manner in which Ceylon and Indian teas are manipulated.

It appears that numbers of the English planters mix the sweeping the tea factories with their produce. Chemical analysis of several sam has proved that these contain less than 50% of tea, the balance consist sand or other waste. Buyers have thus been cheated of half their mo it is in Ceylon that this fraud most frequently takes place. These swe ings sell five rupees the maund (80 lbs. English). One is astonished t the English planters lend themselves to such an improper practice to ob so small a benefit But many of them who cultivate the Indian and Cey teas are obliged to have recourse to such improper methods in order t able to pay dividends to their creditors.

RETURNED.

It would appear, observes the *London Commercial Record*, t East India no longer lays claim to being an exporter of its prod pure and simple, for recent events have shown that under gi circumstances it is an importer of some consideration of its o produce as well. The rumour of a shipment of about 100 tons Cochin ginger to Bombay, of which we made mention a little wh ago, does not seem to be without some foundation; on the contra there are some people in the Spice trade who profess to be "in know," who positively affirm that such a quantity has been ship to that Indian port, although we must confess we have, so far, b unable to trace the exportation in the official Custom's List. O a few hundred packages are reported officially as having been warded to Bombay from London, and that being the case, we naturally sceptical as to the veracity of the rumour. It appears us more like the wish being the father of the thought, and yet fact that Bombay dealers have actually been bidders in our mar this week lends undoubtedly some colour to the rumour. We h Bombay has wired some orders for fair quantities of Cochin wash rough in the neighbourhood of 28s. c.i f. Bombay, without meet with sellers, the market having become firmer as far as rou descriptions are concerned, and nothing under 30s. f o b. is obta able. As the market in the East is extremely firm, there is ev possibility of the bid being repeated at a higher figure, a business in the end may result which would be very satisfact

ith regard to our stocks. But it is not ginger alone which ndia stands in need of; Cardamoms, principally seeds, have f late been in strong request as well. So great, indeed, has een the demand for export to India recently that our market has ractically been cleared of seeds. Considering the deplorable state which India has been for some years, it is not to be wondered at hat stocks of certain commodities have been allowed to run unduly ow. Now that the plague is practically stamped out, that the ffects of the famine are quickly disappearing, and the gloom cast ver the country is vanishing, dealers and consumers find themelves face to face with an absence of stocks of those articles which hey had become accustomed to look upon as their favourite comnodities for dealing and speculating, and, as prospects of the rowing crop of both ginger and cardamoms are far from satisactory, they lose no time in securing some lots in London, where tocks are still heavy and prices low. This is what we have been vaiting for, and London is, therefore, not slow in appreciating the eal position, as was clearly proved by the result of this week's ginger and cardamom sales. Both passed off with spirited competition—fine sorts of cardamoms paticularly enjoying good support —and resulted in an advance of values. The position of both articles s unique, and the prospects at the moment are for an improvement n both articles.

NOTES ON COMESTIBLES.

CHICORY

is the white, milky root of a plant known as the wild endive. It is cultivated in Holland, Belgium, France, Germany and England. The roots are large, fleshy and carrot-shaped. When dug up in August or September, the roots are washed out into small pieces and dried until about a quarter of their original weight. They are then roasted with a little oil to prevent burning and ground into powder, when they are ready for mixing with coffee.

CHOCOLATE

was first introduced to Europe by Humboldt, who found it in common use as a beverage by the Aztecs of Mexico when he conquered that country. It is now one of the popular beverages of Europe, and as a flavoring it ranks second to vanilla. It is prepared from the roasted seeds of the cocoa tree mixed with sugar, sago, potato-flour, corn-flour or some similar farina.

CINNAMON

is a native of the East Indies, China and Japan. The cinnamon of commerce is the bark of the cinnamon tree, which is one of the wonders of nature. Beside the valuable properties contained in the bark, there are the buds, known as cassia buds, which are so rich in flavor. An oil, similar to clove-oil, is made from the leaves. Camphor is derived from the roots and the fruit yields an oil, called cinnamon suet, which is highly fragrant, and in Ceylon was formerly made into candles for the exclusive use of the king.

CLOVES

are the dried, unopened flowers of the clove tree, which is now cultivated in several tropical countries. About four-fifths of the world's supply comes from East Africa, the city of Zanzibar being the great centre of the trade. The principal method of adulterating cloves is to include an excess of stems, sticks or stalks, which contain very little virtue.

COCOA, THE BEVERAGE,

is made from the berries or seeds of the cocoa, a tropical evergreen tree. The berries are harvested twice a year, in May and October. When gathered, they are conveyed to the "sweating-house," where they are submitted to a process of fermentation for from 4 to 10 days. This improves their taste, and gives them a fine, rich appearance. The process is completed when the pod falls off the bean, which is the cocoa of commerce. They are then dried in the sun, and shipped in bags of about 100 lb. each. These kernels or beans are, in this state, capable of yielding genuine cocoa. But, as this product is rather too rich, and is hard to cook, it is principally sold in the manufactured state. The variety in quality and price is largely due to the proportion of cocoa beans used as compared with the amount of inferior materials. As it lends itself easily to adulteration, the retailer should be careful to avoid new brands, when the special advantage claimed for them is their low price.

GINGER

is obtained from the knotty, fibrous roots of a reed-like plant, cultivated in several tropical countries, especially in Jamaica. Preserved ginger is made from roots taken from the ground early in January when they are five or six inches long and quite succulent. The dry gingers are dug up a few weeks later when the roots are firm and fibrous. The black whole ginger is made from the older, inferior roots by scalding them in water and drying in the sun. The best and soundest roots are made into whole white ginger by scraping off the outer dark-colored part and then drying without scalding. The finest whole ginger is new, dry, plump, heavy, white in color and chalky or crumbly in texture, but without worm holes.

MUSTARD.

The use of mustard, powdered in its present form, originated in Durham, Eng., about the year 1720, where it was prepared on a small scale by an old lady named Mrs. Clements, who kept the secret of its manufacture to herself—grinding the seed in a mill and sifting it—for several years. She visited London and the principal towns in England twice a year, thus founding the reputation of "Durham Mustard." Mustard is made from a mixture of different kinds of mustard seed, white, black or brown in color, and with or without * the addition of other ingredients, such as wheat flour, turmeric, cayenne, etc. It could be made from white seed alone, but, as the brown and black seeds only possess the oil yielding the piquant flavor which is so much esteemed, a mixture is necessary to produce the finest goods.

NUTMEGS AND MACE.

The nutmeg is the kernel of the fruit of the nutmeg tree. (Mace is the covering around this kernel.) The tree, which resembles in shape and size the pear tree, yields about 10 lb. of nutmegs and 1 lb. of mace each year under ordinary circumstances, but it is said it will produce 10 times that amount when highly manured. Nutmegs are liable to attacks of insects. These can be got rid of by exposing them on seives to the fumes of burning sulphur in a close vessel. The substitutes which have been most often sold as nutmegs are made of wood or of a paste made of flour, oil and nutmeg powder. Most of the nutmegs used in Canada come from the West Indies.

PEPPER

is a general term used for various hot, pungent and aromatic pods, berries, fruits or seeds obtained from the "Piper" species of plant. In the Middle Ages all imported aromatic spices were designated pepper. The natural family of the plant is now known to be limited to four plants only, of which the black pepper, the long pepper and cayenne pepper are the only kinds in general domestic use. From the black pepper berry or seed white pepper is produced, by taking off the husk before grinding. Black pepper is more pungent than white, on account of the acid resin, known as piperine, and a volatile oil contained in the skin or fleshy part. Ground white pepper is frequently adulterated with linseed meal, flour mustard husks, ground olive stones, ground rice, ground long pepper, and even by sand and clay.—*The Canadian Grocer.*

TEA AT THE LONDON DOCKS.

REQUIRES FOUR TIMES THE SPACE FOR OTHER GOODS.

"One Who Knows" writes to *Fairplay* :—

In Mr. Rogers's evidence before the Royal Commission he is reported to have said that the rates for tea were enormous, and he implied that they were so in consequence of a combination called "The Tea Clearing House," and that they were double as heavy as the rates for coffee. Now coffee rates include collecting from import vessel, lighterage landing, sorting to quality, weighing, piling away, and delivery to numbers; but the cost of this working is very considerably less than that of working tea. Tea has to be collected from lighter from import vessel, landed to marks, species, and numbers, laid down, each chest opened for inspection, packages repaired, weighed in presence of H.M. Customs Officers, put on show, samples served to the trade, warrants, weight-notes, and landing accounts of each individual chest, and delivery to picked numbers.

* We know of no commercial mustard free from admixture, nor do we think that *pure* mustard would be saleable. Its strength would be objectionable.—Ed., *P. O.*

The following extract from the printed and published list of charges on tea will show exactly the nature of the work that has to be done:—

The operations necessary under the management and bulking rates are:— Management Rate includes receiving bills of lading, getting same released, Customs entries, having lighters, or vans, in attendance upon steamer's arrival, conveying tea to warehouse by road or water, landing, sorting to marks and species, coopering where required, and weighing gross with H.M. Customs' Officers, marking and scribing number, rotation, year, and weight on each chest, opening and laying each break for broker's inspection, re-coopering, drawing, and forwarding samples, piling away in warehouse to picked numbers, weighing and delivery, placing chests on show for public sale, attendance while on show, and serving the trade with samples, adjusting to original weight, and nailing up, furnishing landing accounts and warrants.

These operations take at least four times the room that the same weight of coffee, sugar and similar goods would occupy, an important consideration where rent, rates, and taxes are based on superficial measurement of floors, and the rental earned is consequently less than a quarter of that earned on the other goods mentioned. I think that Mr. Rogers will have great difficulty in finding amongst his forty witnesses anyone to controvert the truth of this statement.

THE PLANTER AND THE SELANGOR GOVERNMENT.

(With Apologies to *Truth*.)

Planter.—Concerning the road you engaged to construct
As a means of exploiting the State,
It is more than three years since you started the job
And it scarcely is yet up to date.
I thought I would call just the cause to enquire
Of this very amazing delay
Oh, when will you finish it—really, dear Sir?

Government.—"We are carefully feeling our way."

Planter.—There is also the tap-drain that should have been cut
For I heard that the contract was let
To a *really good man;* may I humbly enquire
If he's started to work on it yet?
Is it really the fact as I hear from my friends
That the cause of this woeful delay
Is—the middle is done, but alas! not the ends?

Government.—"We are carefully feeling our way."

Planter.—And when you have felt it to judge from the time,
For this small piece of work I'd to wait,
I shall probably find you've constructed a drain,
That's a perfect disgrace to the State.
The planters would flock in from near and from far,
It's possible now that they MAY,
But with premium on land at a dollar, Oh, no!

Government.—"We are carefully feeling our way."

Planter.—There are some applications for land, I believe
That were made just a twelvemonth ago,
No grants for the same have been issued, I think,
Though, of course, I am not in the know.
May I ask when you think a surveyor will come?
His fees I am willing to pay,
Though the road is impossible, still there's a launch.

Government.—"We are carefully feeling our way."

Planter.—The labour is scarce, and the sickness is great,
But 'twas something like drawing a fang
When they told me that all of the votes for the year
Were transferred from this district to Klang!
You'd best have a care how my patience you try or incensed
by your needless delay
I shall find out a way to my feelings express
While you're "carefully feeling your way."

RUSTICUS in the *Straits Times*.

RIVAL FERTILISERS.

NITRATE OF SODA AND SULPHATE OF AMMONIA.

The rival claims of nitrate of soda and sulphate of ammoni fertilising substances for agricultural land have for a numbe years been the subject of much spirited debate. There are m experienced farmers who pronounce unreservedly for sulpha ammonia as the best nitrogenous accompaniment to min manures, while the majority perhaps hold as firmly to nitra soda as the more effectual dressing. This sharp conflict of opi is not surprising in a sense, for the acute dissension that exist almost every point connected with the wide subject of manurin one of the most remarkable features of modern farming. A cl examination of the testimony arrayed on either side of this l standing debate, however, reveals traces of argument somew removed from the region of practical and unbiased evidence. peculiar circumstance connected with the use of the rival nitr nous manures is that the respective sides rigidly adhere to substance of their fancy, whatever may be the character of the or of the soil. Unprejudiced discrimination seems to be spicuously absent, for the two materials seem to be seldom fo on the one holding. A searching investigation of the rela merits of the two manures does not confirm the wisdom of exclusive use of either of the invaluable materials. The substa are really less antagonistic than is usually supposed. They similar in their chemical contents, but essentially different in t fertilising effects, and consequently the one substance is o incapable of economic substitution by the other, as is intellige shown by Professor Warrington in the paper that appears his name in the Royal Agricultural Society's journal. Nitrat soda is, of course, the more speedy in its action, and is thus p liarly adapted for application as a top-dressing when the establis plants appear to need encouragement. It is also more effectua dry seasons than sulphate of ammonia. The latter, however, highly advantageous manure for spring application, along v phosphatic and potassic materials, and while nitrate of soda usu gives the better yield as measured by bulk, sulphate of ammoni the more efficacious in improving the quality of the crop. selection of the nitrogenous dressing is distinctly a matter careful and intelligent discrimination, and not, as is often suppo one on which the fancy of the individual may be humoured v impunity.—*The Field*.

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION.

Extract from Abstract of the Proceedings of a Meeting the General Committee held at Calcutta, 18th December, 19 Mr. W. Brown, Vice-Chairman, presiding.

Letters of 23rd and 30th November, from the Secretary, Ind Tea Association, London, were brought up for final considerat and disposal. The chief matters dealt with in these letters were

(*a*) **Work on the Continent.**—In his letter dated 23rd Novem Mr. Tye reported that the London Committee had arranged subsidise the "English Tea Rooms," 23 Pizza di Spagna, Ro to the extent of £75 per annum for three years; and in additio give a bonus of 10s. per chest for each chest of Indian or blen British-grown tea, sold during the year in Italy, up to a maxim of 50 chests in the first instance. The subsidy was to be spent the proprietress of the Rooms—in consultation with Mr. J. E. Harrington— in pushing the sale of Indian tea in Italy, both judicious advertising and by the opening of branch agencies in principal Italian towns. Reports and accounts were to be rende to the Association quarterly.

(*b*) **Publication of Details of Sales in London.**—In the same le it was stated that the London Tea Brokers' Association had brou forward a proposal for restricting the publication of the pr given, and bids made, at the sales of tea. It was considered by brokers and the dealers that this publicity was adverse to t interests as well as to those of producers. They, therefore, posed the issue of catalogues to the recognised body of Lon dealers only. The Ceylon Association had passed a resolu in favour of the proposal, being tried for six months. The Lon Committee had it under consideration.

(c) **Enhancement of British Import Duty.**—It was stated in the etter, dated 30th November, that the proposed memorial to the Chancellor of the Exchequer (mentioned in the proceedings of the neeting held on 4th December) upon this matter had been prepared. It was to be presented to Sir Michæl Hicks Beach in December by Sir Henry Seymour King, M.P. Copies would be ent to Calcutta in due course.

Considered letter, dated 11th November, from the Secretary, United Planters' Association of Southern India, forwarding a copy of the following resolution which was adopted at the Annual Meeting of that Association held on the 8th August last, *viz.* :—

"That considering the critical condition of the tea and coffee industries, this Association do communicate with the Indian Tea Association the Ceylon Planters' Association, the Indian Chambers of Commerce, and the leading firms of merchants and brokers interested in tea and coffee, etc., in this country and in England and her Colonies with a view to ascertaining whether a movement in favour of a commercial combination of Great Britain and her Colonies and India against the world (which would by a system of differential duties afford some protection to British-grown products and manufactures) would receive support.

In the letter it was also stated that there was felt to be a strong, and growing, feeling in England, and her Dependencies and Colonies in favour of what might be termed an Imperial Fiscal Federation for the protection of British interests as against those of the rest of the world. The Planters' Association was desirous of eliciting opinions on the subject, with a view to the submission of memorials, etc., to the Home Government and the other Governments concerned.

After consideration the General Committee decided to submit copies of the letter to all the members of the Association, and to the different branches for expressions of opinion. The nature of any action, which it might be considered desirable to take in the matter, could then be determined.

The attention of the Calcutta Tea Traders' Association was to be drawn to the question of revising the present method of drawing samples at the Tea Warehouse.

A note by Mr. H. H. Mann on "a suggested remedy for Thread Blight" was to be published for the information of the members of the Association.

SHE CARRIES IT WITH HER.

When Mrs. Mary Wren is about to start on a trip to Sydney she always packs in her bag a bottle of Mother Seigel's Syrup. Of course, she is careful to put it where it is not likely to get broken, as she does not want to waste the medicine, neither does she want to spoil her things. So far, I am glad to say, she has carried the precious bottle without an accident.

And when she gets home to Acacia Cottage, Bridge Street, Muswellbrook, New South Wales, she has always reason to be thankful that she took the Syrup with her.

For, you must know, that on the 20th day of Sept., 1899, Mrs. Wren was 75 years old, and fifty of them she has spent in the town of Muswellbrook. She has had fifteen children, ten of whom are still living; certainly a record of which she has a right to be proud.

Now, to make this little tale run straight; and to keep the kinks out of it, we shall have to hark back to the place where it properly starts. Better still, perhaps, to let the good old lady tell it herself, as she does in a letter dated 21st of September (next day after her birthday), 1899.

"Most of my life," so she goes on, "I had suffered from indigestion and wind on the stomach. I have often been up half the night trying to relieve the terrible pains caused by the wind.

"I spent a lot of money on the essence of ginger and other things, but they all failed miserable. The essence of ginger would warm me for a few minutes, and then the pains would be on again; just as a barking dog begins again after you have hit him with something. That's the way it was with me.

"About five years ago I had a very bad time with influenza; and when I was slowly getting over that the indigestion came on worse than ever. We couldn't do anything for it, or with it; no more could the doctors.

"Then an old friend happened in, and she said, 'Why don't you take Mother Seigel's Syrup?' I told her I didn't believe in any of the advertised medicines. She went on imploring and entreating, and I said she might as well save her breath, for she couldn't move me an inch out of my own opinions.

What does that woman do but go and buy a bottle without my knowledge, and fetch it to me? Then I gave in and began trying it. That very bottle helped, and, after taking a few bottles more, I was as well as anybody wants to be.

"Since using Mother Seigel's Syrup I have got rid of all my pains and aches, and to make sure of keeping them away I carry a bottle with me wherever I go."—Mary Wren.

Mr. William John Davison, Saddle and Harness Maker, of Muswellbrook, writes that he has known Mrs. Wren for 30 years, and the public may put full faith in every word she says.

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

MARKET REPORT.

[*Per Mail advices of 7th December* 1900.]

COFFEE.

The London Commercial Record says:—There is nothing of interest to record in this market. Supplies at auction have been both small and unattractive, and the trade seem quiet indisposed to business. In the market for "futures" there have been a few fluctuations; early in the week reported damage to the next crop by rain caused a rise of 1s per cwt., but on large receipts the tone became depressed and the advance was lost. Yesterday March delivery Santos sold at 34s 3d to 34s 6d, May at 34s 9d to 35s, September at 35s 6d to 35s 9d, and December at 36s 3d. Catalogues to-day comprised:—195 bags East India, 57 bags 63 barrels Jamaica, 706 bags Nyasaland, 511 bags Guatemala, 243 bags Salvador, 440 bags Colombian, 242 bags Mexican, 193 bags Nicaragua, 385 bags New Granada, and 1,440 bags unwashed Dumont. The sales went off quietly. Colombians were 1s per cwt. lower. Other descriptions unchanged. We quote:—

London ...	Santos ...	March delivery ...	34s 4½d.
New York ...	No. 7 Rio...	,, ...	6·30 cents.
Hamburg...	Santos ..	,, .	35¼ pf.
Havre ...	Santos ...	,, ...	42 francs.
Holland ...	Good ordinary Java ...		35 cents.

Imports, Deliveries and Stock of Coffee in London, are as follows:—

	Stock.		Imports.	
	1900.	1899.	1900.	1899.
Tons ..	15,130	16,246	33,782	45,015
	Home Consumption.		Export.	
	1900.	1899.	1900.	1899.
Tons ...	15,376	15,701	17,861	27,449

The preceding figures exhibit—	Tons.
In the Imports a decrease this year of ...	11,233
Home Consumption a decrease of	325
Export a decrease of	9,588
Stock a decrease of	1,116

Auctions this week have gone off as under:—

Ceylon—*Plantation*.—7 casks 2 tierces 1 bag sold, smalls 63s 6d, low middling to middling 67s to 77s, pea-berry 75s.

Costa Rica.—Of 440 bags catalogued only 20 bags good middling hard gray sold at 62s.

Salvador.—712 bags offered about half sold, good brownish colory 49s, good middling 58s 6d.

GUATEMALA.—Of 479 bags catalogued 65 bags sold, small 41s 6d, low middling 50s 6d, middling 54s, pea-berry 50s.

NICARAGUA.—72 bags partly sold, pea-berry 48s to 71s

COLOMBIAN.—Of 121 bags offered only one lot pea-berry sold at 58s 6d.

VENEZUELAN.—Of 148 bags catalogued one lot pea-berry brought 59s, remainder bought in

ECUADOR.—117 bags sold, country-damaged bulked 31s 6d to 37s 6d, fine ordinary pale greenish 38s 6d.

The following were bought in:—18 half-frazils Mocha, 40 bags Vera Paz, and 44 bags Bolivian.

Receipts in Rio and Santos.

	1900-1.	1899-1900.	1898-99.	1897-98.
Since July 1	Bags	Bags.	Bags.	Bags.
Rio ..	1,501,000	1,970,000	1,611,000	2,463,000
Santos ...	4,929,000	4,268,000	3,415,000	4,094,000
Total	6,430,000	6,238,000	5,026,000	6,557,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange $10\frac{1}{32}$d, previous day $10\frac{1}{16}$d.

HAVRE, *Dec.* 6.—Good average Santos December opened quiet at 41¼f. and closed steady at 41⅜f.. March opened at 41¾f. and closed at 42f., May opened at 42¼f. and closed at 42½f., September opened at 43f. and closed at 43¼f.

HAMBURG, *Dec.* 6.—Good average Santos December opened quiet at 34pf. and closed dull at 34½pf., March opened at 35pf. and closed at 35¼pf.. May opened at 35½pf. and closed at 35¾pf , Septemaer opened at 36¼pf. and closed at 36¼pf.

NEW YORK, *Dec.* 6.—Closing prices of No. 7 Rio, were as follow:—

	Dec.	Jan.	Feb.	Mar.	April.
December 5...	6·10	6·15	6·25	6·35	6·40
December 6 ..	6·05	6·10	6·20	6·30	6·35

TEA.

CHINA.—The market is quiet, but about steady. At auction during the week 4,672 packages offered and partly sold as follows: Kaisow 3⅛d, Panyong 5d to 5½d, Soomoo, 4¾d Souchong 4½d, to 4¾d, Moning 5d, Formosa Oolong 6½d to 9d, Flowery Pekoe 8½d to 9d, Scented Orange Pekoe 5¾d. Moyune Green:—Gunpowder 8½d to 1s 2d, Imperial 4¼d to 7½d, Sow Mee 6½d to 1s 5½d, Foong Mee 9½d to 11¼d, Hyson 3½d to 4⅜d, Young Hyson 4d to 8d per lb.

INDIAN.—Auctions comprised 44,600 packages against 46,900 packages in the week before, and 38,600 packages at the same time a year ago.

A somewhat better tone was observable owing to more general enquiry, resulting from a feeling that prices are not likely to recede further. There was no material change in quotations for common and ordinary grades which continue to bring about the same, but in some cases over 7d per lb the bidding was brisker, especially for strong useful Broken Pekoes Fine and choice lots were not over plentiful and sold well.

For 38,500 packages on Estate account 6¾d was obtained, contrasted with 8d per lb. for 34,500 packages, 7⅞d per lb. for 36,300 packages in the two preceding seasons.

November deliveries were more satisfactory than of late amounting to 13,785,000 lbs or fully equal to those of 1899, and it is now to be hoped that dealers having used up their old duty-paid stock the clearances may again assume a normal state. For the eleven months from 1st January, 132,359,000 lbs. were taken from the London Bonded Warehouses *versus* 129,170,000 lbs. for the corresponding period previously, so that the statistical position should soon look more favourable.

CEYLON.—Rather more was brought forward in Public Sale, *viz.*, 22,500 packages opposed to 19,200 packages on the foregoing Tuesday. During the similar interval in 1899 offerings were 23,100 packages.

Competition was scarcely so strong for common to fair Pekoes and Pekoe Souchongs, while broken kinds under 7d per lb. were in less request, and a decline of ¼d to ½d per lb. was often noticeable. Continental houses were again puchasers of medium to fine leafy descriptions which were also wanted by the Home trade, and consequently ruled firm to dearer in most instances Unevenness was again apparent in Broken Pekoes and Broken Orange Pekoes, but on the whole they did not shew much alteration.

The average is 7⅝d per lb. On the 29th ultimo it was slig over 7½d per lb., and 7¾d per lb. in 1899 Consumption seems t benefiting by the low range of prices current, deliveries for past eleven months being 97,999,000 lbs., and 87,082,000 lbs. in former year.

JAVA.—A little over 800 packages of direct import passed hammer. The upper lines were taken up freely at enhanced ra but others went slowly. For the 13th instant 540 packages advertised.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Ja Tea Report, dated December 7th, 1900, *says :—*

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DA

	Indian. Pkgs.	Ceylon. Pkgs.	J P
1900-1901	805,605	664,894	27
1899-1900	877,596	650,367	31

47,541 *pkgs.* INDIAN
23,146 ,, CEYLON
844 ,, JAVA
} Total 71,531 packages were offered in public auc this week.

Movements of Tea during November show that the recent range of price has counteracted to a very large extent the eff of the increased duty, and for the first time since March last monthly delivery of Indian and Ceylon Tea shows an expans over the corresponding period last year. This expansion is sa factory, but it has been dearly paid for by the producers of Te our own Dependencies, the average price obtained for Indian Ceylon Tea during November being more than 1d. per lb. be the price ruling during November, 1899. In the case of the lo grade Teas on which the increased tax is most heavily felt, decline has amounted to nearly 2d .per lb. The deliveries of C Tea on the other hand show a falling off, and thus the total sumption of all descriptions of Tea mark but a very small incr over November last year.

INDIAN.—Trade has continued fairly brisk and there has sufficient demand to maintain prices for the quantity of Tea offe which was again moderate for the time of year.

Total Tea sold on Garden Account 1st June to date 1900, 649 pkgs., av. 7·70d. 1899, 651,384 pkgs., av. 8·53d.

CEYLON.—Supplies at auction have not been excessive. quotations current last week have been maintained with Some of the invoices have shown a tendency to fall off in qua The official wire gives exports to United Kingdom during Nove as 9,250,000 lbs. against 6,500,000 lbs. last year, making the from 1st January 103,250,000 lbs. against 99,500,000 lbs. same pe 1899. Average for week 7·45d.. against 7·68d. in 1899.

Ceylon Tea sold on Garden Account 1st January to date 1,144,570 pkgs., av. 7·21d 1899. 1,023,063 pkgs., av. 7·97d.

JAVA.—The selection, though small, comprised some attrac invoices, and competition for these was especially brisk.

Bank Rate 4 per cent. Exchange on London three months sigh Calcutta 1/4 7/32. Colombo 1/4¼.

COCOA.

No auctions were held on Tuesday. Privately the marke much more active than recently and about 5,000 bags of var growths have changed hands during the week at easy prices, —fine and superior Trinidad at 76s to 78s 6d, middling to good ditto at 70s to 73s. Bahia at 70s to 72s, and Guayaquil—good to Arriba at 78s to 82s 6d. greyish red Caraquez 75s to 76s per cw

COCOA POWDER.—At public sale on the 4th instant of 115 p ages offered only 25 packages Dutch sold at 9½d to 11½d per lb.

COCOA BUTTER is rather dearer, 600 cases (60 tons) Cadbu selling at auction on the 4th instant at 1s 6¼d to 1s 6¾d. ave 1s 6 9/16d against an average of 1s 6 3/16d per lb. obtained at the Nov ber sales. At Amsterdam on the same day 65 tons Van Hout sold under the hammer at an average of 86c, being a decline o on the previous prices realised.

COCOA SHELLS.—At auction on Tuesday D grade declined 10 15s in value, but other qualities were rather dearer. 1,640 (62 tons) Cadbury's sold—A at 92s 6d to 95s, B at 87s 6d to 90 at £5 10s to £5 12s 6d, and D at £13 10s to £13 12s 6d per ton.

PEPPER.

BLACK.—The market is very quiet, and values have tende favor of buyers. About 150 tons Singapore have been sold arrival, including January-March shipment (s.) at 6 5/16d to 6

d February-April and March-May at 6⅜d to 6 5/16d. On the spot és of fair Singapore at 6 3/16d to 6½d.

At auction on Wednesday 241 bags Lampong and 140 bags nang retired unsold. 10 bags shells sold at 2½d per lb.

The shipments of Black Pepper for the month of November, come as follows:—

	1st-half.				2nd-half.			
	1900.		1899.		1900.		1899.	
	Tons.		Tons.		Tons.		Tons.	
K.—Sing. ...	*nil*	30	50	120	*nil*	*nil*	20	90
Penang ...	30		70		*nil*		70	
ntinent ...		40		70		110		150
ited States ...		220		*nil*		20		20
Total ...		290		190		130		260

White is quiet. For arrival about 50 tons Penang have been ld at 8 9/16d February-April shipment. On the spot sales of fair ngapore at 9 3/16d, and fair Penang at 8 9/16d.

At public sale on the 5th instant. Of 75 cases 507 bags Singaore catalogued, 5 cases 45 bags sold—fine in cases 9½d to 9⅝d. and bags at 9⅜d. 60 bags Penang dust brought 2¼d to 2⅜d per lb.

The shipments of White Pepper for the month of November, mpare as follows:—

	1st-half.				2nd-half.			
	1900.		1899.		1900.		1899.	
	Tons.		Tons.		Tons.		Tons.	
K.—Sing. ...	130	200	310	350	40	40	70	70
Penang ...	70		40		*nil*		*nil*	
ntinent ...		100		50		30		20
Total ...		300		400		70		90

GINGER.

Cochin.—A break in the uninteresting line this article has followed for so long can at length be recorded, for there has been a ood business done privately since our last, some 1,500 bags washed ugh having changed hands at 27s to 30s for leanish to good fair, hich shows a rise of quite 1s per cwt. Under the hammer sales re confined to cut kinds, operators being unable to screw up eir bids to holders' ideas for washed or Calicut rough. 204 cases bags were brought forward, and 87 cases sold at rather lower ices—good medium cut and scraped 63s, medium, some small t rough, plumpish 45s, very dull ditto 43s, small ditto 39s to s 6d. For worked rough 29s 6d per cwt. bid and refused, which gure was also offered in vain for Calicut Sorts.

Japan is also dearer. 181 bags offered, and 26 bags sold—rough avily limed 29s 6d per cwt.

Jamaica very difficult to quit, and of 174 barrels catalogued only out 30 barrels sold—good bright 62s, middling to fair 45s to s per cwt.

CARDAMOMS.

Cardamoms.—403 cases offered about half sold:—Mysore @ Ceylon Tonacombe," very fine extra bold pale plump smooth 4s 2d to s 3d, bold ditto rather duller 3s 3d to 3s 4d; "Duckwari," very ne extra bold pale 4s 2d, bold ditto 3s 3d, bold medium ditto 2s 4d, nall ditto 1s 5d, extra bold splits 3s 5d; "Vedehette," extra bold le plump 3s 6d, bold ditto 2s 9d, medium ditto 1s 11d; very bold lish and yellowish 3s 4d, bold 2s 7d, medium 1s 11d; extra bold mp yellow 2s 11d to 3s, medium 2s 1d, small 1s 2d; small to ld palish and yellowish 2s 6d to 2s 7d, inferior ditto 2s 3d; extra ld long unclipped lean and greenish 2s, bold ditto 1s 6d to 1s 7d, edium 1s 2d; very bold brown 2s 5d to 2s 6d, bold 2s, medium 6d, small 1s 4d; good brownish medium bold 2s 2d, medium tto 1s 7d; medium badly clipped 1s 4d; medium bold dull llowish 1s 7d, small brown 1s 4d. Mangalore @ Calicut, bold le 3s 2d to 3s 4d, medium ditto 3s to 3s 1d, bold brownish 2s 9d. ild Ceylon, fair 2s 11d to 3s, rather lean 2s 8d. Seeds realised 6d to 2s 9d for fair to good and 2s 5d down to 2s per lb. for ordiry to common. Splits ranged from 1s 9d for good pale down to per lb. for common brown.

CINCHONA.

The N. V. Ned. Veem cinchona-bark department at Amsterdam ports the shipments during November from Java to Europe at 90,000 Amst. lbs., against 1,362,000 in 1899, 1,837,000 in 1898, 989,000 in 1897, and 909,000 in 1896. The total shipments from January to November have been

1900	9,680,000	1896	9,189,000
1899	10,783,000	1895	8,193,700
1898	10,132,000	1894	8,386,700
1897	7,706,000	1893	6,951,000

while the N.V. Vriesseveem cinchona department reports the shipments from Java from Ocober 30 to December 3, 1900, at 1,772,000 Amst. lbs., and from January 1 to December 3 at 9,548,408 Amst. lbs. For the five months ended August the exports from British India were:—

	1900.	1899.	1898.
Lbs.	1,491,484	1,253,288	761,486

The exports from Holland during the nine months ended November were:—

	1900.	1899.	1898.
Kilos.	371,500	407,900	337,800

In the drug auctions thirteen serons of Huanoco quill sold at from 6½d to 6¾d for lean to good bright, and seven serons Toxa good quill at 1s 6d per lb. Another lot of sixteen serons Huanoco grey bark sold at 6¾d and a bale of dark flat Calisaya was cleared at 3d per lb.

QUININE.

The slump in the second-hand market has been further accentuated this week by the failure of a speculator, who held, it is said, about 250,000 oz, which have been forced on the market. This fact together with the heavy bark shipments last month, have completely demoralised the speculative market, and quotations have gradually dropped to 1s. 1¼d. for December delivery, in which position a small business has been done, and for March there are sellers at 1s. 2d. It is currently reported that makers will be compelled to reduce their quotation, if, as quite anticipated, there should be a decline at the Amsterdam bark sale to-day. The opinion is expressed that makers would have reduced their quotations ere this, had it not been that they are exceptionally busy and that the "falling clause" was in operation on undelivered portions of contracts. There is now a discrepancy of 5½d. between the second-hand quotation and that of makers. American quinine manufacturers reduce their quotation on Wednesday to 32c. per oz. In the drug-auctions 2 cases of Howard's quinine sulphate, each containing 100 1-oz. vials, were offered and bought in.

[*Per Mail advices of 14th December* 1900.]

COFFEE.

The London Commercial Record says:—There has been rather more business transacted during the past week, but no general improvement in the tone of the market, and prices as a rule have again been against sellers, with the exception of a small supply of home trade quality Colombian which sold yesterday at a slight recovery. The market for "futures," under pressure of Continental sales, has been depressed, and latest transactions shew a decline of nearly 2s per cwt. for the week. Yesterday March Santos sold at 33s to 32s 1½d, May at 33s 1½d to 32s 10½d, September at 34s to 33s 3d, and December at 34s 3d to 33s 9d per cwt., closing 3d to 6d above the lowest.

To-day the sales went off with dull demand. Guatemala and similar qualities 1s to 2s per cwt. lower. Catalogues to-day comprised 167 bags East India, 324 bags Nyasaland, 138 bags Salvador, 579 bags Guatemala, 74 bags Colombian, 42 bags Nicaragua, 444 bags Costa Rica, and 2,870 bags unwashed Dumont.

London	Santos ...	March delivery	... 32s 6d.
New York	No. 7 Rio ...	,,	... 5·90 cents.
Hamburg	Santos ...	,,	... 32½ pf.
Havre	Santos ...	,,	... 39½ francs.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1900.	1899.	1900.	1899.
Tons ...	15,066	15,811	34,379	45,525
	Home Consumption.		Export.	
	1900.	1899.	1900.	1899.
Tons ...	15,801	16,001	18,150	28,090

The preceding figures exhibit— Tons.

In the Imports a decrease this year of	11,146
Home Consumption a decrease off	200
Export a decrease of	9,940
Stock a decrease of	745

Auctions this week have passed off as follows:—

CEYLON—*Plantation.*—15 casks 4 barrels partly sold, smalls 48s 6d, pea-berry 68s.

CEYLON—*Liberian.*—19 bags bought in.

EAST INDIA.—234 bags mostly sold as follows: *Mysore*, smalls 42s 6d, low middling to middling 48s 6d to 56s, bold 58s to 66s 6d, pea-berry 59s; *Coorg*, middling to good middling 52s to 57s, bold faded 66s; *Neilgherry*, smalls 43s 6d to 49s 6d, low middling to middling 48s to 53s, bold 59s 6d, pea-berry 51s to 52s

MOCHA.—88 ½-frazils bought in.

COSTA RICA.—Of 177 bags catalogued 120 bags sold, good middling faded colory 65s to 65s 6d, good bold 72s 6d to 75s 6d.

GUATEMALA.—203 bags mostly sold, smalls 46s, good to fine ordinary 43s to 44s, good middling 54s 6d, bold 58s 6d, pea-berry 51s to 52s.

VERA PAZ.—Of 207 bags brought forward only 40 bags sold, smalls mottled gray 41s 6d, fine ordinary 46s, pea-berry 56s.

COLOMBIAN.—Of 685 bags offered 320 bags sold, country-damaged bulked 44s to 48s pea-berry gray 53s; sound, smalls 40s to 43s, low middling to middling 45s to 52s, good middling 59s, bold 54s to 64s, pea-berry 56s to 65s 6d.

ECUADOR.—70 bags mostly sold, sea-damaged bulked 30s 6d to 33s.

SANTOS.—762 bags bought in.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	1,542,000	2,011,000	1,644,000	2,548,000
Santos ...	5,054,000	4,382,000	3,509,000	4,199,000
Total...	6,596,000	6,393,000	5,153,000	6,747,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 10d, previous day 9 15/16d.

HAVRE, *Dec.* 13.—Good average Santos December opened quiet at 39¼f. and closed quiet at 39¼f., March opened at 39½f. and closed at 39½f., May opened at 39¾f. and closed at 39¾f., September opened at 40½f. and closed at 40½f.

HAMBURG, *Dec.* 13.—Good average Santos December opened quiet at 32pf. and closed steady at 31½pf., March opened at 32¾pf. and closed at 32¾pf., May opened at 33pf. and closed at 33pf., September opened at 34pf. and closed at 34pf.

NEW YORK, *Dec.* 13.—Closing prices of No. 7 Rio were as follow:—

	Dec.	Jan.	Feb.	Mar.	April.
December 13...	5·65	5·75	5·85	5·90	5·95
December 12...	5·70	5·80	5·90	6·00	6·05

The public market will be closed after Wednesday, 19th inst., until Tuesday, January 8th, 1901.

TEA.

INDIAN.—Public sales were heavier, viz., 55,200 packages contrasted with 44,600 packages last week, and 44,400 packages at this period of 1899.

The position of the Market remains much the same as regards useful teas over 6d per lb., with an occasional hardening in price for desirable parcels. Under that, however, owing to the large number of uninteresting invoices, quotations were often lower to the extent of ¼d per lb. Fine and finest continued comparatively scarce and commanded attention, particularly a few choice Darjeelings. Arrivals from other districts, especially Assam, are not so good as shipments to hand in November.

For 47,300 packages on Estate Account 7⅛d per lb. was obtained against 8⅜d per lb. for 40,200 packages, and also for 30,800 packages in the two previous seasons.

From the statistics given below it will be seen that exports from here shew a marked increase, those for the past month being the largest on record and double that of the year before.

CEYLON.—Auctions included 21,800 packages *versus* 22,500 packages on the foregoing Tuesday, and 21,000 packages in the corresponding interval twelve months ago.

Common to fair leafy and broken kinds continue depressed, but there was again a strong enquiry for Pekoes and Orange Pekoes with full flavoury infusions, both from dealers and shippers, which passed as a rule in favour of sellers. Medium and fine Broken Pekoes and Broken Orange Pekoes for the most part went off well. Finest tippy lots were less plentiful than of late.

The average is 7⅜d per lb. On the 6th inst. it stood at 7⅛d pe and 7¾d on the 14th December, 1899.

JAVA.—Nearly 700 packages of direct import were submit There was a somewhat quite tone, and a considerable portion withdrawn owing to bids not being up to limits.

Deliveries.—The clearances of all Tea (on which duty has paid) from the London warehouses, as per official returns *viz.*:—

From 1st to 11th December,	1900	7,498,813 l
Do. do.	1899	7,239,270

During the week the following have been printed for sal public auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total off Pkgs
India	46,053	9,176	55,22
Ceylon	19,829	2,008	21,83
Java	465	230	69
Total ...	66,347	11,414	77,76

Also 809 packages from second hands.

Arrivals:—	From Calcutta. lbs.	From Colo lbs.
Ex *Oruba*	—	382,000
„ *Logician*	2,195,000	307,000
„ *Shropshire* ...	—	948,000
„ *City of Corinth* ...	4,744,000	—
Totals ...	6,939,000	1,637,000

Messrs. Gow, Wilson & Stanton's Indian, Ceylon, and J Tea Report, dated December 14th, 1900, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DA

	Indian. Pkgs.	Ceylon. Pkgs.	
1900-1901	862,873	687,652	2
1899-1900	923,230	671,963	3

57,268 *pkgs.* INDIAN
22,758 „ CEYLON
695 „ JAVA
} Total 80,721 packages were offered in p auction this week.

Recent low prices have certainly had the effect of stimula the use of British-grown Tea in markets outside the United K dom, the quantity of Indian Tea alone re-exported during Nov ber amounting to 1,714,437 lbs. against only 872,115 lbs. for corresponding month last year.

For the first eleven months of the year, 1900, there is an inc of two million lbs. in the re-export of Indian Tea, and of over and a half million lbs. in that of Ceylon when compared with corresponding period of 1899.

The Tea re-exported from the United Kingdom at the pre time goes mainly to countries in Europe, and it is satisfactor learn that the use of our Teas in those markets is showing a st increase, Russia especially appearing to respond readily to the l prices lately current for grades suitable for that important ma

INDIAN.—The week's sale was heavy, comprising 57,268 packa the market, however, was steady for all useful liquoring T prices for these showing here and there a tendency towards provement The lower grades, on the other hand, met with s what less attention and sold occasionally at slightly easier pr The following averages are worthy of note:—"Jungpunnah," 1 "Margarets Hope," 1/2½; "Con. T. & L. Bloomfield," 1/2¼, "Budla Beta," 1/1½.

Week's average of Tea sold on Garden Account, 1900, 47,596 p av. 7·02d. 1899, 40,639 pkgs., av. 8·32d.

Total Tea sold on Garden Account, 1st June to date, 1900, 69 pkgs., av. 7·65d. 1899, 692,023 pkgs., av. 8·51d.

CEYLON.—With moderate auctions, bidding was well distribu except for poorest liquoring Teas, which appeared to be some neglected, and in sympathy with Indian kinds showed slig easier rates; good and medium descriptions, however, were a st market and sold with good competition. The following aver may be mentioned:—Carolina T. Co. "Goatfell," 1/2½; and "T wakelle T. Co.," 1/-.

Average for week 7·38d., against 7·77d. in 1899.

Ceylon Tea sold on Garden Account, 1st January to date, 1,165,878 pkgs., av. 7·20d. 1899, 1,043,472 pkgs., av. 7·96d.

JAVA.—The few Teas brought forward were all of direct import. Although some lots were withdrawn for higher offers, the Teas were mostly sold at about previous quotations.

Bank Rate 4 per cent. Exchange on London three months, sight:—Calcutta 1/4 7/32. Colombo 1 4¼.

COCOA.

Values continue on the down grade, and at the auctions on Wednesday, when 4,085 bags were catalogued, a fresh reduction of 1s to 2s per cwt. was submitted to. Of 1,537 bags Trinidad catalogued 300 bags sold at 69s to 71s for good to fine red, being a good 1s down. Of 963 bags Grenada 270 bags found buyers at a depreciation of 2s per cwt., viz:—70s 6d to 72s for good to fine, and 67s for ordinary. Of 47 bags Demerara one lot sold at 69s 6d, the remainder being bought in. 14 bags the Jamaica sold, out of 170 bags catalogued, at 71s, or about 2s below valuation. Of 213 bags Dominica 4 bags common were quitted at 66s. 100 bags Bahia partly sold at 69s, whilst 2 bags bold grayish Carthagena realised 64s. Of 406 bags Guayaquil 140 bags greyish to red Caraquez sold at 72s to 74s, shewing a decline of 1s to 2s. Of 107 bags Colombian 16 bags common grey were placed at 60s to 65s 6d. 155 bags St. Lucia passed the hammer unsold. 485 bags Ceylon about a fourth part sold—fine bold and medium red 90s 6d, good ditto 83s to 85s 6d, and smalls 60s to 66s 6d per cwt, showing no material alteration.

PEPPER.

BLACK.—The market is dull in tone and value is lower. On the spot small sales of fair Singapore have been made at 6⅛d; for arrival 100 tons have been sold *viz.*, February-April shipment at 6 5/16d and March-May at 6 3/32d down to 6 5/16d.

Nothing offered at auction on Wednesday except 315 bags shells, dust, and stalks, which were bought in.

WHITE dull of sale. For arrival no business reported. On the spot sales of fair Singapore at 9⅛d and of fair Penang at 8½d per lb.

At public sale on the 12th inst., 52 cases 80 bags Singapore bought in at 9½d to 1s, whilst of 100 bags Penang catalogued, 61 bags fresh-water damaged sold for account of whom it may concern at 8⅛d to 8¼d per lb. 132 bags shells and dust retired unsold.

GINGER.

COCHIN.—Quite a brisk business has passed in this article since we last wrote notwithstanding the fact that some prominent men are abstaining from operating as the profess not to believe in the stability of the market. Nevertheless values steadily improve, the private sales this week of 2,000 bags including fair medium and small washed rough at 31s to 32s wormy ditto at 30s, small Calicut rough at 30s, and rough D's also at 30s per cwt. To arrive business has been done in new crop at 30s to 31s c. i. f. for unassorted. Under the hammer 27 cases 368 bags were offered but only 10 cases sold—good medium cut and scraped 62s 6d, small and ends, limed, 37s per cwt., being about steady.

QUININE.

Immediately after the Amsterdam cinchona-auctions last week the makers of German sulphate reduced their quotation 3d per oz. —now 1s 3d for 1,000-oz. lots in bulk. Howards' quotations in vials is now 1s 7d for 1,000-oz. lots. Since the official reduction the second-hand market has gradually improved, to the extent of quite ¾d per oz. from the lowest point touched last week, business having been done at up to 1s 1¾d for spot, March at 1s 2d, and May at 1s 2¼d per oz. To-day no business has transpired, the market closing with sellers on the spot at 1s 1¾d, and 1s 2½d for March. There are few sellers in second-hands. Quinine salts have also been reduced, the following being the quotations for the more important in 100-oz tins:—Hydrobromide, 1s 8½d; bi-hydrobromide, 1s 11½d; hydrochloride, 1s 8½d; bi-hydrochloride, 1s 10½d; benzoate, 1s 10½d; citrate, 1s 9½d; phosphate, 1s 10½d; salicylate, 1s 8½d; tannate, 11d; and valerianate, 1s 11½d per oz.

(AVERAGE FOR ALL INDIA 6·64d., DECEMBER 7TH).

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.
Neilgherry ...														
Non Such	78½c	9¾	38½c1	0¼ 10⅝	40½c	9	...	...	...	...	...	...	...	...
Travancore ...	969	5·28												
Belford ...	61 c	4¾	...	...	37½c	6½	24½c	5	...	...	...	...	...	...
Bonaccord ...	123 p	5¾	...	...	39	5¼	45	6½	19	5	6	4¼	14 p	4¼6¼
CMR	24	4¾	...	...	16	4½	7	5½	...	...	1	3	...	...
Ellangy ...	131 p	4¾	...	...	64	4½4¾	28	5¼	24	4½	...	...	15½c	3¾ 5
Glenmary ...	165 p	5¾	85	5½ 5¾	...	...	28	7¼	30	4½	...	...	22	6½
Merchiston ...	47 p	5¼	6½c	6	22	5	11½c	7	..		8	4¼ 5	...	...
Poonmudi ...	120 p	5	25	5¾	44	4¾	17	6	24	4½	4	4¼	6½c	4
Riviera ...	50	4	...	...	29	4	7	5½		...	4	3¾	10	3
Sth Trav Co Ven ...	138 p	5¾	...	...	54	5½	55	6 7	20	5	...	...	9½c	3¾
Trav T Est Co BA...	110	5¼	36	5¾	38	4½	36	5¼	...	...	...	...	...	...

(AVERAGE FOR ALL INDIA 7·02d. DECEMBER 14TH).

Neilgherry ...	192	7·48												
COA ...	34	7¾	...	...	34	7¾	...	...	...	...	...	...	...	...
Curzon ...	64	6¾	...	...	15	7½	3	8¼	39	6¼	7	6¼	...	...
Kodanaad ...	94 p	8	38½c	9 1/1½	40	6¾	...	...	...	...	...	...	16½c	7¼
Travancore ...														
Atchencoil ...	64½c	4½	...	...	16½c	4¾	11½c	6¾	23½c	4¼	8½c	2¾	6½c	3 3
Bonaccord ...	51	5	...	...	1	4½	50	4¾ 5	...	...	...	...	...	...
Cherian Mallay ...	7	4	6	4	1	3¾	...	...	...	...	2	3	...	...
CMR ...	24	4½	...	...	13	4¼	9	5	...	...			8½c	4¾
Ellangy ...	104 p	4¾	...	...	68	4¾	17	5¼	11	3¾	...	...	...	...
Isfield T Co Isfield...	62	5¼	14	5	...	...	30	5¾	18	4¼	...	...	73½c	3⅝ 6¾
Kan Dev H C An ...	268½c	5¾	...	...	83½c	5	67½c	6¾	32½c	4¾	13½c	4½	2½c	4
Lockhart ...	36½c	5½	6½c	6½ 11¾	13½c	5¼	...	...	7½c	4½	8¼c	4¼ 5¼	...	...
Merchiston ...	9	4½	...	...	7	4½ 4¾	...	...	...	...	2	4½	12½c	4¾
Sth Trav Co Ven ...	283 p	6	...	...	120	5½ 5½	101	6 7½	50	5 5¼	...	...	...	...
Trav T Est Co Pam.	227	5¾	37	9	106	4¾	40	7	44	4	...	...	2½c	4
Wynaad ...	407	5·28												
Chulika ...	117 p	6	45½c	7	38½c	6½	...	...	34	5	...	...	...	...
Wynaad T Co Per...	290 p	5	109 p	5	...	...	86c½	6¼	80	4¼	13	3¾	2½c	4½

TANJORE DISTRICT BOARD 4 PER CENT. RAILWAY DEBENTURE LOAN OF 1901, FOR Rs.20,00,000.

The Tanjore District Board, which until recently has been joint owner with Government of the 54-mile Mayavaram-Mutupet Railway, has now become the sole owner of that line, having purchased the Government share of it, under the authority of Madras G.O., No. 402, Ry., dated the 12th March, 1900. As it stood on the books on the 31st December, 1899, the approximate value of the Mayavaram-Mutupet Railway was Rs.26,00,000.

2. The Board desiring to extend its railway, through Adirampatnam and Pattukkottai, to Arantangi, a distance of 46 miles, now asks the public to subscribe to a 4 per cent. debenture loan of Rs.20,00,000, to be secured on the existing 54 miles of railway as well as on the 46-mile extension to be built out of the loan which it is proposed to raise. The extension will be built by the South Indian Railway Company under the supervision and control of the Madras Government. The value of the entire railway, when completed, will be over Rs.50,00,000, and on this property the debenture loan will be secured as a first mortgage, pending its being paid off in due course by a sinking fund, as hereafter explained.

3. Interest on the loan, amounting to Rs.40,000 per half-year, will be secured on the Board's Railway income. This income has now for several years amounted to some Rs.2,00,000 per annum, out of which about Rs.1,00,000 per annum has been contributed by a special cess of 3 pies per rupee of land assessment, and about Rs.50,000 by the Board's moiety of the net earnings of the Mayavaram-Mutupet Railway. But now that the Board has become sole, instead of half, owner of the railway its income from that source may be expected to be doubled, and will, in due course, be further increased by the earnings of the extension.

4. After the payment of interest shall have been provided for as just specified, provision will be made for the ultimate payment of the debentures by setting apart, under the control of the Accountant-General, Madras, so much of the balance of the Board's Railway income as may be necessary for the formation of a sinking fund for their amortization at the close of the year 1920. The Accountant-General estimates that Rs.35,000 per half-year must be set aside and invested in Government securities for this purpose.

5. The Government of India have reserved the right of taking over the railway under reference at any time on twelve months' notice, by assuming liability for any debentures which the Board may have issued, and by re-payment of any money which it may have spent out of its own balances. The Government of India have definitely stated that this reservation will not affect the subscribing public, whose debentures will continue to run until maturity. Thus, if the railway should at any time be taken over by Government, subscribers to this loan will become the Government of India's, instead of the Board's, creditors. There is no intention under any circumstances of terminating the loan before the fixed date, *viz.*, 1st December, 1920.

6. Debentures will be issued for Rs 20,00,000. They will have a currency until the 1st December, 1920, and will bear interest at the rate of 4 (four) per centum per annu payable half-yearly in arrear on the 1st of June and the 1st December of each year. No interest will be paid before 1 June, 1901, although it will accrue as hereafter explained, fro date of allotment or of payment of instalments. The form debenture bond will be that hereto appended. Each debe ture will be issued for Rs.100 or for some multiple thereof.

7. Each tender must be expressed in the form given belo and, enclosed in a sealed cover and superscribed "Tender f Railway Loan," must be addressed to the President of t District Board, Tanjore. Forms of tender can be obtained application to the President.

8. Each tender must be accompanied by an earne deposit, in the form of currency notes or of a deposit recei from the Bank of Madras or any of its branches transacti business for Government, or any Government Treasury the Madras Presidency, for not less than 2 per cent. of t amount tendered. When a tender is accepted, the earne deposit will be held in part-payment of the amount tendere and, provided that the whole amount tendered is paid up the manner herein prescribed, will bear interest at the rate 4 per cent. from the date of acceptance of the tender. If a allotment after being made is not taken up, or if the fu amount allotted is not paid as hereinafter prescribed, t earnest deposit will be forfeited. The earnest deposits o non-accepted tenders will be returned without interest, o application accompanied by a duly stamped receipt.

9. The rate at which a tender is made must be specifie in rupees, or in rupees and annas. A tender not so specifie will be rejected as null and void. A rate must not contai fractions of an anna. Should a rate contain fractions of a anna such fractions will be struck out, and the tender will b treated as if the rate did not contain such fractions of an ann

10. In order to avoid mistakes a separate tender must b submitted for each rate tendered and a separate deposit mus accompany each tender.

11. The President of the District Board will be prepare to receive, and to consider on their merits, offers to exchang Government $3\frac{1}{2}$ per cent. paper for the Board's 4 per cen debentures, the Board taking the chance of Governmen paper rising in value between now and the date on which may hereafter be necessary to sell it for the purpose of sup plying funds for Railway construction. In such cases th earnest deposit required under para. 8 should also be in Gov ernment Promissory notes, which should be endorsed to th President of the District Board by their existing holders.

12. When an allotment shall have been made, th whole amount of each allotment must be paid in instalmen as follows:—

Instalment I.—Payable on or before the 12th Febru ary, 1901.

Must consist, with earnest money, o 30 per cent. of the whole allotmen

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

VOL. VI.] MADRAS, SATURDAY, JANUARY 12, 1901. [No. 2.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 18th instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad. *January* 1st, 1901.—*Crop*—coming steadily in, but ripening-up very slowly: a few places with bumper crops, the generality with moderate. *Plant diseases*—a little leaf disease. *Weather*—fine with east winds; on X'mas day, the wind turned and came from the west. *Health*—generally good.

Coorg. POLLI BETTA, 9*th January*.—*Weather*.—The East wind is *non est* this season. A good thing too. The cold, clear weather, too usual at this time, has been singularly absent. Clouds mostly sail by nearly every day. Coffee is keeping in wonderful heart, even where crops are heavy. This is due to the favourable S.-W. monsoon last year. *Crop*.—As a result of the coffee keeping in good fettle, the crop is ripening satisfactorily and contract picking is going on merrily. Crops are turning out well, samples being good nearly in all cases. *Labour*.—Sufficient. *General Health*.—Not satisfactory. *Prices of Grains*.—Easing.

AGRICULTURE AT COSSIPORE.

THOSE of our readers who are interested in the spread of Agricultural Education in India may usefully devote a few moments to the perusal of a brief account of the Cossipore Practical Institution of Agriculture, Floriculture and Agriculture. The title is somewhat imposing; the objects of the Institution are stated to be, to improve Horticulture, Floriculture, and Agriculture in this country and to popularize the conditions under which these may be practically studied by the natives of Bengal, or, for that matter, of India. To facilitate the accomplishment of these objects, means have been provided for conducting experiments with a view to produce the best specimens of flowers, fruits, vegetables and agricultural products. A number of students are maintained, with free board and quarters, and a monthly allowance of Rs.10 each, for studying the subjects both in theory and practice; and a Library has been established, containing many rare and valuable works on Botany, for the use of the students, as also of the general public interested in that branch of knowledge. Means, too, have been provided, though to a limited extent as yet, for the improvement of cattle by keeping bulls of the best Indian breed. Originally, a garden of about 30 acres in extent was provided at Ultadanga, on the eastern suburbs of Calcutta, but this was found to be insufficient, and a new garden of 35 acres has since been opened at Malhupore. The expenses of acquiring the land and laying it out for the purposes of the Institution were all met by the President, Babu HEM CHUNDER MITTER. The climatic and other conditions being favourable, the cultivation is being successfully carried on, in this branch garden, of such herbs and plants as are required for the Ayurvedic (Indo-Sanskrit) system of Medicine. Besides these, many specimens of fruits, vegetables, and agricultural products are being grown there that cannot be grown in the garden at Ultadanga. Already the branch garden has become a very valuable accessory to the accomplishment of the objects of the Institution. A similar garden is about to be established in the Hooghly district, near the native village of the President.

The Honorary Secretary states that ever since the foundation of the Association there has been a growing interest in Horti-Flori and Agri-culture among the educated people of India, and he attributes this largely to this example set by the President-Founder. He states that the knowledge of both Indian and foreign flora is gradually spreading among the upper and middle classes of the country; and we trust the statement is correct, for it is in every way good that the attention of a proportion of the rising generation should be diverted from the dry study of the law to the interesting field of natural science, especially in its botanical branches. The chief features of the garden at Cossipore are the cultivation of flowers, fruits and exotic greenhouse-plants; adjacent, is a plot of land where agricultural operations and experiments are carried on. There are two gardens at Ultadanga within

a short distance of each other. These gardens are well stocked with plants of different varieties, selected fruit and flower trees, and ornamental plants collected from different parts of the country. Great pains have been taken to collect and cultivate medicinal plants used in the Ayurvedic system of treatment. This feature of the gardens has enlisted in their behalf the interest of medical men and students of Botany in general. Besides these gardens, there are two branch farms in the district of Sonthal Perganahs. Here experiments are constantly being made in connection with new and rare varieties of fruits, flowers, and vegetables. Experiments are also said to have been made with the following crops: Paddy, Maize, Sunn hemp, Chait-Arahar, Sugarcane, Guinea-grass and Jowar. This shows that the agricultural branch is not being sacrificed to the more fascinating study of flora, medicinal plants, etc. It should be specially mentioned that the Institution aims at the development of the Indian system of Horti-Flori by introducing the improved, scientific methods of the West. By imparting practical and theoretical lessons free of charge, it interests and trains individual students; by holding annual Flower Shows and Agricultural Exhibitions it enlists the interest of a good many of the public.

We need not place before our readers details of results of experiments; but we note from the report that various of these were very satisfactory. Indian corn of the Patna variety was grown all the year round and was much better in outturn than the American corn acclimated. Sugarcanes—Khari, Sámsárá, Kájlá and the Bombay variety—gave good outturns. Carrots from acclimated seeds were raised; the outturn was heavy; one biggah having yielded 120 maunds. There was a great demand for the crop from horse-owners and the people of the North-West Provinces, who use it as food for themselves. Guinea and Elephant grass were continued to be cultivated on the same plot of ground. No manure was applied or special care taken, but the grasses grew luxuriantly, quite regardless of the neglect of treatment. Native vegetables and pot-herbs were cultivated in order to obtain the best seeds. A collection of horticultural plants from Europe and America was added to the stock. The propagation of Mangoes and other good fruits and various fragrant flowers was carried on vigourously to meet the heavy demand for them. A large quantity of Rhea roots was supplied during the year to the planters than in the preceding year. The large stock of different medicinal plants enumerated in the Hindu Ayurvedic medicinal books was revised and extended in the Ultadanga garden and labelled for identification. The whole Institution, it will be seen, is not on a very large scale, but it is especially notable, as an instance of well-directed enterprise on the part of an individual. The President-Founder, Babu HEM CHUNDER MITTER, is said to have expended on this experiment, during the last twelve years, not less than three lakhs of rupees. It is not surprising that the Committee should now have pointed out that some measure of State aid is necessary to ensure the permanency of the Institution. For us, the chiefinterest attaching to it lies in the fact that it sets an excellent example before planters in Southern India. For the most part, they neither conduct experiments themselves on scientific principles nor heed suggestions that they should combine to start experimental gardens for the benefit of the community generally. We cannot but think that they might learn a useful lesson from Cossipore.

THE LATE MR. RALPH TATHAM.

Owing to the editor's temporary absence, we omitted to ref last week to the sad news of the death of Mr. Ralph Tatha of Tellicherry, Agent to Messrs. Arbuthnot & Co. Qui recently Mr. Tatham embarked for home in consequence ill-health; but, we regret to say, he died on the voyage fro an affection of the heart. Mr. Tatham was the eldest son Mr. Ralph Tatham, formerly of Ceylon. His father was lo connected with Major Skinner and the Public Works Depa ment. He married the elder daughter of the Hon'ble Saunders, Treasurer, sister of Sir Frederick and Messr Henry and William Saunders. Mr. Ralph Tatham (junio after being for some time in a mercantile office in Colomb got the appointment from Messrs. Arbuthnot & Co., Madras, as their agent at Tellicherry and no more trus worthy agent has firm had. He worked well for them f many years and his death has caused a gap that will not easily filled. Popular among planters, Mr. Tatham was de to all who knew him, and his genial presence will be great missed not only at Tellicherry but in the many distric where he was a welcome, if all too rare, visitor. Especial will he be missed on the West Coast, where he had do much to advance both commercial and social interests.

THE OVER-PRODUCTION OF TEA.

In a letter to the Colombo press Mr. Edward Roslin suggests a remedy for the over-production of Tea. We fe it is one of the impracticable order. He remarks that t three possible methods suggested for reducing our crops are —(1) Finer plucking which would tend to reduce the outp whilst giving a better quality of tea. (2) Making a certa percentage into green teas. (3) Resting a certain percentag of the acreage in bearing. The first two are easily dismissed —"The objection to No. 1 is that we should probably ha too much fine tea produced with a corresponding fall in i value and directly the better and poorer classes of tea appro imated in value, there would be a tendency to pluck coar again. The objections to No. 2 are (*a*) the green tea mark is not as yet sufficiently developed to afford material relie and (*b*) the difficulty of making both black and green teas the same factory." Mr. Rosling then points out the advan ages of No. 3, saying "if you do not pluck a field for certain number of months, you rest your bushes and you ca hardly bring them into plucking again without pruning, th doing away to a certain extent with a possible temptation break out of the combination. The net result would be reduced yield and improved bushes." He therefore propos that all estate proprietors or their agents in Ceylon and Ind be asked to rest 10 per cent. of their acreage in bearing f two years from the 1st April, 1901, to 31st March, 190 This arrangement to be subject *to at least* 80 per cent. of t acreage in both countries agreeing to it in writing. N doubt this would have the desired effect in checking produ tion, but we greatly doubt if planters can be got to adopt t system proposed. It involves an immediate sacrifice on t off-chance of future gain; and its success is largely depende upon the example being followed in India, where planters not readily bind themselves all to take a certain course.

NOTES.

ychelles Vanilla.

The crop for next year is variously estimated at from 50,000 to 70,000 kilos.

he Indian Museum.

Mr. Lionel de Niceville, Clerk of the Court of Small Causes, Calcutta, as been appointed Government Entomologist in the Indian Iuseum.

ver-production.

Some Indian merchants in London are considering the advisability of a cheme for the curtailment of the Indian and Ceylon tea crop, ut it is feared to be not feasible. We should say not.

ailure of a Big Tea Firm.

A receiver has been appointed to wind-up the affairs of Messrs. Cooper, Cooper & Johnson, Limited. The recent annual report of he Company showed that things were not prospering.

erman Quinine.

The exports of "quinine, quinine preparations, &c.," from Germany or the nine months ended September, were :—

	1900.	1899.	1898.
ilos. ...	137,700	160,600	146,300

he British Tea Duty.

Among "Proceedings" in our present issue will be found an interesting report of a debate at a meeting of the Planters' Association of Ceylon with regard to the suggested reduction of the British Tea Duty.

dulterated Pepper.

The Local Government Board in England reports that certain samples f so-called pepper, taken during the year by Inspectors of Food, contained as much as 40% of Indian corn. The analysts ad not previously met with this form of adulteration.

Iexican Notes.

The Tabasco Commercial Co., with headquarters at Springfield, Massahusetts, is developing a tract of 15,000 acres in the state f Vera Cruz, Mexico, between Coatzacoalcos and Frontera, utting mahogany and preparing to plant rubber and other rops.

he London Tea Market.

Cabling to Colombo on the 3rd instant, Messrs. Gow, Wilson and Stanton reported a generally steady market. Average of Ceylon Tea, 7½d. *Reuter* stated that 20,000 packages Ceylon's were sold out of 22,000 offered, and 23,000 packages Indian's ut of 25,000 offered. Average price of Indian, 7⅛d.

alcutta Tea Sales.

The first sale in the new year took place on the 4th instant; 17,000 packges were offered, and practically all passed the hammer. he catalogues included a large proportion of reddish mixed af. The sale passed off with more spirit. Medium to desirble kinds were a little dearer, but the commonest descriptions ontinued to sell at very low quotations.

ea in Switzerland.

The consumption of Tea in Switzerland makes but slight progress. Notithstanding that the year 1899 was one of the best tourist easons, the value of imports of tea declined from 46,000 lbs. 1898 to 43,000 lbs. in 1899. Indian Tea showed an increase of 1,000 lbs. (total import 4,300 lbs.), while China Teas decreased 4,000 lbs. (total import 37,000 lbs).

A Panama Rubber Plantation.

The rubber plantation of the Las Cascadas Plantation Co., Limited, is situated at Las Cascadas, in the district of Emperador, department of Panama, republic of Panama. This plantation has been in existence since January, 1890, when the then proprietors planted 40,000 India-rubber cuttings, none of which has yet been tapped, and they have been adding to these year by year. They also have a large quantity of coffee and cacao trees, the majority of which are now bearing.

The late Mr. A. C. Griffin.

The *Nilgiri News* recently announced the death of Mr. Albert Charles Griffin, at Kotagiri, on the morning of New Year's Day, at the age of 48. The deceased was a planter for many years on the Nilgiris and in the Wynaad, notably on the Seaforth Estate, in which property his uncle, the late Captain Griffin, was a part-owner. Latterly Mr. Griffin was in charge of an estate in the Nelliampathies, where he contracted malarial fever, which ultimately took an enteric turn and proved fatal.

Quinine Lygosinate.

This new quinine salt is the outcome of the experiments made on the sodium salt of the acid by Fabinyi, and is prepared by the interaction of sodium lygosinate and quinine hydrochloride. The acid has the constitution of a diorthocoumarketone, and the formula of the new salt is $(C_6H_4)_2C_5H_4O_3(C_{20}H_{25}N_2O_2)_2$. It is an amorphous orange-coloured powder of aromatic odour and somewhat bitter taste. It is soluble in alcohol, but only to a slight extent in water. It melts at 114°. It possesses a very strong germicidal action.—(*Ph. Post*, 1900, 598.)

Localisation of the Cinchona Alkaloids.

According to Dr. Charpentier (*Ph. Post*, 1900, 600) microscopic analysis is usually not sufficient of itself to discriminate between wild and cultivated barks. The tannin vessels, which are much more numerous in the leaves than in any other organ, contain practically no alkaloid. The highest percentage of alkaloid is found in the root, the best tissue being poorest in this respect. Traces only were detected in the phloem parenchyma. He states that the leaves contain sufficient alkaloid to justify their being employed as a tonic and febrifuge.

Cooly Savings.

Says the *Ceylon Observer* :—If Indian coolies do not carry away to their *Sheemai* as much in savings as they did in the old coffee days, their Kanganies manage to secure far more in the way of advances. Here is what a paper reports of emigrants to the West :—"The Emigration Agents for British Guiana announce the interesting fact that the total savings brought back to India by emigrants returning from this

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nicholson's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf people, unable to procure the Ear Drums, may have them free.

Address—No. 989 D, THE NICHOLSON INSTITUTE,
Longcott, Gunnersbury,
London.

[w. 26-5-00—26-5-1901.]

colony amount to over a crore of rupees. The ship *Ban*, which is expected in Calcutta on Christmas Day, brings coolies with more than a lakh of rupees to their credit."

Colombo Tea Sale.

The first Colombo tea sale of the new century was held on the 4th instant, and in consequence of the holidays, the catalogues were unusually heavy. The auction began at 10-30 A.M., and with an adjournment of three-quarters of an hour for lunch, closed at 7 P.M. Mr. Jas. Forbes, of Messrs. Forbes and Walker, offered for sale with the small lots one box golden tips, containing 3 lbs., which fetched R.3 per lb., at which price it was purchased by Mr. Seneviratna, a native buyer. The *Times of Ceylon* says, at the public sale of tea at the Chamber of Commerce room yesterday, about 18,227 pkgs. = 1,401,630 lbs. were offered, of which about 14,813 pkgs. = 1,139,477 lbs. were sold.

Tea-growing in Hungary.

The example of Russia has inspired Austria-Hungary with a belief that she can "grow her own tea." On the initiative of Count Zichy, who recently returned from a tour through Asia, the Hungarian Minister of Agriculture ordered that trials should be made in various parts of the country with tea plantations. With this in view, large quantities of seeds, together with about 1,000 tea-plants, were imported from Shanghai; but, notwithstanding the utmost care, the plantations have been failures. According to experts, when the selected plants arrived at Fiume, they were more fit for burning than for planting. The Agricultural Department has not yet given up the hope of obtaining favourable results, and has decided to make fresh attempts; for which purpose plants have been brought over from Tiflis. These have been distributed throughout Hungary to the State nurseries.

The San Jose Scale.

It is significant that the First Assistant Entomologist to the U. S. Department of Agriculture now regards the San José scale as a permanent factor in fruit-growing. Extermination is possible only where the scale is detected at the very outset on new or recently planted nursery stock, or, at least, before any considerable chance of spread has been afforded. The experience of California has demonstrated that this scale insect can be controlled, and the more recent experience in the east points indubitably to the same conclusion. By proper repressive and remedial treatment, an orchard can be protected from serious injury and kept in a good paying condition so far as influenced by the San José scale. One of the most effective and oldest remedies for the control of the San José scale is the lime, sulphur and salt wash. There is nothing better in California and similar climates, but in the east the frequent rains and moister atmosphere render this wash ineffective. It would be interesting to note the effects of a similar wash upon scale pests in this country; but what might be effective in an orchard would probably fail utterly on a coffee plantation.

Quinine in Italy.

A Bill is being brought forward by Signor Boselli and Baron Sonnino for regulating the sale of quinine. This measure proposes that authority should be given the Minister of Finance to buy bisulphate and hydrochlorate of quinine, and to sell it in the ordinary State tobacco and salt shops at the price of 50 centimes (5d.) per packet, containing either 3 grammes of bisulphate or 2 grammes of hydrochlorate. The quality of quinine must be of the purest, and the packages must be d up in a way approved by the Superior Council of Sanitat The Bill makes provision for the increase or diminution of price of the packets in case the market value of quinine r or falls more than 25 per cent of its price at the time of passing of the law. The Minister of Finance is furt empowered to entrust the preparation of the quinine to or more private firms by a contract lasting not more than years. The object of this Bill is to place the means of c bating all forms of fever within reach of the peasants over the country. Tobacco and salt are Government mo polies in Italy, and shops for the sale of those articles at fi prices exist even in the tiniest and most out-of-the-w villages, where often no chemist lives, or where, if he li quinine can only be bought at high prices and of infe qualities. Now that the discoveries with regard to the r tion between mosquitoes and malaria, and to the importa of administering quinine to sufferers from fever during non-malarial months of the year, have made it more t ever necessary that the supply of good quinine should available everywhere, and at cheap rates, the importance the Sonnino-Boselli Bill is generally recognised.

LETTERS TO THE EDITOR.

PREPARATION OF COFFEE FOR DOMESTIC U

In regard to the preparation of coffee for a table bevera I have consulted many authorities and venture to think t the following extracts from *Chambers's Encyclopædia* cont the most reliable information :—

"When the beans are roasted till they assume a reddish-br colour, they lose 15 per cent. by weight and gain 30 per cent bulk; when further roasted till they become chestnut-brown, t have lost 20 per cent. by weight and increased 50 per cent. in b while if roasting is continued till the beans become dark-bro they lose 25 per cent. in weight and acquire 50 per cent. in bul

"In Britain, coffee is usually under-roasted probably in orde escape the loss in weight, but in France, Norway, Germany, other countries, where it is roasted at home by the consumer, roasting is carried to the dark-brown stage."

"The writer who has watched the domestic roasting of coffe many countries attributes the superiority of the infusion mad these countries mainly to this and the use of freshly roasted ground coffee"

"The important offices which coffee fulfils are, to allay sensation of hunger; to produce an exhilarating and refresh effect; and, according to some authorities, to diminish the amo of wear and tear, or waste of the animal frame, which proceeds m or less at every moment."

"An endless variety of apparatus have been contrived, som them of great complexity,—for preparing coffee for the table. chief object aimed at is to obtain the liquor free from sedim The simplest and cheapest device is that of placing a bag or m strainer, by means of a suitable rim,—in the upper part of the co pot, placing the ground coffee in this and pouring boiling w through it. Or the ground coffee may be simply placed in a sa pan or coffee-pot, hot water poured upon it and boiled for a minutes. The chief effect of adding chicory to coffee is to de the colour. The question whether coffee should be boiled at a simply infused has been much discussed. The writer has obse that in countries where pure coffee is used, boiling is practi in favour. This suggested some experiments which have sh that pure coffee is improved by two or three minutes boiling, w chicory is rendered bitter and unpalatable by such treatm Soyer recommends that, before the boiling water is poured in sauce-pan should be set dry on the fire and the powder stirre it is quite hot, but not in the the least burned"

Mrs. R. Temple-Wright, in her useful little book "Baker nd Cook," says :—

"The Criterion (Arndt's patent) made of black tin, price Rs. 4/8 be had from Messrs. S. E. Thompson, Ironmongers, Calcutta, nd from almost all European shops, makes excellent coffee. But his gives you only an infusion like tea, and coffee is perfect in avour only when boiled."

A lady-friend of mine has kindly made several experiments o ascertain how much coffee is required for ordinary house-old use. The conclusion arrived at is as follows :—

Raw coffee, when selling at 1s. 8d. per pound in London, oses 25 per cent. during the roasting operation, therefore he outturn of one pound of raw coffee will be $\frac{3}{4}$ of a pound, o that one pound of roasted coffee would cost 2s. $2\frac{2}{3}$d. and would make 64 cups of the beverage at $\frac{5}{12}$ths of a penny per cup.

Raw coffee, selling at 1s. per pound, would, therefore, cost 1s. 4d. per pound when roasted, and would make 64 cups of good coffee at one farthing per cup.

An experienced French cook once informed me that his special success in making delicious coffee was the result of putting a little finely powdered crystalline sugar into the roaster when it was removed from the fire and revolving the roaster for a few minutes, so that the berries might be partly coated with the sugar so as to prevent the aroma from being lost.

When in England I purchased at the Agricultural Hall a most excellent contrivance which thoroughly performs the duties of either a tea or coffee-pot. Its advantages consist firstly in the lid being fixed so as to open forward, instead of backward, and, secondly, in the ingenious arrangement of a diagonal sheet of perforated gauze, which not only most effectually prevents any tea leaves or coffee sediment being passed into the cup, but absolutely precludes the possibility of any of the liquid in the pot spilling while being poured out, owing to the strainer being the full height of the interior of the pot and the peculiar position of the lid and the opening which it covers.

I also inclose an instructive cutting from the *Daily Graphic*.

"PURE COFFEE."

[INCLOSURE.]

"FRENCH COFFEE"—AS DRUNK IN ENGLAND.

SIR,—A story is told of a Frenchman who did not think much of the roast beef of Old England. He told a friend that hearing a man with a hand-barrow shouting out "meat meeeat," he purchased some of the "meat" from the itinerant vendor and found it far from satisfactory. Similarly, we Britishers form a very wrong impression of coffee in general, and "French coffee" in particular, from the stuff sold in bright, showy tins with "attractive labels." I enclose an advertisement from a trade journal—honest in its way—which describes what "French coffee" is (in England). If housewives would take the trouble to purchase good, raw coffee and have it freshly roasted, or, at least, buy it roasted whole, and grind it as required, one of the best temperance drinks would undoubtedly be brought into extensive use, to the benefit of everyone interested in health and temperance.—Yours faithfully,

S. C. T. A.

FRENCH COFFEE.

The most attractive label in the trade, customer's name and address printed thereon for orders of 23 lbs. and upwards, duty paid.
Coffee with 40 per cent. chicory, 1-lb. and ½-lb. tins.
Coffee with 40 per cent. chicory, ¼-lb. tins, cream and chocolate label.
Coffee with 50 per cent. chicory, 1-lb. and ½-lb. tins.
Coffee with 50 per cent. chicory, ¼-lb. tins, blue and chocolate label.
Coffee with 65 per cent. chicory, 1-lb. and ½-lb tins.
Coffee with 65 per cent. chicory, ¼-lb. tins, red and gold label.
Coffee and chicory, in tins of 14, 28, and 56 lbs.

"FOXY COFFEE."

DEAR SIR,—In reply to Mr. Percy G. Tipping's letter, in your issue of the 5th instant, I should put "foxy coffee" down to want of fermentation in the vats.

"Foxy coffee" invariably is found in the earliest picking and is caused, in my opinion, by the small quantity of pulped coffee placed in the fermenting vats, there not being sufficient to get at a healthy fermentation. I don't know whether other planters have found this the case.

A. L. ALEXANDER.

GENERAL ARTICLES.

THE INDIAN TEA INDUSTRY.

"Camellia" writes in the *Pioneer* :—

Mr. Leslie Rogers' papers recently published in the *Pioneer* are in my judgment full of sound counsel and advice. He has touched pointedly and not unsuccessfully at one particularly objectionable feature of the times in tea. I refer to the weeding out of good men for bad ones. Of course the sage directors of tea companies do not put it that way: to them it appears as a matter of reducing expenditure. But they none the less expose their ignorance and stupidity by arguing as they do, that a cheap man reduces expenditure: he is much more likely to reduce receipts, and eventually to wreck the garden. But there is no good in gainsaying the fact, there was and still is in tea a number of gentlemen with a facile tongue, a big head, and very little in it. In tea it is high time of day they were once for all unceremoniously kicked out of it. If men of experience, keen and long observation and intelligence cannot make gardens pay: it is the perfection of folly to suppose that a much inferior man on a low salary will. Although Mr. L. Rogers has hinted and not obscurely either that some of these latter apparently by finesse are able to very materially increase their material wealth not covered by the modest salary they draw, this is an insinuation that needs no amplifying to be understood.

We, of course, are all aware of Mr. Rogers' Dehra Dun affairs from the full publicity that was given to them and some might think here and there a tinge of it has crept into his papers on tea. I should say, however, that his observation on the point are distinctly to the point. For myself, however, I may say at once I speak from a wholly independent position with no personal grievances good, bad or indifferent to air. Directors will more and more discover that cheap more or less empty-headed management is a sorry kind of panacea for resuscitating the exchequer of tea companies.

But I apprehend the time is not just yet. As competition gets a little keener, plainly enough discernable to those who know full well of the considerable acreage of new tea that comes fully into bearing during the ensuing two years, to say nothing of the very large acreage of tea developing in the Travancore District: when the general average gravitates anywhere between 4d. and 6d. per lb. then will be the period of woe and lamentation for those gardens with crude management.

The weeding out of these men in tea I would, however, characterise as a small matter. But the agents, directors, transit companies, dock, and warehouse men I contend are main factors to be dealt with to-day. It was only the other day the Hon. Mr. Buckingham conducted a rather lengthy argument to shew that even in the matter of carrying specie the Assam River Companies scented a good deal more than those companies where tea does not grow. Again the Shipping Companies charge 10s. per ton more for tea than other ordinary produce I believe, and perforce because of this, or what, what is for? The Tea Association must needs enter into an agreement demanding a no less than two years' notice of termination of contract. Now about this contract, I would like to know whether those tea carrying compaines carry anything that can be more compactly put up, more absolutely regular in shape, form, and cubic contents, whether indeed there is anything they handle more expeditiously and cheaply embarked than tea?

And if this is so why this extra 10s. per ton? The warehouse men have, I believe, recently reduced charges no less than 20 per cent. Could anything be more eloquent of the extortionate charges that existed and still exist. Is it not a fact they charge 3½d. each for weighing up empties?

Now for a few words about those great men the Calcutta agents, brokers, etc. A former communication the *Pioneer* was good enough to publish, drew forth the observation from a planting journal that in substance the aforesaid agents, etc., were a highly honourable set of men: a superfluous observation, because, I think, no one ever said they were not. But why this ridiculous touchiness, and trashy sentimentality in tea. Is the rude awakening not sufficiently near at hand for honest men to speak up, and speak out? and not at mere babes and sucklings: but at the exploiters of tea as a manufactured article and those exploiters are agents, brokers, shippers, dock, and warehouse men: let all these fall into line in conformity with an article reduced from a modest Is. to well nigh 6d. and still on the downward path, and great good will result to the industry. But when all has been said relative to the above factors, virtually the greatest sinners are the confiding gullible shareholders, who in a surprising manner swallow the plausible statements of mere ornamental directors, many of whom have never seen a tea plant even: but have not the smallest objection to fees ranging from £2,000 downwards. I adhere to all I have said on the subject of tea, there is nothing more badly managed in India, and nothing in the commercial world to-day more unjustly exploited. And the time has surely arrived when the matter should be energetically thrashed out: and the tea share-holding public can do yeoman service at this time by a full awakening to the fact that the day has gone by when they should trust implicitly interested agents, and fee-drawing directors. One of their most contemptible arguments is the weather, and the reader who cares to study the language of tea company directors will find the weather is their one great apology: a more miserable argument was never so sedulously ridden to death. Does not the weather exist for everything else as well as tea, and can it be altered by an iota? and if not, why cover incompetence, and a string of excessive charge with this *deus ex machina*.

I counsel every tea shareholder to strenuously insist on reduction of agents' commissions, brokers' commissions, and to fight the warehouse men and shipping companies persistently, and to insist on shelving mere figurehead directors. Tea demands intelligence, and sustained keen observation, from the plant to the consumer, and if the ignorant tea-planter should be got rid off, so too should the wholly inexperienced director in favour of men, or at all events one man to each company, the *sine qua non* of whom should be knowledge of the subject in all its bearings and unswerving attention to the company's interest.

But so long as many directors are also the agents, or connected with agency firms and as has been shown with the dock and warehouse people and the shipping companies in several instances: and so long as agents are allowed to finance the gardens, so long will a large number of companies have to pay through the nose, and take the residue which, as nigh a hundred companies shew, is *nil*. There is just one other matter I should like to touch on. In a former paper I animadverted on the Tea Association: a correspondent of a planting journal opined I either did not know, or forgot this Association was largely composed of the Calcutta agents. Let me assure him I neither forgot, nor was in the least unaware of the fact. He seems to have somewhat missed the sarcasm of my observations on the Association. I have here one proposition to make which is this, that the name of the Tea Association be changed to that of the Tea Selling Corporation. As an institution for surveying the tea industry as a whole it is absolutely defective: its operation are virtually that of a superior set of shopkeepers: whereas the crying need of the industry is a great and united council for tea in all its manifold bearings. If this were in existence we should at least be spared the ridiculous fiascos that break out in tea every now and again as, for example, asking the post office to sell teas for them.

Neither probably would the Government of Assam have come forward with the astounding sentimental, and impracticable proposition for increasing the wage of coolies, when tea never was so low in price, and when there never were so many companies paying nothing, and when it is almost a dead certainty unless a few scores of companies go to the wall, or unless the foreign markets make much more headway that tea has not reached the minimum. I say unless these things happen the woe and lamentation is just ab two years ahead.

But I would beg not to be put down as a croaker in the mat only that it is high time this house of tea was founded on so thing more than random methods, and the dustoorie of 50 years a Planters and very largely British capital have literally m Assam, yet by the planters' stupid *laissez faire* policy it is possi for some of the impractical doctrinaires of the Government to co in uncalled for and propose an increase of coolie wage at the v time when tea is least able to bear it, setting aside the exceedin doubtful question as to whether the coolie is worth more, or is even now overpaid.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Sao Paulo.—The cultivation of coffee and sugarcane is increas in Lençóes.. The crop of the former for this year yielded ab 20,000 bags, while, 1,500 pipes of rum were produced; farms changing hands at good prices and trade is generally improving

Coffee—*Santos, November* 24th, 1900.—The persistent and conti ous fall of the price of coffee in the consuming markets could pass without disturbing primary markets also, thus we experienc a sharp decline here yet dealers and planters resisted as much possible, and only the strictly necessary was sold in order to be a to meet engagements.

The amount of coffee sold at these low prices, therefore, is large. On the other hand, it must be stated that on certain da had there been any large offerings of coffee, prices would have ceded by leaps and bounds, as buyers were shy in absence of orde

Only during the latter part of the week larger orders came fr Havre, of which part only were executed. To-day with small in rior arrivals, 22,000 bags only, the market here reacted immediat and an advance of from 200 to 300 réis was paid in an insta This shows how dangerous the position is, as there must be a c tain short interest at these low prices here, although it cannot large, but the short interest in consuming quarters must have sumed considerable proportions, always taking into considerati the much lower basis of prices reached.

We quote:—6$100 to 6$500 for *superior* during the week. T first mentioned price ruled on Thursday and Friday, to-day 6$250 6$300 were reached on account of smaller arrivals and larger orde of which, being at a low figure, very likely nothing could be exec ed, although exchange was weak and declining. There was special demand under the circumstances, cheapness only induc exporters to buy.

The big American houses are out of the market at present, th will probably buy cheaper in New York, where a merciless drawi out of the weaker element must have taken place, as it was t weakest market of all.

Arrivals showed already during the week signs of decline a the natural falling off, in combination with the low prices, make prediction of smaller receipts fairly safe.

Prices approached during the week the lowest level seen last ye followed however by a sudden, formidable, and irresistible rise. W do not think this will repeat itself this year, but a rise to abo 7$000 in a short time seems probable.

The demand from the States was *nil*, from Europe there we large orders, specially from Havre, at 32s. to 33s. 6d. for go average and 33s. to 35s. 6d. for *superior*. At the higher prices certain quantity has been contracted for shipment.

Exchange—*Rio, November 26th,* 1900.—Ninety days' rate London opened on Monday, the 19th instant at 10 1/2 to 10 15/32 but after keeping pretty steady all the week finally gave way Friday, and closed this evening weak at 10 1/16d.

The position since we wrote last week has undergone a profou change, not only has the advent of the Republica been through discounted, but the steadying effect that was anticipated from presumed ability to draw for a considerable sum without cover h not come up to expectation. The present weakness appears, ho ever, to be of a purely speculative character, the result of coveri sales to some of the foreign banks made during the early part the month which refused to take Republica paper.

A good many operators, consequently, who were pretty full this paper were obliged, not only to buy again for delivery, but

t rid of Republica paper on its own terms. This held the rate few days, but as soon as it was done, rates gave way and market kers getting alarmed rushed in as usual and helped the slump. here is no doubt, however, that the feeling has changed and is w decidedly "bearish." Too much was expected from the Banco Republica, people forgetting that it is the banks' function not boom or to burst the rate, but to keep it as steady as circumances will permit, without tilting at brick walls. To Government really does not matter what the rate is as sufficient gold revenue ill be secured by the 25 % duties that will next year be payable gold to guarantee foreign payments independent of exchange. deed, with coffee prices so weak abroad, it would be positively inous to push exchange upward now but, in our opinion, equally ngerous to let it drop. Currency prices have nearly reached bottom and unless exchange fall too, the chance of a much wer sterling quotation abroad seems likewise improbable. For ery reason, the rate should, we think, be maintained if possible ecause any sign of weakness will, with such heavy actual entries coffee and the prospects of breaking the record next year, be tilised by operators in foreign markets to "bear" sterling coffee rices. So long as 8$ or 9$ can be maintained as the minimum ere and exchange kept from falling below 10d. as it may be, e believe, without great difficulty, planters may, it is true, suffer, at they are bound to do in any case but every other kind of busiess will be the gainer by stability. . . .

There is, as far as we can see, no occasion for alarm. Bears may y to forcerates down, but money is scarce and bills fairly plentiul, and the banks coming to the end of their tether. If there were lenty of money or the situation would allow of a safe bear deal a ig slump might be, under the present depressing circumstances, far om impossible, but as it is, we believe, that the scare is nothing ore than one of the squeezes that the banks know so well how to reate and even the victims appear to enjoy. As soon as it is over, nless something rabid occur in the economico-politico line we see o reason to change the opinion we have expressed that exchange ill be steady or perhaps rising up to the end of the year at least.

Aggregate entries for the crop at Rio show a decrease of 401,452 ags compared with last year's, but at Santos an increase of 624.147 ags, so that taking both ports together this crop to date has surassed by 222,695 bags that of last year.

COFFEE IN LONDON.

The London Commercial Record of 21st ultimo says :—

The week previous to the Christmas holidays has closed quite in ccordance with the general expectation, for it has been true to its raditions—very dull and uninteresting. Next to no business has een transacted, and when goods have actually changed hands, the eller invariably has been the loser. Bears throughout the week ave been successful in almost all branches of our trade, but they y claim to an exceptional score in the case of coffee. After having xhibited signs of great weakness for some time past, our terminal harket experienced a veritable slump last Tuesday and Wednesday, hen prices for Brazilian failed to resist the enormous pressure of xceptionally heavy supplies—25,000 bags—and registered a decline f about 2s. per cwt. Such a drop being absolutely unexpected aused some amount of consternation in our market, and frightened any holders into clearing out of their stocks. Bad as the effect as been on the minds of our operators, what must it have been on he spirits of the Hamburg bulls? They are certainly having a very ncomfortable time of it at present, but the lower we go the greater, f course, the chance of an early recovery; the only question is hether Hamburg holders will prove themselves strong enough to ear the heavy loss they have so far sustained. On this point there s, of course, a difference of opinion. Rumours of serious difficulties upposed to have arisen in the banking world of Germany, princially Berlin, have been spread by some of our daily contemporaries, nd have found a willing ear on this side of the Channel. If they hould prove to be correct, the unlucky "bulls" of coffee may find ore trouble in tiding over the present trying time; but not only hat, a crisis, or even failure, among German banks would undoubtdly involve the bankruptcy of many of the Hamburg operators, r not only their financial support would cease, but also any credit alance they may possess at any of these banks might be transferd into a doubtful liability on the part of the failing banks. The outlook in Hamburg, therefore, is not a very bright one, and it is terrible to think what fate would be meted out to coffee were the holdings of German bulls to be thrown upon the market. However, this would represent the darkest side of the position. The German banks, with the exception of one or two insignificant ones, have proved themselves strong enough so far at any rate to face the difficulty successfully, and it is to be hoped in the interest of all concerned that they will succeed in doing so in future, for the losses sustained in coffee are already heavy enough. The movements of the article are followed with the keenest interest, as the position is extremely critical.

THE MARIAWATTE YIELD FOR 1900.

A REMARKABLE YEAR.

Mr. D. M. Salmond, superintendent of Mariawatte, Gampola, shows in his annual return, that in 1900 the famous old field nearly equalled the wonderful record of exactly ten years earlier—with the second higher rainfall—while for the whole estate of 458 acres the phenomenal figure of 996 lbs. per acre is given :—

MARIAWATTE ESTATE.

	A.	R.	P.
Yield of old tea	101	1	0

Year.	Made tea. lbs.	Yield per acre. lbs.
1884	109,230	1,078
1885	117,842	1,163
1886	105,925	1,046
1887	115.996	1,145
1888	106,410	1,050
1889	113,834	1,124
1890	140,144	1,384
1891	120.366	1,188
1892	119,909	1,184
1893	115,440	1,140
1894	110,448	1,090
1895	118,560	1,170
1896	113.360	1,119
1897	105,729	1,044
1898	108,423	1,073
1899	111,987	1,108
1900	137,066	1 357

	A.	R.	P.
Yield for the whole estate	458	1	17

	Rainfall.
1892	95·74
1893	86·22
1894	72·00
1895	100·28
1896	115·41
1897	111 25
1898	79 90
1899	106·81
1900	114·63

THE TEA DUTY AND MEMORIAL TO THE CHANCELLOR OF THE EXCHEQUER.

The following is the text of the memorial of the Indian and Ceylon Associations which Sir Seymour King, M.P., and Mr. W. E. T. Sharpe, M.P., presented, and to which an unfavourable answer was returned :—

LONDON, 10*th December*, 1900.

To the Right Honourable Sir Michael Hicks-Beach, M. P., Chancellor of the Exchequer.

SIR,—We, the undersigned Associations, representing owners and agents in the United Kingdom of the principal Tea Estates in India and Ceylon, and also merchants interested in the importation and distribution of tea, have the honour to submit to your attention the following considerations with regard to the imposition in the last budget of an additional tax of 2d per lb. duty on tea consumed in the United Kingdom.

The points we desire to submit are chiefly the following :—

(1) That the burden of the extra duty falls to a great extent upon the growers and distributors of the tea, and not altogether

upon the consumers in United Kingdom, whom, presumably, it was intended to tax for the expenses of the South African War.

(2) That this burden falls upon the tea industry at a time when it is in a depressed and critical condition.

(3) That this additional tax has been imposed upon only one of three articles of consumption of a similar class, and that of these three articles, coffee and cocoa are chiefly imported from foreign countries, whereas the tea consumed in this country is mainly grown by British subjects and with British capital.

With reference to the first point above mentioned, we beg to submit that the extra duty imposed upon tea consumed in this country cannot be added to the price paid by the consumer without adversely affecting the general consumption, and this must react upon the price paid to the producer. That tea has only gone into consumption at a lower range of prices is evidenced by the fall in the auction price, *e.g.*—

The price of staple teas, *viz.* :—

INDIA AND CEYLON.

	Peoke.	Pekoe Souchong.
Prior to 1st April, 1900, being	5¾d.	5½d.
And at present date	4¾d.	4¼d.

Although the average price of Indian and Ceylon teas may be at present stated at 7d to 7½d. per lb., some 75 per cent. of both is being sold at from 4½d. to 6d. per lb. in bond, and, therefore, on the bulk of the tea the duty of 6d. per lb. is equal to 100 per cent. on its value. If it be true that this falls upon the consumer, then the very poorest class of the community are the sufferers by this taxation, while the better classes who pay from 1s. 6d. upwards per lb. contribute a wholly inequitable proportion; and, further, if the consumer pays it, with the increased cost, consumption will decrease and the market will fall in consequence, to the loss of the producer. But although part of the tax may fall upon the consumer (if not in money then in quality), the above-quoted comparison in prices bears out the contention that the incidence of at least half is upon the producer.

With regard to point (2) we urge that recent Indian Legislation, with the concurrence of the Home Government, threw a heavy burden on tea producers by raising the exchange value of the rupee to 1s. 4d. The effect of this has been to increase the sterling cost of production by at least 20 per cent., and to render a large number of estates immediately unremunerative.

Further, it must be noted that this action of the Indian Government has had the effect of granting a bounty equal to 30 per cent. to China tea all over the world at the expense of the British industry in India and Ceylon. In China, the price of silver is allowed to exercise its natural effect on the course of exchange. In India, the rupee stands at about 40 per cent. over its intrinsic silver value, with this effect, that, whilst teas from India and Ceylon may be costing the same silver price as those from China, the latter can be sold in sterling for 25 per cent. less, with the same result to producers.

We do not contend that the fiscal policy of this country should be regulated with reference to the interests of any particular industry in India or Ceylon; but we venture to ask consideration of the fact that while sugar, which to a large extent is the product of foreign countries, is exempt from taxation, tea is one of the chief agricultural industries developed by British energy and capital, and it is a matter of the highest importance to India in its present troubles, that this industry, which employs so much native labour should not be subjected to a severe check or crisis. Tea being the staple export of Ceylon, were its cultivation to be seriously crippled grave consequences would undoubtedly result to the revenue of that Colony.

We desire to point out that although we were aware when the tax was imposed that its incidence would fall heavily on the industry, we made no formal protest, as we felt that our loyalty to the Empire demanded that we should in no way embarrass the Government in its scheme of taxation at such a critical time.

The third point is of some importance inasmuch as the new scale of duty gives an increasing undue advantage to coffee and cocoa, which most directly compete with tea at the breakfast table.

It seems to us that an industry carried on by British enterprise and capital within the Empire, should at least be put on equal terms with the produce of foreign competitors.

Though the average price in bond of the three competing articles is approximately the same, *i. e.*, 8d. per lb., the import duty on tea is 6d. per lb., on coffee 1½d per lb., and on raw cocoa only 1d. per lb. The annual consumption in the United Kingdom is roughly—

Tea (from all countries)		240 millions of lbs.	
Coffee		28	,, ,,
Cocoa, raw	32		
Cocoa, ground, etc.	6		
		38	,, ,,
		306	

And on the present scale of taxation, therefore,

Tea pays about		£6,000,000	0 0
Coffee pays about		175,000	0 0
Cocoa (raw) pays about	£133,000 0 0		
Cocoa (ground, etc.) pays about	50,000 0 0		
		183,000	0 0
		£6,358,000	0 0

In conclusion, therefore, we venture to hope—

(1) That you will find it possible to remove the extra 2d. per l War Tax, in the next budget.

(2) That it may be found possible to abolish or at least to redu the difference in the scale of taxation imposed upon tea, coffee, a cocoa.

We have the honour to be, Sir, your most obedient servants.

NOVEMBER COFFEE MOVEMENT IN THE U.

Last month's deliveries were large and above the monthly avera for the present trade year; but, for Europe and the United Stat far behind the same time in 1899. For the first five months of th season the deliveries in the two countries averaged 1,147,912 bag against 1,336,857 bags in 1899, or a movement 944,724 bags less i the five months—a loss of over 14 per cent.

The November deliveries in the United States were 459,004 bag in Europe, 822,634 bags; total, 1,281,638 bags, against 1,576,964 ba for the same time the previous year.

The following statement shows the movement and general po tion of the article :—

	Bags.	Bags.
Stocks, November 1, 1900—		
United States	906,697	
Europe	3,718,319—	4,625,016
Receipts during November—		
United States	548,174	
Europe	1,010,590—	1,558,764
Total supply, December 1		6,183,780
Less stocks, December 1, 1900—		
United States	995,867	
Europe ...	3,906,275—	4,902,142
Deliveries, November —		
United States	459,004	
Europe	822,634—	1,281,638
Deliveries, November, 1899—		
United States	583,113	
Europe	993,851—	1,576,964
Decrease as compared with November, 1899		295,326
Deliveries (United States and Europe) October ...		1,340,059
Do. (do. do.) September ...		981,198
Do. (do. do.) August ...		917,608
Do. (do. do.) July ...		1,219,058
Total for five months, 1900		5,739,561
Do. do. 1899		6,684,285
Decrease as compared with 1899... ...		944,724

The November deliveries in the United States consisted of 393,8 bags of Brazil and 65,121 bags of all other sorts.

The visible supply of the world on December 1 was 7,874,1 bags, against 7,802,016 bags on November 1, 1900 (an increase 72,126 bags), and 7,436,492 bags on December 1, 1899.

The total receipts at Rio and Santos for the first five months the trade year were 6,296,000 bags, against 6,094,000 bags for t same time the previous year, and 4,894,000 in 1898-99.

Last year 68 per cent. of the total crop was received at Rio a

ntos from July 1 to December 1. If the same proportion has ne forward this year, it means total receipts of 9,258,820 bags. e find, however, that the average proportion of the crop sent to o and Santos for the first five months of the past five seasons was per cent. of the total, so that if receipts this season are up to that erage, the total crop will reach 10,500,000 bags. Nowithstand- g the increased deliveries of the past two months, the visible pply continues to grow, and is at present the largest ever orted.

The November sales on the Exchange were 725,750 bags, against 7,250 bags in October. The highest price was 7·75 cents for o. 7, September delivery; the lowest, 5·95 cents for December. he spot price was $7\frac{1}{8}$ @ $8\frac{1}{2}$ cents, against $6\frac{1}{8}$ @ 7 cents at same date st year.—*American Grocer.*

DISTRICT ASSOCIATIONS.

CEYLON PLANTERS' ASSOCIATION.

THE BRITISH TEA DUTY.

A general meeting of the Planters' Association of Ceylon as held in the Memorial Hall, Victoria Commemoration uildings, on the 29th ultimo.

Mr. E. Rosling presided, and there were present: Messrs. H. G. ccles, Chairman, Rangala P. A.; W. H. Biddulph, Matale; Charles ibbon, Wattegama; S. N. Vowler, Dikoya; H. V. Bagot, Neboda; . Stevenson, Kandy; M. Scowen, Panwila; R A. Galton, Chair- an, Maskeliya P. A.; St. Geo. Carey, Kandy; T. C. Huxley, andy; F. S. Vowler, Pundaluoya; F. J. Wright, Chairman, elani Valley P. A.; G. C. Bliss, Pussellawa; J. B. Coles, Kandy; . J. Charlesley, Pussellawa; A. M. Carmichael, Hony. Secretary, ussellawa P. A.; A. Cantlay, and James Westland, Matale; . D. Bosanquet, Chairman, Dimbula P. A.; A. H. Thomas, imbula; James Ryan, Dimbula; Joseph Fraser, Matale; W. D. ibbon, Kandy; W. P. Metcalfe, Pundaluoya; A. C. Smail, ogawantalawa; R. S. Duff Tytler, Chairman, Pussellawa P. A.; on. J. N. Campbell, A. Philip, Secretary, C P. A.

The Secretary read the notice convening the meeting, after which e read the minutes of the previous general meeting which were ken as read.

THE CHAIRMAN'S REMARKS.

The Chairman said that it had become the custom at general eetings of the Association to consider the points of interest which ave occurred since the last general meeting, but owing to the near pproach of the annual meeting he would depart from the rule. he point to be considered at this time was the position of the tea nterprise. Owing to over-production many estates were working a loss. They should, therefore, either continue in their present eadlong course or combine to reduce production. He had no cheme to lay before them, but if any practical scheme was thrown orward by any member, he hoped they would all give it their ery cordial support. He then called Mr. Metcalfe to propose his esolution.

Mr. Metcalfe in rising to propose his resolution said in view of he fact that since the resolution, was drafted a deputation at home ad waited on the Chancellor of the Exchequer, he would, with the ermission of the Chairman and the consent of the seconder, Mr. Westland, slightly alter the wording of the resolution as ollows:—"That this Association would urge on Her Majesty's overnment a reduction at as early a date as compatible with the nancial needs of the Empire in the import duty on tea in Great ritain which is now equal to nearly 100 per cent., *ad valorem*, where- y consumption is checked and the stability of the tea enterprise in his colony is seriously threatened, and that a copy of this resolu- on be forwarded to the Secretary of State for the Colonies." In oving his resolution, Mr. Metcalfe said that in view of the fact hat the duty on tea was raised two-pence per pound last Spring, nd that up to the date of framing his resolution, no protest had een raised by the growers, it seemed to him absolutely necessary hat their Association should take steps to record its disapproval f the increase and to advocate reduction. There seemed to be an mpression amongst some few of their community that they were ut ploughing the sands in bringing forward a resolution such as e had the honour to propose. With that he could not agree. Speaking on the subject of increased duty, the Chancellor of the Exchequer had stated that he had heard of no objection from the growers. It was their mistake in not having objected, but it was not wise for them to perpetuate that error. If his resolution was carried by a full vote, the Chancellor of the Exchequer would have to decide if he would maintain a duty which might crush the tea planting industry of Ceylon. It stood to reason that with the present excessive rate of duty, the consumption of tea should be checked, and that was to be regretted, that owing to the large clearances made before this year's budget took effect, the figures could not be accurately quoted in proof of his contention. If they had studied the returns from the United States of America for 1896 and 1899, it would have shown them that the duty imposed in 1898 had caused a shrinkage in consumption during 1899 of $2\frac{1}{2}$ million pounds. Those figures, he maintained, clearly proved that duty checked consumption. The tea planting enterprise conducted by Britishers had to submit this year to a fall in price of over $\frac{3}{4}$d. per pound for their produce, and even if a further fall of $1\frac{1}{4}$d. took place they should have only arrived at the same retail price as in March last; prior to the increase in duty, the grower would have suffered without any benefit to the consumer. In speaking of the fall in price he had taken the figures for all Ceylon tea sold in London, but the shrinkage was far greater on low-grown teas, probably amounting to $1\frac{1}{2}$d. per pound. It was evident from the miserable prices, that were obtained for all teas that consumption had not expanded, as it might have done if the duty had not been raised. He (the speaker), therefore, maintained that they had every right to apply for a reduction. His resolution stated that the duty was nearly 100 per cent., *ad valorem*. He ventured to submit that they might well characterize the rate of 6d. per pound as prohibitive, and as a tax on their industry which could not be borne. Tea was no longer the luxury of the few, but the daily necessity of the many, and it, therefore, behoved them to be able to supply their millions of consumers without the restriction which such an exorbitant rate of duty placed on their produce. They had so far endured the increased duty without a murmur, as he felt sure, all of them had felt that it was but their contribution as citizens of the great British Empire. Now that they found this charge on their enterprise greater than they could bear, they asked for relief and counted on the Government of the mother-country, not squeezing her dependents out of their means of living. Many of them were too painfully aware that the squeeze had already commenced, and he stated without fear of contradiction that unless consumption was allowed to follow its natural course unhindered by the checks recently imposed, the stability of the tea planting enterprise was seriously threatened. That was the feeling that actuated him to bring forward that resolution; calling them there that day, he felt that delay was dangerous and if they waited for their annual meeting, they might miss the opportunity of making their protest heard in time to take effect before next year's budget was framed. They had heard by wire of the curt reception accorded to the deputation in London by the Chancellor of the Exchequer. They could hardly have expected it to be otherwise in view of the fact that they had not objected to the increased rate at the time of its imposition, but he did not think that that first refusal should discourage them from fresh efforts. The Chancellor had stated that the rate would be reduced some day; it was for them to convince him by the unanimity of their vote that the day must be an early one; that relief from the six-pence rate was necessary because of its unjustly high proportion to the cost of an article in such universal comsumption as British-grown tea. In the same paper they had read of the deputation; they had also seen that the Home Government; had appealed to the employers to retain the situations of Colonial troops. They should certainly listen to that appeal, as he trusted theirs would be listened to and a reduction of the tea duty granted at an early date. He begged to move the resolution as altered.

Mr. James Westland seconded the resolution and in doing so he said that in the last annual report in the book of proceedings of the Association, he found a resolution passed to the effect that the Committee had not been sufficiently convinced of the desirability of the reduction of the tea duty in England to induce them to commence an agitation. In December last a resolution was passed by the Planters' Association to the effect that they deemed it undesirable to take action in the matter. The reduction of the duty would, in his opinion, have led to a considerable increase in consumption of tea in the United Kingdom. Instead of six pounds per head he

did not see any reason why it should have taken as much as Australia. The reduction or abolition of the duty he had always held would have led to a greater demand for their teas among the working classes. The abolition would also have led to a considerable reduction in London warehouse charges which were a heavy burden over their industry The Committee were afraid that by the abolition of the duty the Home market would be flooded with rubbishy teas believed to be stopped at the Customs, and the Committee doubted whether a reduction of the duty would directly benefit the consumer of whether it would not benefit the low-priced teas from China and other competing countries. With reference to the absence of check on rubbishy teas, they had the Food Adulteration Act, and all foods were liable to it, so that teas unfit for food could be seized and destroyed as readily at the Customs although there was no duty. Why should they suppose that tea, free from duty, should not be seized and destroyed, it it had contained rubbish, or was found unfit for consumption under the Food Adulteration Act. Other products and foods were well looked after, whether duty or no duty. It struck him in all probability that the act would be more stringently enforced, if the duty was abolished Rubbishy teas was a very different thing from poor teas. Poor teas would find their way to market so long as there was a demand for them and it paid the grower. All could not grow high-class tea. If it was admitted that the reduction of duty from 6d. to 4d. had increased the consumption, he did not see why a further reduction should not have a similar effect. They knew that since the duty had been increased from 4d. to 6d., they—the growers—had their prices all round reduced almost 1d. per pound, while the increasing consumption was checked. Any action which tended to check the consumption of their teas was a serious matter to their industry and to Ceylon. In December, last year, he had the pleasure of seconding a resolution that suggested action being taken in conjunction with the Indian Tea Association for the abolition of the English Import duty on Tea when the time for such agitation was deemed advisable. He regretted that that resolution had been lost. The patriotic feeling was then too strong in Ceylon to give any consideration to such a subject; the bare consideration of the question was declared by a majority to be inopportune. Some were quite aware of the danger of a probable increase being imposed, but they preferred to sit on the fence and see how the cock jumped A year had shown at least some of them the mistake they made in putting off the consideration of the question. The past year had shown them how the extra 2d. duty of which they had almost to pay one-half (and some thought more) had checked the home increasing consumption. Need he point out the seriousness of the position. There must be thousands of acres of god tea not paying for cost of production. They had only to look at the Wednesday's sale list, and if they were analysed a useful table would be found there. He would not harrow their feelings with any attempt at a description of what may prove to be history of Ceylon during the first year of the new century, if matters went on a few months longer as they had been doing. He hoped they would not have to face another crisis, for many of them remembered the hard struggle they had to make ends meet when coffee began to fail, and many who where unable to fight the dead fight, had to give up the struggle If the great tea industry continued to be handicapped by a tax of nearly 100 per cent. *ad valorem* by the mother country, the whole island of Ceylon would suffer for a time. If they had been overanxious to increase their staple industry, had they not been doing all they could to open up new markets in foreign countries? They were spending largely out of the little profits they had, but which they would have no longer unless a decided improvement took place, either in the reduction of British duty or increased demand from other markets. He would beseech them not to give the Secretary of State or any one else the opportunity of saying that they had not expressed their opinion on the effects of that tax on the main industry of their Colony. They should have spoken out long ago. They might be too late for getting immediate relief they sorely needed, but they should not quietly submit to a tax that they knew was crushing the life of their industry.

Hon. J. N. Campbell said he had great pleasure in supporting the resolution. Their present feelings had been fully described by the mover and seconder Mr. Westland had remarked that their patriotism prevented them carrying on an agitation last year, and he (the speaker) hoped that they were all just as patriotic now. He compared the consumption of tea and coffee between England and America.

Mr. J. Ryan said that he had expected some one to oppose resolution, and as nobody had done so, he rose to speak in favo the same. He was one of those who sat on the fence last y They had contributed their quota in men, money, and in o ways, and made the island a home for involuntary exiles w enhanced the price of coal and iron. Last year they were in a carious position, living on reduced income, and they might soon to live without any income. It had been said that the A ciation was not sufficiently represented by proprietary plan and that superintendents gave their votes, having no pecun interests at stake. That sort of day was over. He would p out that Imperialism was a good thing and the Empire a g and good thing, but it was not proper for Imperialism to be one Colony to make another. He regretted that this motion not passed last year. They were then undoubtedly shortsighte

Mr. W. D. Gibbon said that it was best for them to show local Government the danger of the present day. Two weeks he had received a letter from a large tea proprietor in the South Province, stating that at present the more tea he put into market the more he lost. He had other products in reserve, did not like to care what had hitherto given him a fair reve He also thought that the natives employed by him would suffe they did not receive their wages on his abandoning the estate. asked for his advice. He replied to say that if he could affor that he might give rest to the estate for some months. There another difficulty to face and that was the impoverished Sinha labour employed in the low country in plucking tea. It w also militate against the prosperity of Moratuwa where sawers carpenters came from. In his opinion, Mr Ryan had looked at matter in the proper way as citizens of Ceylon. He hoped that w they said that day would show the Executive of the country danger of the duty on tea. He supported the resolution.

Mr. Charles Gibbon said that the cause of all this was not high duty but over-production. In hearing the arguments of gentlemen who had spoken, one would imagine that it was all to high duty. They were losing sight of the fact that theirs an agricultural Association, rather than a political one. If t had a strong case, they should show that the remedy was in t hands. If duty was reduced to-morrow and prices increased, th would yet be plenty of capital to open out more land and the state would be worse than the first. He was of opinion that t should ask for a *quid pro quo* in the form of a board or schoo Tropical Agriculture, in return for what they gave.

Mr. W. A. Bosanquet said that at a meeting held in Dimbula Friday, they had given their unanimous support to Mr. Metcal resolution, although their district was less affected by the pres position. They did not take a selfish view, but chose to stand the general prosperity of the country. He did not agree w Mr. C. Gibbon in saying that the present position was due to o production. On the contrary, it was due to less consumpt although overproduction has its effect.

Mr. Metcalfe then rose and said he was glad to see there was u nimity amongst them. He had been 26½ years in the island, this was the first time he had the pleasure of addressing them. this matter, he felt that prompt action was necessary, and. theref he did not delay in bringing forward the resolution. He than them all for the support they had given him

The Chairman then put the resolution to the meeting and it carried unanimously.

The Secretary stated he had received 252 proxies in suppor the resolution.

A vote of thanks to the chair terminated the meeting.

WYNAAD.

Proceedings of the Annual General Meeting held Meppadi, Wednesday, 2nd January, 1901. PRESENT Messrs. Atzenwiler, Behr, de Fonblanque, Mackinlay, Malcolm, Nicolls, Taylor, and G. Romilly, *Honorary Secret* Mr. Mackinlay *in the Chair*.

The Honorary Secretary read the following Annual Report :—

Annual Report for 1900.

GENTLEMEN,—In submitting a report to you on the work don this Association during the past year, I will confine myself ch

local matters, and only touch on those of more general interest, so far as the action of this Association with regard to them is ncerned.

Roads.—As usual, the chief efforts of the Association have been rected on trying to prevail on Government to grant sufficient nds to keep open our main road to the coast, and at last, after any years of impatient waiting and constant agitation, they have een crowned with success.

The year opened with a declaration by the President of the istrict Board to the effect that he could not find funds for the pkeep of this road, and that either the Public Works Department ust take it over, or the Ghaut portion would have to be abandoned. t length, by a G. O., dated 5th March, confirmed by one on the h May, the P. W. D. was ordered to take over the road from alicut to the Mysore frontier, and power was to be taken under the adras Local Boards Act to enforce the use of wider tyres for cart-ads over certain weights. The work of reconstruction was com-enced at once and is now being rapidly pushed on.

This is the second time, during a period of fifteen years, that this ad has had to be reconstructed, owing to the short-sighted policy the Madras Government, which, after spending lakhs on its nstruction, refused to find the necessary funds for its upkeep. Ve can only hope that the costly lessons of the past will prevent s again being allowed to go to ruin.

Soon after the work of reconstruction had commenced, a terrible ll of rain, during the night of the 3rd August, caused severe ndslips, breaching the road in many places over a distance of five iles and quite cutting off our communications with the coast. Ve have already recorded our thanks to the Madras Government r the prompt way in which the necessary repairs were taken in and and carried out.

With regard to the taluq roads we have got the Collector to recog-se the principle that tenders under **A**-system should not be ac-pted from persons whose supervision is likely to be nominal, and consequence we may hope for improved maintenance on these roads uring the coming year.

Famine.—In March last we suggested to the U. P. A. S. I. that ey should open a Famine Relief Fund, but the Chairman declined, nd, in consequence, we sent our subscriptions to the Malabar istrict Fund. At first deeming famine to be an impossibility in Malabar itself, we requested that the whole contribution should be aid over to the Central Committee without any deduction whatever r the district; but we soon found that the effects of the famine ad come even nearer home to us. In our own district the prices f grain rose abnormally, and the rise was accentuated by cart-affic being cut off from the coast on the one side by the slips on the haut, and hampered on the Mysore side by the plague camps. or many weeks strong coolies were not able to earn much more an their subsistence allowance, and the weaker ones began to ow signs of distress. In consequence, all future contributions ere devoted to local relief, and we opened small famine hospitals t Meppadi and Vayitri. The thanks of the Association are due to Ir. W. Mackinlay and the late Mr. Arthur Winterbotham for aving organised and superintended these relief kitchens.

Plague.—Luckily the plague has not yet made its appearance in ne district. Although considerable dissatisfaction has been ex-ressed as to the way in which the plague camps were conducted, nd complaints were made as to alleged blackmailing, and, although e expressed great satisfaction at their being closed in July last, yet, hen the severe recrudescence occurred in Mysore in August, we agerly welcomed the return of the camp inspection, justly consi-ering that immunity from plague was cheaply purchased by a w cases of individual inconvenience.

Police.—At the commencement of the year we asked that the uropean constable at Vayitri might be allowed horsekeep, so as enable him to do his duty; but the department, with economical olicy, declined the request.

Money Orders.—There have been numerous complaints in the year out the delay in cashing money orders at Post Offices; but from ne papers that will be put before you to-day, it will be seen that future all cause for complaint should be removed.

And now I will pass on to subjects which are primarily dealt ith by the U. P. A. S. I.

Legislation.—The amendments to the Coffee-stealing Prevention ct have passed into law. The Collector of Malabar has been sent a suggested form for returns demanded by the Act; but, although the harvest is now more than half over, we have not yet heard that the new forms have been circulated among coffee-growers.

The Labour Bill is still *in camera*. In January last we held a special meeting at which the original draft was considered and various amendments to it were suggested: these were forwarded to our then representative on the Council, Mr. Hodgson, and we have his assurance that the amendments have all been accepted by the Member of Council in charge of the Bill. This was in February last; but up to the present moment no copies of the amended Bill have been circulated. The necessity for this secrecy is not apparent.

Foreign Market Funds for Coffee and Tea.—At a meeting held in October all the tea-planters of the Association, with one dissentient, agreed to support the fund constituted, as it was then on the old basis of 4 annas an acre and ½ anna per maund of made tea. Unfortunately the very next month a new scheme for bearing a cess by the London brokers was submitted to us, and the matter is consequently still under consideration. As to the coffee fund we have not shown the same disposition to join. The cases are hardly analogous. The tea industry of India and Ceylon is already enormous and steadily increasing. The object of the foreign fund is to enable it to master and control the markets of the world. As fast as China tea is driven out from any country, quantities of cheap Indian and Ceylon teas are ready to be poured in, and the vacuum is filled. But with Indian coffees, the case is widely different. The production is very small compared with that of other countries. Really good Indian marks are well-known and secure prices equal to, if not better than, those of coffees from other countries, and I fear that no amount of money spent in advertising and in seeking so-called new markets, will enable our commoner kinds to compete on more advantageous terms than at present, with the other cheap coffees of the world.

Statistics.—I regret that, in answer to an appeal for statistics from the Indian Tea Association, so few returns were sent to me, as to make them valueless.

Sir Arthur Havelock.—Two years ago, in our annual report, we stated that we were deeply indebted to Sir Arthur Havelock for his support about the road and for the unremitting interest he had shown in all subjects affecting the welfare of the planting industry. We can endorse that sentiment to-day. A month ago we asked the Chairman of the U. P. A. S. I. to convey the thanks of the community to His Excellency by letter; but, as you will see in to-day's proceedings, this course was not approved. Regret must be felt by all that Sir Arthur Havelock was allowed to leave the Presidency without a public expression on the part of the planters of their thanks for the consideration shown them during his tenure of office.

Memberships and Accounts.—Owing to deaths and departures from the district, the members of the Association have dwindled this year to the record number of 34. Among the deaths we have to deplore that of one of our oldest members in Mr. T. J. Boosey, who was a member of the Association in the sixties, and that of our youngest Mr. Arthur Winterbotham, who only joined us in the month of July last.

The income of the Association is still in excess of its expenditure.

Proposed by Mr. Atzenwiler and seconded by Mr. deFonblanque—carried unanimously—that the Annual Report be adopted.

The Honorary Secretary then laid some of the year's accounts on the table; but stated that the balance-sheet would not be ready till February. Proposed by the Chairman and carried that the following addition be made to the rules:—"That at any meeting of the Association, five members shall form a quorum."

Proposed by Mr. DeFonblanque and seconded by Mr. Nicolls that a cordial vote of thanks be given to Mr. Romilly for his work as Honorary Secretary during the past year. Mr. Romilly was requested to carry on the work in the coming year to which he consented.

Resolved that General Meetings for the coming year be held on the first Wednesday of each month with the exception of April, May and June.

Proceedings of a General Meeting.

The same members being present, and Mr. D. McKenzie.

1. Proceedings of last meeting were taken as read.
2. Mr. S. H. Powell (junior) was elected a member of the Association.

3. **Import Duty on Tea in Ceylon.**—Mr. de Fonblanque, in a short speech, called attention to the import duty of 4 annas per lb. on tea in Ceylon. He pointed out that it was totally opposed to the principles of free trade, and that the circumstances under which it was originally imposed no longer existed. Resolved that the Honorary Secretary address the U. P. A. S. I. and the Madras Chamber of Commerce with a view to taking combined action for the purpose of prevailing on the Ceylon Government to remove the tax.

4. **Roads.**—Read letter from the Honorary Secretary to the President, District Board, with reference to the Meppadi-Kulpatty footpath, to which no answer had been received.

5. **Tea Foreign Fund.**—Read letter from the Honorary Secretary to the Hon'ble Mr. G. L. Acworth on the subject of levying a tea-cess through the London brokers, and his replies. Recorded.

Resolved that this Association prefers to adhere to the former scheme for levying the cess.

Read U. P. A. S. I. circular No. 80. Recorded.

6. **French Tariff.**—*New Markets for Coffee Fund.*—Read U. P. A. S. I. circular No. 77 and No. 79, forwarding a letter from the Chairman.

Resolved that their Association is not prepared to levy a cess, but is willing to support the Paris Exhibition Coffee-shop scheme by donations after hearing what other Associations more largely interested propose doing.

7. **Sir Arthur Havelock.**—Read letter from the Chairman, U. P. A. S. I., saying that he had not conveyed the thanks of the planting community to the Governor by letter as it would be contrary to official etiquette, but that he had thanked him privately before his departure from Ooty. Recorded.

8. **Process Fees** for service of warrants in Mysore. The Honorary Secretary stated that he had as yet received no answer to his letter to the District Magistrate, Malabar, dated November 21st: he was instructed to write again.

9. **Post Office and Money Orders.**—Read letters from the Postmaster-General, the Superintendent of Post Offices, Calicut, and the Deputy Tahsildar, Vayitri. Resolved that, in the opinion of the Association, arrangements should be made that money orders can be cashed on any day at the Meppadi Post Office; but that, with regard to Kulputty and Sultan's Battery, the Honorary Secretary do communicate with those interested in order to arrange for the cashing of orders on one special day of the week.

10. **Differential Duties.**—Read the U. P. A. S. I. circular on differential duties and answers from the Upper India Chamber of Commerce, Madras Chamber of Commerce, and Indian Tea Association. Recorded.

11. **London Docks.**—Read U. P. A. S. I. circular No. 78. Recorded.

12. **Taluq Board.**—Read letter from the President, Taluq Board, recording Mr. R. K. Walker's resignation. Mr. M. D. Taylor consented to serve on the board in his place.

13. The following papers were laid on the table:—

Indian Tea Association circulars.
Proceedings of the Shevaroy Planters' Association.
Do. do. S. Mysore do. do.
Do. do. Nelliampathy do. do.

A vote of thanks to the Chair terminated the proceedings.

(Signed) W. MACKINLAY,
Chairman.
(„) G. ROMILLY,
Honorary Secretary.

SHEVAROY.

Proceedings of the Monthly Committee Meeting of the Shevaroy Planters' Association held in the Victoria Rooms, on Monday, the 7th January, 1901, at 1 p.m. PRESENT:—Messrs. Thurston Short, C. Rahm, W. J. Lechler, E. Dickins, and R. Gompertz, *Honorary Secretary.*

1. The notice calling the meeting was taken as read.

2. Read letter from Secretary, U. P. A. S. I., enquiring whether this Association thinks it should apply for the gold medal it has won, seeing that the winners of medals have to defray the cost of them.

Resolved that, having won the medal, we think it should be applied for.

3. Read letter from Chairman, U. P. A. S. I. (Secretary's circular, No. 79/00), regarding London Docks and New Markets for coffee. Also enclosing copy of a letter from the Foreign Office stating th... has every reason to believe that the French Government ha... present intention of increasing import duties on tea, coffee, etc...

Recorded with satisfaction.

4. Read Secretary's circular, No. 81/00, reporting action ta... by the Upper India Chamber of Commerce, *re* proposed commer... combination of Great Britain and her Colonies.

Recorded with satisfaction.

5. Read letter from Traffic Manager, Madras Railway, enqui... whether Honorary Secretary could recommend a reliable man, ... would furnish cash security, to convey parcels from Suramanga... to planters on the Hills, at the rates the planters are prepare... pay. Honorary Secretary said he hoped shortly to be able... submit the name of such a man for the Traffic Manager's appro...

6. Read letter from Mr. G. Turner complaining that the Treas... was not open on the 28th ultimo, though the Tahsildar had iss... a notice saying that it would be. As Mr. Turner has not rep... to the Honorary Secretary's letter asking for certain neces... particulars, the letter was recorded.

The following papers were read and recorded:—

Circulars received from the Secretary, U. P. A. S. I.

83/U. Forwarding letter from Mr. Sanderson reporting th... Royal Commission has been appointed to report on the Lon... Docks.

84/U. Central Travancore wants to know if Tea Associations... in favour of compulsory cess.

86/U. Chairman forwards letter from Foreign Office which... every reason to believe that the French have no present intent... of increasing import duties.

87/U. Action taken by Upper India Chamber of Commerce... proposed commercial combination of Great Britain and her colon...

Letter from Traffic Manager, Madras Railway, requesting to... informed if a reliable man can be recommended as a contra... for having parcels conveyed from Salem station to the Sheva... Hills.

Letter from Dr. Watt requesting to know the best season for... visit with reference to fungoid and insect pests.

The following papers were laid on the table:—

Planting Opinion, dated December 1st, 8th, 15th, and 22nd 1... and 5th January, 1901.

Brazilian Review, dated October 9th and 30th, November ... 13th, and 20th.

Salem District Gazette (sale of Waste land).

Proceedings of the South Mysore, Nelliampathy, Coorg ... Wynaad Planters' Associations.

Report on the operations of the Department of Land Records ... Agriculture, Madras Presidency.

Proceedings of the Indian Tea Association, dated December 1... 12th, and 4th.

Agricultural Ledger, No. 18, Rhea (Riha) or China-grass.

YERCAUD, *8th January*, 1901. (Signed) R. GOMPERTZ, *Honorary Secretary, S. P...*

MARKET REPORT.

[*Per Mail advices of* 21*st December* 1900.]

COFFEE.

The London Commercial Record says:—The public sales dur... the week have presented little feature of interest, and privat... there is scarcely any demand. The flatness which has so long p... vailed has become accentuated by the approach of the Xmas h... days; the small auctions yesterday were the last of the year, pu... business being suspended till Tuesday 8th January, 1901. Ny... land sold without change. Dumont Santos was pressed on buy... at a decline of 2s per cwt. The market for "futures" has b... depressed and a serious decline in price has occurred, the ca... being the continued very heavy Brazil receipts and increased e... estimates. Santos March delivery sold down to 30s 3d, May... 30s 6d, July to 31s 6d, and September to 31s; then there wa... rally and March rose yesterday to 31s 3d, May to 31s 9d. ... September to 32s 3d. We quote:—

London ...	... Santos ...	March delivery	... 31s 3d.
New York	... No. 7 Rio...	„	... 5·75 cen...
Hamburg...	... Santos ...	„	... 31 pf.
Havre ...	... Santos ...	„	... 38 fran...

Imports, Deliveries and Stock of Coffee in London, are as follows:—

	Stock.		Imports.	
	1900.	1899.	1900	1899.
Tons ..	14,938	15,237	34,858	45,754
	Home Consumption.		Export.	
	1900.	1899	1900.	1899.
Tons ..	16,170	16,326	18,390	28,568

The preceding figures exhibit—

	Tons.
In the Imports a decrease this year of	10,896
Home Consumption a decrease of	156
Export a decrease of	10,178
Stock a decrease of	299

Auctions this week have passed off as follows:—

East India.—22 bags *Liberian* withdrawn.

Mocha.—28 ½-bales bought in.

Java—*Liberian*.—137 bags retired unsold.

Nyasaland.—Of 112 bags catalogued 85 bags sold, pickings 31s to 34s, smalls 38s to 39s, middling 44s to 46s, bold 48s 6d, pea-berry 56s 6d to 59s.

Jamaica.—Of 192 barrels and 38 bags offered 96 packages sold—smalls 42s 6d, good to fine ordinary 36s to 40s 6d, fine fine ordinary 52s, low middling to middling 45s to 48s 6d, bold faded greenish 57s to 57s 6d.

Guatemala.—Of 347 bags offered only one lot sold at 40s.

Nicaragua. Of 523 bags offered 355 bags sold, country-damaged and sea-damaged 25s to 35s.

Guayaquil.— Of 390 bags brought forward 70 bags sea-damaged and re-packed sold at 31s.

Costa Rica.—25 bags bold faded greenish realised 53s 6d.

Colombian.—Of 274 bags brought forward 100 bags sold, smalls 35s 6d to 38s, low middling gray 46s, bold hard gray 63s 6d, pea-berry 50s to 59s.

Brazil.—Of 737 bags washed Santos 134 bags sold, good bold bright green 42s, medium colory (London-cleaned) 44s; 2,405 bags unwashed Dumont half sold, bold to extra bold brownish green 34s to 37s.

180 bags Salvador, 90 bags Mexican and 271 bags Ecuador were bought in.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	1,581,000	2,046,000	1,681,000	2,637,000
Santos ...	5,195,000	4,444,000	3,609,000	4,430,000
Total...	6,776,000	6,490,000	5,290,000	6,937,000
Crop ...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 9$\frac{23}{32}$d, previous day 9$\frac{13}{16}$d.

Havre, *Dec.* 20.—Good average Santos December opened quiet at 37f. and closed steady at 37$\frac{3}{4}$f., March opened at 37$\frac{1}{4}$f. and closed at 38f., May opened at 37$\frac{1}{2}$f. and closed at 38f., September opened at 38$\frac{1}{4}$f. and closed at 39f.

Hamburg, *Dec.* 20.—Good average Santos December opened quiet at 29$\frac{1}{4}$pf. and closed steady at 30pf., March opened at 30$\frac{1}{4}$pf. and closed at 31pf., May opened at 30$\frac{3}{4}$pf and closed at 31$\frac{3}{4}$pf., September opened at 31$\frac{1}{4}$pf. and closed at 32pf.

New York, *Dec.* 20.—Closing prices of No. 7 Rio were as follow:—

	Dec.	Jan.	Feb.	Mar.	April.
December 20...	5·55	5·55	5·65	5·75	5·80
December 19...	5·45	5·45	5·50	5·60	5·65

TEA.

Indian.—Auctions were lighter, comprising 42,500 packages against 55,200 packages in the previous week, and 41,300 packages a year ago.

There was a fair enquiry for nearly all descriptions. Common at the opening did not shew further depression, but a flatter feeling was apparent afterwards for both leafy and broken sorts at and under 5½d per lb. Useful to good were taken freely at late rates where quality was maintained. Bidding was brisk for fine and finest kinds.

For 38,800 packages on Estate Account 6¾d per lb. was realised, contrasted with 8⅛d per lb. for 35,300 packages and 8d per lb. for 11,900 packages in the two preceding seasons.

Totals printed on Importers' Account during December were:—

1900.	1899.	1898.
142 300 pkgs.	124,300 pkgs.	108,700 pkgs.

making 876,000 packages of the present crop disposed of to date, *versus* 902,000 packages in the same period of 1899, and 878,000 packages in 1898

Ceylon.—At the closing sale of the century held on the 18th instant, 29,100 packages were submitted, opposed to 21,800 packages on the foregoing Tuesday and 12,200 packages twelve months since.

A dull tone prevailed for Pekoes and Pekoe Suchongs under 5¼d per lb. which were easier, the latter selling down to 4½d per lb. or, say, 2d per lb. under the quotation of this time last year. Pekoes and Orange Pekoes over 6½d per lb. did not shew much alteration, though occasionally going in buyers' favour. Low Broken Pekoes were difficult to move, except at a reduction, but those possessing strength and flavour were usually in request. Choice lines continued scarce, many of the parcels now coming to hand from well-known gardens being deficient in tip and cup, as against prior arrivals.

The average is 7⅛d per lb. On the 13th instant, it was 7⅜d per lb., and 7¾d per lb. in 1899.

Catalogued in December:—

1900	1899.	1898.
73,500 pkgs.	56,200 pkgs.	51,500 pkgs.
(Avge. 7⅜d per lb.)	(Avge. 7¾d per lb.)	(Avge. 8⅛d per lb.)

From 1st January to 21st instant, 1,263,200 packages yielded; 7¾d per lb., compared with 8d per lb. for 1,138,100 packages and 7⅞d per lb. for 1,108,800 packages in the two former years.

Java.—Nearly 1,3000 packages of direct import passed the hammer. Demand was limited and many of the less desirable lots were withdrawn.

Totals for the month were:—

1900.	1899.	1898.
2,800 pkgs.	2,000 pkgs.	3,300 pkgs.
(Avge. 6¼d per lb.)	(Avge. 6⅞d per lb.)	(Avge. 6⅞d per lb.)

Deliveries.—The clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 18th December,	1900	11,962,920 lbs.
Do.	do.	1899	11,346,355 „

During the week the following have been printed for sale by public auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offered. Pkgs.
India	34,762	7,777	42,539
Ceylon	25,643	3,481	29,124
Java ...	883	401	1,284
Total ...	61,288	11,659	72,947

Also 386 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated December 21st, 1900, says:—

Quantity brought to Auction in London from 1st June to date.

	Indian. Pkgs.	Ceylon. Pkgs.	Java. Pkgs.
1900-1901	906,367	717,528	29,590
1899-1900	964,640	684,287	32,695

43,494 *pkgs.* Indian
30,476 „ Ceylon
1,284 „ Java
} Total 75,254 packages were offered in public auction this week.

Indian.—This week's sales closed the business of the year so far as public auctions are concerned, the first Indian sale after Chirstmas not taking place till the 2nd prox. Attractive Teas sold with good competition, but common showed slightly easier prices. The official wire from Calcutta gives the exports to U. K for first half of December as 12,010,000 lbs. against 11,200,000 lbs. same period last year, making the total from 1st April to date 137,430,000 lbs. against 129,792,000 lbs.

In a circular recently issued by the Indian Tea Association, the Calcutta Committee strongly emphasize the necessity for funds to open up new markets. Referring to the levy being raised in Calcutta for that purpose, they close their remarks the following paragraph:—

"The Committee therefore trust that all Companies and Proprietors who have not yet undertaken to contribute will see their way to do so before the 31st December, after which date it is proposed to publish a complete list of subscribers."

Week's average of Tea sold on Garden Account 1900, 38,592 pkgs., av. 6·70d. 1899, 35,863 pkgs., av 8·02d.

Total Tea sold on Garden Account 1st June to date 1900, 736,052 pkgs., av. 7·60d. 1899, 727,886 pkgs., av. 8·49d.

CEYLON.—The closing auction of the year was a rather heavy one, and as the quality of many Teas was not quite up to recent arrivals, quotations were here and there slightly lower. Bidding was pretty general for all medium and good liquoring Teas, but for common descriptions, prices fell away, quotations marking a drop in some instances of ¼d. per lb. The next sale will be held on the 1st prox. Private advice states the quantity shipped from Ceylon to U. K. for first half of Dec. as 5,500,000 lbs. against 6,500,000 lbs. last year, and estimates the quantity for the month as 11,000,000 lbs. Average for week 7·14d., against 7·82d. in 1899.

Ceylon Tea sold on Garden Account 1st Jan. to date 1900, 1,194,536 pkgs., av. 7·20d. 1899, 1,055,154 pkgs., av. 7·96d.

JAVA.—Javas sold somewhat slowly at easier prices, the lower grades especially being weaker.

Bank Rate 4 per cent. Exchange on London three months sight:—Calcutta 1/4 11/32. Colombo 1 4⅜.

COCOA.

At public sale on Tuesday the small supply of 1,732 bags met a flat market, and only about 450 bags sold, at a further decline of 1s per cwt. Of 382 bags Trinidad 160 bags sold at 69s to 70s for good to fine, or a reduction of 1s. 58 bags Grenada sold at a similar fall, at 68s for good fair, and 58 bags Dominica were placed also at 1s below valuations—67s to 68s 6d for fair to good, and 65s to 66s for common. 12 bags St. Vincent brought 66s to 72s. 6 bags common bold grayish Colombian realised 65s 6d. 26 bags Esmeraldas partly sold at 60s for sea-damaged bulked. 316 bags Bahia, 461 bags Guayaquil, and 20 bags Cuba passed the hammer unsold. 27 bags fair to good African were placed at 65s 6d to 67s 7 bags Seychelles brought 67s to 69s. Fine qualities of Ceylon were very firm, but other grades were flat; 351 bags catalogued and 130 bags sold—fine bold and medium red 95s to 100s, middling 76s, smalls 68s to 69s, broken at 64s 6d per cwt. Privately about 1,000 bags Trinidad have changed hands at 70s to 71s 6d for good to fine red, 250 bags Grenada at 70s for good red, and some fine Arriba Guayaquil at 82s 6d per cwt.

PEPPER.

BLACK is dearer, with sales of 100 tons Singapore for arrival, including March-May shipment at 6 11/32d to 6⅜d, closing buyers at the higher price. On the spot sales of fair Singapore at 6⅛d.

Nothing offered at auction.

The shipments of Black Pepper for the first half of December compare as follows:—

	1900.		1899.	
U. K.—Singapore	*nil*		*nil*	
,, Penang	*nil*	*nil*	330	330
Continent		120		100
U. S.		*nil*		40
Total tons...		120		470

WHITE is firm. For arrival 75 tons Singapore have been sold, *viz.*, November-December shipment at 9 5/32d, and January-March 9 3/16d to 9¼d. On the spot only small sales reported, *viz.*, fair Singapore at 9⅛d, and fair Penang at 8½d.

14 bags Ceylon, offered at public sale on the 19th instant, sold at 8⅝d for fair and 8d per lb. for much mixed brown.

The shipments of White Pepper for the first half of December compare as follows:—

	1900.		1899.	
U. K.—Singapore	*nil*		50	
,, Penang	*nil*	*nil*	*nil*	50
Continent		70		90
Total tons...		70		140

GINGER.

COCHIN.—A firm tone prevails, and private business has again been active, about 1,500 bags selling at 32s to 33s for good washed medium and small rough and 32s for Calicut rough sorts, which prices show a further advance. At auction 38 cases 215 bags were catalogued and 170 bags sold, mostly "without reserve" at 30s for medium and small bright Calicut rough wormy, 29s for small to bold dullish washed slightly limed, and 26s to 27s per cwt. for sea-damaged Calicut rough.

INDIA RUBBER.

The market for fine Para has continued firmer and a fair busi has been done; sales of Hard fine old import on the spot at 3s to 4s ditto forward delivery 3s 10½d to 3s 1 ¾d; Soft fine spo 9¼d to 3s 9½d, forward at 3s 10d; Negroheads, small sales of scra at 2s 10d, Cameta 2s 3½d to 2s 3¾d. Peruvian.—Considerable s of ball at 2s ½d to 2s 7½d according to quality and condition. medium kinds there is more enquiry at the low prices, with s privately of Mozambique Lamu ball at 2s 4½d, and softish w ball at 2s 2½d to 2s 3d per lb.

At auctions to-day small supplies were brought forward, wh met a fair demand at slightly better prices.

Para.—28 cases retired.

Peruvian.—42 packages offered and 12 sold, fair scrappy 2s fair ball at 2s 8d.

Mollendo.—28 cases sold. Fine 3s 8½d to 3s 8¾d, entrefine 3s scrappy negroheads 2s 8¾d.

Central American, &c.—28 bales sold, good clean scrap 2s tarry scrap, fair 2s 5¼d to 2s 6¾d, clean pressed strips 2s 1¼d, sheet 2s per lb.

Mangabeira.—12 cases offered and 2 sold, pinky sheet, rat dirty 1s 8d.

New Guinea.—3 bags sold, brown ball, good 2s 9½d, ditto rat dirty and mixed 2s 5d.

Madagascar, 11 packages; Mozambique, 77 bags; and Assam packages, retired.

PRICES CURRENT.—Per lb.	Present Prices.				1899.		
	s.	d.		s.	d.	s.	d.
Para—fine	3	11½	@	4	0	4	6 @
,, negrohead	2	3	,,	2	10	2	9 ,,
W.I.—sheet	1	8	,,	2	7	2	4 ,,
,, scrap	1	8	,,	2	7	2	4 ,,
Borneo	1	4	,,	2	3	1	6 ,,
Madagascar—flake	1	6	,,	2	10	2	5 ,,
Assam—No. 1	2	10	,,	3	0	3	3 ,,
,, No. 2	2	0	,,	2	2	0	0 ,,
,, No. 3, &c.	1	0	,,	1	4	1	3 ,,
Mozambique—red ball	3	1	,,	3	3	3	5 ,,
,, sausage	2	6	,,	3	2	3	4 ,,
,, white ball ...	2	3	,,	2	5	2	9 ,,
,, red unripe ...	0	0	,,	0	0	0	0 ,,
,, Lamu ball ...	2	3	,,	2	6	3	1 ,,

CINCHONA.

At the London auctions, on Tuesday, the small supply of 1, packages were offered by the nine brokers, of which the grea proportion sold at an average unit of 1⅜d to 1 7/16d, as against 2d the previous London auctions, and slightly below the parity of last Amsterdam sale. The next sale in London will be on January

The following table shows the amount of bark offered and sold

	Packages offered.	Package sold.
East Indian cinchona	681	556
South American (Calisaya quill) ...	389	335
Java cinchona	277	277
Ceylon cinchona	137	54
	1,484	1,222

The following were the approximate quantities of bark purcha by the principal buyers:—

	Lbs.
Brunswick factory	87,406
Mannheim and Amsterdam factories	44,710
Messrs. Howards & Sons	37,900
Frankfort & Stuttgart factories	24,810
Imperial Quinine factory	22,985
American factory	2,250
Druggists, etc.	32,620
Total quantity sold	252,681
Bought in or withdrawn	60,323
Total quantity offered	313,004

The prices paid for sound bark were as follows:—

SOUTH AMERICAN.—Bolivian cultivated Calisaya quill, ordin to fair, 6¾d to 8¼d per lb.

CEYLON.—Ledgeriana, original stem chips, 4¼d; hybrid di 3¼d to 3¾d.

AVA.—Ledgeriana, original stem chips and shavings, 3½d to 5⅜d: nch, 4¾d to 4⅞d; root, 5⅜d to 6⅜. Red, original stem, 2¼d to 5⅛d, root, 2¼d per lb.

AST INDIAN.—Red, natural stem chips and shavings, 2½d to 5⅜d; ewed, 7⅛d. Ledgeriana, original branch, 3⅜d; officinalis original n, 3¼d to 7⅛d; renewed, 5⅞d to 7⅝d; branch, 5¼d; and root, 5d 5d.

he exports from Java for the first half of December were 470,000 sterdam lbs., against 270,000 Amsterdam lbs. last year.

QUININE.

There is no further improvement to be noted in the second-hand market this week the tone being dull and the tendency still easy, although there are few sellers. On the spot B. & S. or Brunswick brands have sold at from 1s 1d up to 1s 1¾d per oz, March delivery at 1s 1¼d to 1s 1¾d, and May at 1s 2d. The market closed on Wednesday with buyers of March delivery at 1s 1¾d, and sellers at 1s 2d. To-day the market has been quiet with sellers at 1s 1¾d per oz spot, and small sales have been made at that figure.

Duty payments and exports during the first eleven months of the last three years are given below:—

	Imports.			Duty Payments.			Exports.*		
	1900.	1899.	1898.	1900.	1899.	1898.	1900.	1899.	1898.
ian	133,916,378	124,409,663	119,520,528	126,999,935	123,790,871	121,517,853	9,164,048	7,108,465	6,891,747
lon	105,190,036	95,206,980	90,816,321	86,084,549	79,103,171	76,657,021	12,828,666	11,268,092	10,799,072
na	20,286,009	30,830,551	24,818,037	12,435,101	15,525,882	13,687,442	17,271,266	10,684,823	14,642,982
er Countries	8,714,252	8,803,484	7,102,095	5,792,940	6,360,204	4,511,130	770,730	649,465	1,121,071
Total lbs.	268,106,675	259,250,678	242,256,981	231,312,570	225,780,128	216,373,446	40,034,710	29,710,845	33,454,872

Analysis of above export of Tea from United Kingdom during the last two years (not including transhipments).

	Indian.		Ceylon.		China.		Other Countries.	
	1900.	1899.	1900.	1899.	1900.	1899.	1900.	1899.
ntries in Europe	5,341,314	3,802,854	7,915,240	6,839,227	11,826,543	5,529,696	549,666	428,872
ited States	465,609	559,739	909,368	1,228,808	480,752	456,615	19,444	20,433
itish N. America	1,148,934	1,614,430	1,754,875	1,713,261	370,870	535,412	30,714	46,291
wfoundland	99,975	84,115	292,521	232,576	226,618	272,881	6,402	4,956
her Countries	2,108,216	1,047,327	1,956,662	1,254,220	4,366,483	3,890,219	164,504	148,913
Total lbs.	9,164,048	7,108,465	12,828,666	11,268,092	17,271,266	10,684,823	770,730	649,465

(Average for all India 6·70d., December 21st).

Garden.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.
eilgherry ...														
odanaad ...	89 p	8	39½c	8¾ 1/1¼	35	6¾	...	..	...	...	...	...	15½c	7½
ravancore ...	203	5·42												
ome ...	64 c	4¾	...	...	37½c	4¾	24½c	4¾	...	.	2½c	2¾	1½c	3
rav T Est Co Pam.	87	5¾	..	...	26	4¾	61	6	.	...	...	...	...	...
allardi ...	52	5¼	...	...	...	...	...	...	...	...	52	5¼	...	...
ynaad ...	233	5·22												
hulika ...	111 p	6¼	52½c	7¾	37	6	...	...	22	5	..	...	...	...
erindotty ...	122 p	4¼	...	..	24	4¼ 5	12½c	7	86	4	...	...	...	...

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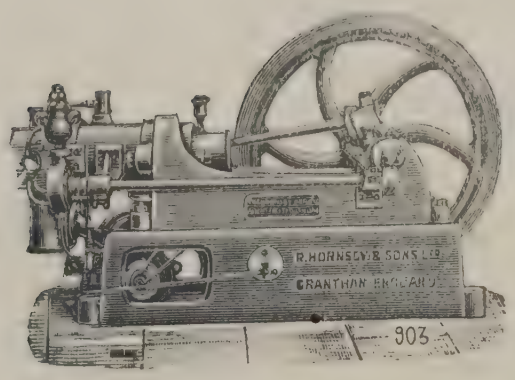

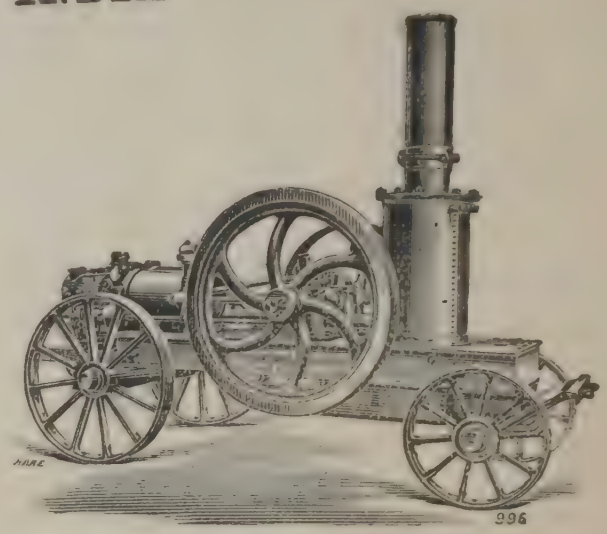

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Extra for Standard connections to Water Vessel ...		35	40	45	50	53	55	60	100	100	150	200	240	300
Extra for Foundation Bolts ...		7	8	12	15	15	17	17	40	50	60	60	70	80
Extra for Exhaust Piping about 5 ft. to Silencer and 9 ft. to atmosphere		27	35	43	55	60	65	65	90	90	110	130	150	190
Extra for Pulley of list size		12	13	20	27	32	38	38	53	58	70	100	150	200
Extra for Self Starter with Hand Pump ...		...		...	...	...	...	...	...	...	...	600	600	700

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PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

VOL. VI.] MADRAS, SATURDAY, JANUARY 19, 1901. [No. 3.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 25th instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad. *January 15th*, 1901.—*Crop*—is ripening-up very slowly; excellent crops are being gathered on most places, and estimates are already generally passed. *Weather.*—A heavy shower of rain fell on Thursday last, and a smaller one on Friday. This has done damage in forcing on a blossom, when the tree should be wintering, and in knocking crop off. The rain will, however, be beneficial in ripening-up the backward berries. *Health*—Generally good throughout the district.

Coorg. POLLI BETTA, 16*th January*.—*Weather.*—Mostly cloudy. Rain last Friday about ·35 inch. *Crop.*—Ripening satisfactorily, and contract picking still going on. *Labour*—Sufficient. *Health*—bad.

COFFEE IN MYSORE.

OFFICIAL statistics should rarely be accepted as absolutely accurate. Especially is this the case when they relate to agriculture, for it is notoriously difficult for any person, official or non-official, to obtain reliable figures from cultivators of the soil. Planters, for instance, usually manifest a decided objection to what they frequently regard as inquisitorial investigations into their financial position; and it has become customary now-a-days to attach to agricultural statistics a warning that they must not be implicitly relied upon. Nevertheless, there is much interest and some little instruction to be derived from the Agricultural Statistics of Mysore for the years 1894-95 to 1898-99. Granted that the figures are probably not strictly accurate, there is no reason to suppose that those relating to one year are more erroneous than those referring to another. Hence we may assume that a fair comparison, or something very near to it, may be drawn between the various annual figures before us; and certain general conclusions may be drawn without much hesitation as to their approximate accuracy. For instance, the statistics show us that Kadur and Hassan are the districts in which coffee plantations are mostly found in Mysore. In 1895, Hassan took the lead with a total of 16,600; in 1897, it fell behind Hassan; and by 1899, the figures stood as follows:—Kadur, 10,222 plantations; Hassan, only 8,963. In other words, nearly 50 per cent. of the plantations open in Hassan in 1895 had closed by 1899, while the number in Kadur had only shrunk from 12,280 to 10,222, a decrease of less than 20 per cent. Then, again, in the matter of permanently employed labourers, Kadur held the lead throughout the quinquennium, while in regard to the average daily number temporarily employed, Hassan was mostly ahead of its rival. The figures stand thus:—

	Permanent.		Average daily.	
	H.	K.	H.	K.
1895	4,615	4,946	25,021	21,247
1896	4,491	5,630	17,916	30,427
1897	3,667	5,409	54,821	21,907
1898	3,570	6,466	48,936	19,694
1899	2,956	5,425	45,522	18,735

Thus the decrease in the number of estates in Hassan is not fully reflected by the decrease in permanently employed labourers, while there has been a large increase in the average daily number temporarily employed. On the other hand, the smaller decrease in the number of plantations in Kadur has been accompanied by an increase of, say, 10 per cent. in the number of permanent hands, and a decrease of rather more in the average number of temporary hands.

Still more interesting are the acreage returns, as will be seen from the following figures:—

	Mature Plants.		Immature.		Total.	
	H.	K.	H.	K.	H.	K.
1895 ...	53,159	55,510	4,048	25,685	57,207	81,195
1896 ...	54,410	58,210	3,545	24,399	57,955	52,609
1897 ...	35,366	57,873	7,150	24,201	42,516	82,074
1898 ...	35,282	58,655	7,279	25,597	42,561	84,252
1899 ...	35,242	59,434	7,280	24,793	42,522	84,227

These figures suggest several deductions. In Hassan the decrease in acreage under mature plants was much greater than the reduction in the number of plantations; in Kadur

there was a small increase in acreage. The fluctuations on the Hassan figures are so violent as to raise grave doubts as to their reliability, yet there are as great oscillations in the "yield" returns for both districts, which are as follows :—

	Yield in lbs.	
	H.	K.
1895	4,974,652	11,812,500
1896	3,492,192	5,595,113
1897	1,483,062	3,133,867
1898	1,816,381	5,680,654
1899	1,595,157	5,237,396

Reckoning entirely on the acreage under mature plants, yield per acre fluctuated (approximately) as follows :—

	Yield per acre in lbs.	
	H.	K.
1895	94	214
1896	64	95
1897	42	54
1898	52	97
1899	45	87

There are certainly indications of serious blunders here. Perhaps some of the older planters in South and North Mysore can throw light upon the facts, which appear to show that the yield per acre in 1899 was less than half that of 1895!

It should be added that figures of total cultivation of coffee in Mysore show the same results (always allowing for "rough" calculations in round figures) and for the fact that area under immature plants is included in the following table :—

	Acres under Coffee.	Yield in lbs.
1895	138,670	16,796,016
1896	141,528	9,112,757
1897	125,876	4,659,376
1898	128,079	7,552,965
1899	128,000	6,868,733

This implies a yield per acre (under both mature and immature plants) of—

	lbs.
1895	121
1896	64
1897	37
1898	59
1899	53

To put things mildly, these figures are amazing.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

The Indian Tea Association (Calcutta) has issued the subjoined memo. by Mr. H. H. Mann, B.Sc., F.I.C., for the information of members :—

A SUGGESTED REMEDY FOR THREAD BLIGHT ON TEA.

One of the most widely diffused and insidious blights which attack the tea plant is that fungus generally known as 'Thread Blight' (*stilbum nanum*). It occurs more or less in practically every district where tea is cultivated in India, and on many gardens it has been responsible for a very large amount of damage. The blight itself is so common, widespread, and well-known that I will not attempt to re-describe it. Starting from a point or points near the jungle, as a rule, it spreads from bush to bush, gradually killing branch after branch of any plant it may attack, and rendering useless, if it does not actually kill, the bush on which it occurs. Its depredations are generally most obvious at the end of the flushing season (although, if looked for, it can be seen at most seasons of the year), and at this time I have seen sections of gardens in which fifty per cent. of the bushes have been affected.

The remedial measures which have hitherto been adopted have usually consisted either in cutting out the thread so far as it can be seen—a method which is recognised as never having been more than a very unsatisfactory palliative,—or in burning the [illegible] before pruning, and then cutting it down to the ground. Reme[illegible] such as the latter of these, though they are generally succes[illegible] are certainly to be avoided if possible, since they necessitate [illegible] collar-pruning of individual bushes in a plot, which generally re[illegible] in serious damage to the bushes in question during the follow[illegible] plucking season, and also since if the treatment does not succ[illegible] the bushes are left in a worse condition than that in which [illegible] are found.

A method has, however, been adopted during the past tw[illegible] three years in Upper Assam which has apparently been very [illegible] cessful in practically eradicating the blight wherever it has [illegible] efficiently applied.

The method is briefly as follows:—7½ lbs. of lime quick [illegible] unslaked—are slaked with water, and then mixed with 2½ lb[illegible] sulphur—water being then added to make the volume of the li[illegible] up to ten gallons. The mixture is boiled in an iron vessel till [illegible] liquid becomes orange in colour and takes on an abominable s[illegible] (somewhat similar to that of rotten eggs), allowed to cool, [illegible] applied carefully and thoroughly with a brush or piece of jute to [illegible] all the stems of the tea bush which show any sign of thread bli[illegible]

It is, of course, almost unnecessary to state that the prun[illegible] should always be burnt wherever thread blight occurs. Other[illegible] the blighted prunings may set up a still more serious attack [illegible] following year.

From what I have seen I think that this method, whic[illegible] comparatively inexpensive, will be found of extreme use in com[illegible] ing this, which is, as I said before, one of the most serious bli[illegible] of the tea plant at the present time.

* * *

THE RIVAL CLAIMS OF TEA CHESTS.

The following is the text of a letter addressed by the T[illegible] buyers' Association, London, to the Indian Tea Associati[illegible] London, relating to Patent Tea Boxes :—

I am instructed by my Committee to call the attention of [illegible] Committee to the very undesirable packages in which Indian [illegible] Ceylon teas are being packed.

They believe that arrangements are now being, or are about to [illegible] made by the gardens for next season's crop, and they feel that [illegible] is the time to put on record their opinion as to the most desir[illegible] package.

No doubt merchants are entitled to pack their teas in any kin[illegible] package they like, but nevertheless, my Committee think t[illegible] buyers are entitled to say what in their opinion is the most suita[illegible]

At present there are several kinds of package in use, *viz.*, woo[illegible] chests with leaden linings, Venesta chests, Colinda chests, Es[illegible] Colinda chests, and Acme metal, and Acme Veneer chests. Th[illegible] may be others. Of these mentioned, my Committee are of opin[illegible] that the old wooden chest, with a good lead lining, is the b[illegible] None of the others are free from serious objection. Metal che[illegible] they consider, are the most unsatisfactory. It is a well-known f[illegible] that metal is a good conductor of heat and cold, and tea packe[illegible] metal chests is subject to every change of temperature. Ther[illegible] a certain condensation on the metal at times which tends to g[illegible] the tea a weathery flavour.

The tops and bottoms of these metal chests are very ea[illegible] knocked out and, very frequently, buyers find several pounds of [illegible] wasted in their vans. Neither are they good for repacking, [illegible] they cannot be cut down, or made smaller.

The Acme Veneer chest has, my Committee believe, been c[illegible] demned, and will not be used after this season, but they underst[illegible] those who are using it at present propose using the Acme m[illegible] chest instead.

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nic[illegible] son's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf pe[illegible] unable to procure the Ear Drums, may have them free.

Address—No. 989 D, THE NICHOLSON INSTITUTE, [illegible]
Longcott, Gunnersbur[illegible]

[w. 26-5-00—26-5-1901.] *Lon[illegible]*

The Venesta, Colinda, and Esma Colinda are very much alike, eing made of three-ply wood and having a thin lead lining. They re much too weak, and are easily broken and punctured. If they ere made of stouter material and stiffened at the corners with attens inside, they would be much better. The leads used are requently so thin, as to be of no protection, and my Committee are onfident that the interests of the importers are considerably amaged by the use of such.

The reason why merchants are using these patent packages is, my ommittee believe, because of the difficulty of getting wood; but ney are assured that an unlimited supply can be obtained from weden, and it would cost no more than the patent packages.

I, therefore, desire to reiterate that the most satisfactory ackage is the old wooden chest with sufficiently thick lead lining, nd some members of this Association have informed the Committee that they will not buy tea packed in any patent package, if ney can possibly avoid it.

COFFEE IN DISTANT LANDS.

XXII.

Abyssinia:—A Consular report from Harrar, says: "The Harrari coffee is of a very good quality, known in the London market as 'Moka long berry,' where it is preferred to the real Moka. Occasionally its price in London is higher than that of Moka. Plantations of coffee are increasing slowly, because the natives prefer to cultivate the Kiatt (Celastrus edulis) as more lucrative, 1 lb. of leaves of which are sold for 1 dol., and sometimes 2 dol.; the natives, as in Arabia, are eating these leaves. Nevertheless, more than 150,000 coffee trees have recently been planted, especially in the districts of Chercher and Itto." The Abyssinian coffee is wild and grows in Kaffa (whence the name), Limmu, Gimma, Gumma, Ghera, Ennarea, Hillu. It has a very good aroma, and if cultivated it would be a very keen competitor of the real Moka. Monseigneur Massaya (afterwards Cardinal), when Bishop of the Gallas some forty-five years ago, cultivated in Ennarea 3,000 trees and obtained a quality much superior to the real Moka both in flavour and aroma. This coffee used to be imported here from the above countries *viâ* Adis Abbaba, and exported to Europe after being cleaned in Aden. In the European market it is known as Abyssinian coffee, but on account of the present low price of American coffee the export of this coffee is decreasing. Most of the import is stocked in Harrar, and now the imports from the interior are next to nothing, the price, 4 dols. per farasla, not covering the expenses of transport from the above-named countries. Should the American crop fail, the increase of export of Abyssinian coffee would recommence. On representations made by the merchants of Harrar, the Emperor Menelek has abolished the export duty of 8 per cent. on Abyssinian coffee this year.

Fiji.—Coffee grows well in Fiji, both the Liberian and Arabian varieties, and does best in shaded mountainous districts, such as are found in the upper reaches of the Wai-ni-Buka in Viti Levu; large areas have been put in by the Fijians as an addition in future years for the payment of their taxes and self-betterment.

Guatemala.—The United States Consul at Guatemala writes:—"The delay in shipping coffee from this Republic is caused by the poor condition of the roads, owing to the heavy rains, which prevents transportation to the ports. While this reason is the one generally advanced, I am of the opinion that the "finqueros" are holding back with the hope that the duty of 6 pesos ($2.70, at present rate of exchange) a quintal (100 lbs.) will be remitted. Coffee shippers in Guatemala are exceedingly worked up on account of this new export duty, saying that the exchange has dropped about 200 points, and therefore the 6 pesos means a greater gold outlay by 33⅓ per cent. than they would have had to pay when the decree fixing the duty was promulgated; besides this, the coffee quotations abroad are considerably lower than was expected. As the largest coffee fincas are owned and worked by Germans, the hardship will affect them most. There seems to be little hope of a revocation of the decree fixing the export duty above mentioned."

Mexico.—The Mexican Coffee Crop in 1899 amounted to 18,375,035 pounds, valued at $3,436,039 (Mexican).

New South Wales.—According to the *Agricultural Gazette* of New South Wales, Mr. John Ball, of Chatsworth Island, reports that his coffee crop in 1900 was a great success. His last crop returned 1,694 pounds, which sold at 1s. to 1s. 3d. per pound. This year the crop is expected to amount to something like 6,000 lbs. Mr. Ball has mastered the manufacture of coffee of the highest quality, and finds a good demand for it. His trouble is to secure sufficient quantities of beans. In reply to inquiries made of Mr. Holmes, a planter in Fiji, Mr. Ball has been informed that, owing to unsatisfactory price offering in Sydney for the Fijian bean, the growers there were abandoning coffee-growing. Mr. Holmes forwarded Mr. Ball some seeds of the Liberia coffee, which is a sturdy-growing tree with deep tap root, and which bears a larger berry than the ordinary Arabian variety. In Fiji, even at the extremely low prices (3d. to 5d. per pound) paid for the beans, this variety returned 4s. 7d. per tree. Mr. Ball finds that he can pay 10d. a pound for good beans. His harvesting is done by lads who are able to earn 15s. a week at the work.

NOTES

Tea Sales in London, 1901.

Every Monday, Tuesday, Wednesday, and Thursday.

Cocoa Sales in London, 1901.

Every Tuesday. First sale of the year, 8th January—11 o'clock.

Coffee Sales in London, 1901.

Every Tuesday, Wednesday, Thursday, and Friday. First sale of the year, 8th January—10 o'clock.

China Tea.

In a few districts in China cultivators are said to be abandoning tea, and substituting sweet potatoes, bananas, and other food-stuffs.

Coffee in the United States.

The *American Grocer* of 5th ultimo says:—The market for mild coffee is dull and nominal. Good Cucuta is quoted at 9¾ cents. The weakness in Brazil coffee has checked demand for all sorts.

The Use of Insecticides.

"Why, Pat, for heaven's sake, what's the matter?" "Well, sorr, I swallied a pertater bug, and, although, sorr, I took some Parrus green widin five minutes after to kill th' baste, shtill he's just raisin' th' divil inside o' me, sorr."

Cinchona Liqueur. A liqueur of cinchona is said to be largely consumed as a liqueur at the refreshment bar connected with the French Chamber of Deputies. A *pharmacien* supplies restoratives and medical stimulants which can be had without a doctor's prescription.

Vanilla Sales in London, 1901. At 12 o'clock.

9th January.	1st May.	18th September.
6th February.	29th May.	16th October.
6th March.	26th June.	13th November.
3rd April.	24th July.	11th December.
	21st August.	

Cinchona Bark Sales in 1901.

London.

15th January.	21st May.	24th September.
12th February.	25th June.	22nd October.
12th March.	23rd July.	19th November.
16th April.	20th August.	17th December.

Holland.

10th January.	9th May.	3rd October.
21st February.	13th June.	7th November.
28th March.	18th July.	12th December.
	29th August.	

Tea Exports from India. The Exports of tea from India from 1st April up to 7th January, 1901, to the United Kingdom total 146 millions lb., and to all other countries 21 millions lb. The comparison with the previous years is as follows :—

1st April to 7th Jan.	To U.K.	To all other Countries.	Total.
1900 ...	123,536,750	14,981,878	138,518,628
1899 ...	138,951,100	19,272,150	158,223,250
1898 ...	146,000,000	21,000,000	167,000,000

Over-production on the increase !

The London Tea Market. Messrs. Gow, Wilson & Stanton's telegram of 10th instant to Colombo reports that the market generally shows a slight decline and that the market for medium liquoring pekoes and broken pekoes is steady, while the market for teas for price is easier. The price of fair liquoring Ceylon Pekoe Souchong is 5d. (a farthing down) and the average price of Ceylon tea sold on garden account this week was 6½d. (five-eighths of a penny down)—as against 6¾d. and 8d. respectively in the corresponding week last year. *Reuter* reports that 29,000 packages of Ceylon tea were offered for sale, of which 27,000 were disposed of ; while of the 52,000 packages of Indian tea offered, 44,000 found purchasers.

Las Cascadas Plantations Company, Ltd. This company has been registered, with a capital of £100,000 in £1 shares (35,000 preference), to acquire the business of growers of and dealers in rubber, cocoa, coffee, cane, rice, tobacco, bananas andother productions, now carried on by a company of the same name in the district of Emperador, Department of Panama, Republic of Colombia, South America ; to adopt an agreement between the said old company of the one part and T. H. Harrison (for this company) of the other ; and to carry on the business of rubber, cocoa, coffee, and general produce planters and merchants, miners, financiers, promoters, etc. The number of Directors is not to be less than two, nor more than seven.

Cardamoms in 1900. Cardamoms have, as usual, fluated considerably, says a H contemporary. The most remarkable feature about the art has been the manner in which it resisted the depressing fluence of increasing stock. The general tendency naturally downwards, but there were several recoveries intervals of three or four auctions, the drop being m continuous from September to the middle of November, w there was a sudden recovery owing to demands from In The firmness, however, was not maintained at the last auctio and in spite of large deliveries during November there been improving its position with the progress of the y stocks being lower and prices higher now than they were January.

Tea and Coffee in London. The *London Commercial Rec* of 28th ultimo, remarks :—Peo generally appear to believe in improvement in trade during the coming year, and parti larly a better demand for spot Tea and Coffee is anticipat for it is felt that the Home trade, which has ever since introduction of the new import duty on Tea and Coffee follow a strictly hand-to-mouth policy, must buy in order to replen their much diminished stocks. No doubt they would ha done so before, but having invested large sums in clear Tea and Coffee to avoid the new tax, they have lacked necessary funds. It is thought that by now they ha recovered, a good demand for spot lots is therefore anti dated in the near future.

Ceylon Green Teas. Mr. Larkin, the head of "Salada" Tea Co., was asked : "H are the Ceylon green teas going ?" "First-rate," he repli "better than we ever expected them to in the course of year. We are getting repeat orders from every place whe we have made a first sale and sent out samples. They are t finest green teas in the world and have only got to be tried be appreciated. We recommend all our friends to be t first in the field with the 'winner,' and this is going to Ceylon green tea. We predict that it will put Japan t entirely out of business in a few years, and then we will dealing with our own fellow-colonists. This is what we ha all been shouting such a lot about ; why not let us put it in practice by getting the consumers to taste these delicious teas.

Cinchona in 1900. Referring to Cinchona bark "the most important drug," t *British and Colonial Druggist* remarks :—The course of t Dutch auctions is, of course, the best gauge of this article progress. In January the unit was 8.9 cents. At the ne auctions it was 10.65 cents, and remained between 10 an 11 cents up to the seventh auction, when it rose to 11.7 cents, following this by a further advance at the next auctio to 12.25 cents. There was a drop, however, at the nint auction to 10.9 cents, and at the last auction to 8 cents. Th shipments of bark from Java were very small during th greater part of the year, and, although they have been large of late, the total shipment for the eleven months is much belo that of 1899 and 1898. The course of quinine is dealt wit under fine chemicals.

Coffee in London. Severe fluctuations have again take place in thetuaterminal market ; say the *Produce Markets Review* of 22nd ultimo : the continuanc

heavy receipts, which indicate a much larger crop than was pected, brought about a rapid fall, until the lowest point er recorded was reached ; there has been some recovery, wever, and rates close 1s. 6d. under last week. Estimates a record crop for next year are still general, but each season oves how unreliable such forecasts are, and the opinion is ily gaining ground that, however large the crop may be, values e now at the lowest, as a continuance of such prices will ll further increase consumption. Auctions have only been ld on two days, and will not re-commence until January 8, 01. Privately there is no desire to increase stocks, and ly quite a retail business has been transacted.

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ylon's Staple Exports for 1900.

The Ceylon Chamber of Commerce figures for last year's total exports show the following results :—

Tea	148,431,639	lbs.
Coffee	10,773	cwts.
Cinchona	510,462	lbs.
Cocoa	33,476	cwts.
(A great falling-off.)		
Cardamoms	536,455	lbs.
Cinnamon (bales)	2,678,111	,,
Do. (chips)	1,863,406	,,
Cocoanut oil	443,959	cwts.
Desiccated cocoanut	13,604,913	lbs.
Plumbago	383,350	cwts.
(A great falling-off.)		

s regards the distribution of tea—

Russia took	8,917,815	lbs.
(More than double 1899's export.)		
Australia	17,606,912	,,
America	3,980,680	,,
"China"	1,262,463	,,

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ea in Canada.

Canadian official returns show the imports of tea during the official ear ending 30th June, 1900, to have been as follows :—

	lbs.
Ceylon (all kinds)	6,857,585
India	4,643,291
China Black	2,843,872
Do. Green	1,234,106
Japan Tea	9,294,267
Other Countries	127,595
Total Imports ...	25,000,716

he Imports into Canada of India and Ceylon tea in

	lbs.
1898 were	5,439,023
1899 ,, ...	7,851,832
1900 ,, ...	11,500,876

his means progress, and it is specially noticeable that ccording to Messrs. P. C. Larkin & Co., of Toronto,) Ceylon reen teas are going ahead very rapidly.

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ndian Tea in London.

The demand has been fairly active, and a larger business has been trans-cted than usual at this period of the year, says the *Produce Markets Review* of December 22, 1900. This is owing, in a reat measure, to the comparatively small stocks held by the ade, but more particularly to the exceptional value obtainable. here is no doubt the grades ranging from 5d. to 7d. have rely, if ever, been more favourable to the retailer, and, al-ough heavy supplies will be brought forward in January, ell selected Teas at these prices are not likely to be cheaper an they are at the present time. The Teas under the above rices have again shown an easier tendency, and a much larger uantity has changed hands under 5d. As the latest estimate of the crop available for this market is from 9,000,000 lbs. to 10,000,000 lbs. in excess of last year, and the quality of the Teas from Calcutta is reported to be inferior, it appears evident that prices will continue on a low level for some time to come. Teas from 8d. upwards of a useful character are not in very liberal supply, and, as there is a good demand for them, the market shows increased strength, and in many cases higher rates have been paid. The public sales comprised 43,494 packages, 8,374 of which were withdrawn.

Cinchona and Quinine in 1900.

The year 1900 ought, says the *Chemist and Druggist*, to be a memorable one for quinine speculators, as the article has again proved a veritable will-o'-the-wisp. The makers have done their best to stem the tide of speculation by refusing to make contracts with speculators, but they have only been partially successful. At the first cinchona-auctions in Amsterdam an average of 8·90c. per unit was paid, but at the second one the price advanced to 10·65c., dropping to 10·05c. at the third, and rising to 10·10c. at the fourth. From this period to the eighth auction in September there was an uninterrupted advance to 12·25c. (the highest point touched). In November the unit dropped to 10·90c., and again this month to 8c. The gradual advance from 10·10c. to 12·25c. was due to a falling-off in bark-shipments from Java, but unexpectedly large shipments were made during September, October, and November. There was then a deficiency of 1,100,000 Amst. lbs., to make up before the year closes, of which 470,000 was wiped off in the first half of this month. Meanwhile, the second-hand quinine-market has been influenced by every little wind that blew ; but makers have been very passive, only raising their price when absolutely compelled, and at one period an advance of ½d. was made when quite 2d. had been expected. Prices are 2d. cheaper to-day than in January. The notable alterations by makers were a reduction of 2d. in April and one of 3d. in December. The highest figure of the year was 1s. 7d., in September, at which time the second-hand market stood at 1s. 6⅜d. spot—also the highest.

Quinine in 1900.

The *British and Colonial Druggist* observes :—Quinine takes precedence in fine chemicals. Our first report in January recorded an advance in the second-hand market to 1s. 3¾d. Within a week the price had got to 1s. 4⅞d., and after a slight set-back rose the next week to 1s. 5¼d. German makers also advanced their figures to 1s. 5d., following on the advance in bark at the Dutch auctions in January, and Howard's advanced their price for 1-oz. vials to 1s. 7d. The feeling in the market was then very good, makers being busy, and eager buyers of the crude material. There was a slight fall, however, in the second-hand market before the January Java shipments were announced, and, in consequence of these, an advance to 1s. 5⅜d. In the middle of February the value had reached to 1s. 5⅝d., and one of the German makers had advanced his price to 1s. 6d. The following week the second-hand figure reached 1s. 6½d., falling to 1s. 6d. and Howard's price became 1s. 9d. "Bear" influences then became pronounced, and the price receded to 1s. 3½d. Short bark shipments in March improved the situation again, but only temporarily, and about the middle of April English and German makers made a drop, which brought Howard's price (in 1-oz. vials) to 1s. 8d. and German bulk price to 1s. 4½d., second-hand falling to 1s. 3d.

From this time till towards the end of July there was a period of depression, relieved by short-lived improvements at the end of May and June induced by small bark shipments. The third week of July, however, saw an advance of 1d. on the part of makers, consequent on the continued improvement in the bark market. A better tone then ruled in the second-hand market for some time, the price rising to 1s. 6⅝d. after makers had, towards the end of August, put up their prices another 1d. In the middle of September 1s. 7d. was reached, but then values began to fall away again, and in the first week of November German makers reduced their price 1½d. This declining tendency has continued since, the last drop on the part of German makers bringingt heir price to 1s. 3d., and Howard's figures being 1s. 7d., whilst second-hand price has got as low as 1s. 1¾d.

LETTERS TO THE EDITOR.

"FOXY COFFEE."

SIR,—With reference to Mr. P. G. Tipping's query *re* "Foxy Coffee" in your impression of the 5th instant, I think he will find the following information of some use. Speaking on the subject at the U. P. A. S. I. Meeting in 1899, Mr. Graham Anderson, C.I.E., said:—"This term ("foxy") denotes a reddy-brown appearance of the seed caused by the adhesion of the silver skin into which the colouring matter contained in the outer skin and fruity portion of the cherry has infiltrated. *This appearance is undoubted evidence of the fruit having been picked when quite ripe* (italics mine); and nearly all really good, cherry-dried coffee, which is so highly esteemed in France, is thus indelibly marked. The quality of the coffee is in no way injured, the stain being superficial and confined to the silver skin, which can easily be scraped off with a penknife. If roasted carefully, the aroma will be found excellent, which is another proof of maturity. If a quantity of ripe coffee fruit is heaped, or kept in a cistern, fermentation will take place, and the red colouring of the skin and fruity portions will sink into the gummy substance surrounding the "parchment," precisely in the same way that aniline ink penetrates the gelatine slab used for copying letters. If prompt measures are not adopted, not only will the parchment be permanently discoloured, but the silver skin below will be stained and firmly gummed on to the seed. If observed in time, the remedy consists of getting the fruit pulped as soon as possible; in closely watching the subsequent fermentation, and having the parchment thoroughly washed as soon as the gum has changed into a state in which it can be acted upon by water. In warm, rainy weather similar changes occur in very ripe cherry before it is picked from the trees. Some pulpers do not work satisfactorily and allow a large quantity of skins and half-pulped cherry to pass into the cistern along with the parchment. If these are not properly separated, before fermentation takes place, the seeds they contain will be more or less foxy. The ripest richest and most succulent fruit is always the first to suffer in this way, or from any delay occurring in "picking, pulping, or preparation."

Last season, in his desire to enhance the quality of his coffee, a proprietor hereabouts allowed his coffee to get dead, or purple, ripe on the trees before picking it, and to his thundering surprise, it was reported on from the Coast as foxy. Now his coffee had never before been reported on as fo His surprise was even greater when he was told that "foxiness" had probably been produced by his allowing fruit to become over-ripe on the trees before gathering it. the other hand, on a neighbouring estate, the coffee, wh had previously to *last* season been nearly always pronoun foxy, was that season singularly free of "foxiness." This attributed to a uniformity of shade over the place wh seems to have been attained for the first time in 1898- but the "trick" seems to have been done by washing coffee twelve hours after pulping it, the pulp-house havin position facing south-west, and the aspect of the estate be throughout nearly the same.

The obvious precautions which suggest themselves from foregoing are—

(1) To avoid, as far as possible, allowing the berries become dead, or purple, ripe on the trees. They should picked as uniformly red-ripe as possible. A spot of gr on the outside pulp will make no difference, the bean be nearly always matured before the pericarp has been fu coloured.

(2) To pulp the coffee as soon after taking in as possib The operations of pulping and measuring might go on sim taneously. Some power more expeditious than cattle-pow is desirable in this connection.

(3) To pulp as cleanly as possible. If pulpers are working satisfactorily, this must be done with the aid o sieve, the skins and half-pulped cherry being passed throu the pulpers a second time.

(4) To wash the coffee as soon as the mucilage is rea to be acted on by water. This can be determined by expe ment. For the rest, trust in Providence. I trust that t small contribution on the question will promote a healt discussion which will lead to the elucidation of a subj which there is no gainsaying is of great importance to t planting industry.

COORG, *9th January.* H. G. R.

NEW RUBBER.

DEAR SIR,—We received from our correspondent Zanzibar the following correspondence in connection w the new Rubber-yielding tree which appeard in your pap a few months ago. I think the plant ought to grow the plains up to a certain elevation above the sea-level.

THE AGRI-HORTICULTURAL SOCIETY, TEYNAMPETT, MADRAS, 15*th January*, 1901. B. F. CAVANAGH, *Superintende*

"*New Rubber.*—The tree referred to in your letter November 22, the fruit of which secretes a fluid which, wh coagulated, resembles guttapercha, has been identified at K as *Tabernæmontana*, sp., probably *T. Usambarensis*, a spec of the economic value of which nothing is known. T tree is known to the natives as *Mapumbukima* on account the curious shape of the fruit. It fruits and seeds free but the fruit is dehiscent and quantities of seed are in th way lost. The coagulated juice closely resembles gutt percha at first, but with time crumbles and will be foun I should think, of very doubtful economic value. We ha only 35 trees on this estate, but it is possible that the tree m be found distributed in the rubber forests of Pemba and the mainland. I hope to ascertain this later."

ARTIFICIAL MANURES: A WARNING.

SIR,—The recent discovery of arsenic in considerable antities in beer has been traced to the substitution for alt in the process of brewing of glucose or invert sugar epared with impure sulphuric acid, made from arsenical rites.

This was succeeded by the alarming announcement that e Manchester analyst has found arsenic in about equal antity in beer brewed from hops and malt alone.

The *Lancet* follows this up with the statement that the se of most artificial manures, *viz.*, superphosphate of lime—ade by acting on bone ash with common oil of vitriol—is rich easily soluble arsenic, which has been proved to be readily ken up from the soil by plants to which this arsenical anure has been applied ; and it is suggested that, as arsenic ccumulates in a soil which is being constantly dressed with perphosphates, its presence in malt may arise from this ause.

It is, therefore, necessary that planters should be on their uard against the possible risks from the use of superphos-hate, which forms a chief ingredient of certain advertised rtilizers ; it is advisable also that the presence of the same ontamination in other chemical manures, *e.g.*, basic slag, mmonium sulphate, etc., should be sought for.

Indian coffee cannot afford to incur the suspicion of being rown with the aid of arseniated manures.

17*th January*, 1901. KALASA.

GENERAL ARTICLES.

A TEA CESS FOR INDIA.

The Tea industry in India has not been very prosperous of late ears. Probably the chief cause of the decline in prices that has aused many estates to become unprofitable is over-production of ea. It is true that the consumption of this commodity has been n the increase, but it is equally true that production in India and eylon has increased to an extent that has more than neutralised he improvement in demand. Planters realise the soundness of the conomic axiom that excess of supply over demand involves a fall in rices. They see that there are, theoretically, two ways of putting hings right: (1) by lessening production, (2) by stimulating demand. Planters in Ceylon have for some years past adopted the second course with characteristic energy ; they are now considering whether they hould also adopt the first. Planters in India can hardly be said o have adopted either the one or the other. The Indian Tea Association has certainly done good work towards the improvement f demand, but its efforts have been crippled for want of funds equal —not to say proportionate—to those placed at the disposal of the Planters' Association of Ceylon for the specific purpose of pushing Ceylon teas in old and new markets. It may be a mere coincidence, ut we can hardly think so, that the increase in consumption of Ceylon tea, the more liberally advertised and canvassed, has been hore rapid than the increase in consumption of Indian tea, in ushing which less money has been spent. In Ceylon, planters oluntarily submitted themselves to a cess that, at their request, vas made compulsory. In India, a good many planters now vish to take a similar course, in order that ample funds may be rovided for advertising Indian teas, opening up new markets, and xtending trade in old ones. A somewhat similar course was ontemplated some years ago, but the Government of India held ut no encouragement. Lately, there has been a recrudescence f belief in the policy of submitting to a cess, and the Indian Tea Association addressed the Government of Bengal on the subject last nonth.

Dealing with the question in some detail, the Association eferred to the Ceylon precedent, and submitted copies of the eylon ordinance, imposing the tea cess (an ordinance passed, as we ave said, at the request of planters themselves.) The Association showed how this cess had enabled Ceylon growers to make greater progress in foreign markets than Indian growers. Reference was made to the present position of the tea industry and to over-production. It was pointed out that a tax of $\frac{1}{2}$ pie per lb. on tea exported would yield about $4\frac{1}{2}$ lakhs of rupees, or about four times the amount of present voluntary subscriptions and donations to the Foreign Market Fund of the Association. The Association does not see its way to establishing a universal cess without State aid. It remarked in its letter that to secure unanimous support among proprietors to a levy, without the intervention of Government, had been found impossible, not, it was believed, because of any antagonism to the object to be attained, but because no organisation sufficiently comprehensive to ensure subscriptions being paid by all proprietors could be brought into existence without State aid. Up to this point the representations of the Association are fair enough, and they make out a strong case for the imposition of a cess. In conclusion, however, the Association appears to have merely asked the Lieutenant-Governor of Bengal whether, in his opinion, the Government of India might be disposed to consider a proposal to institute a tax, if a large majority of tea proprietors expressed themselves in favour of it. Here, we think, the Association erred, it wasted time. The reply of the Lieutenant-Governor is very much what might have been expected. His Honour expressed a doubt whether the Government of India would agree to an export duty in any circumstances, least of all where the proceeds of the duty were not to be used for an imperial purpose. Further, if there were any doubt as to whether the proposal would really receive the practically unanimous support of the tea industry, the chances of a successful issue to the application would be extinguished. His Honour therefore recommended that the Association should take steps to ascertain the opinion of tea-growers regarding the proposal, and inform Government of the result. The Association has accordingly determined to send copies of the correspondence to every Tea Company and proprietor in England and in India, together with a covering letter asking for their support to the proposal by an early date.

This might just as well have been done earlier. Even a more satisfactory reply from the Lieutenant-Governor of Bengal would not have committed the Government of India to any particular action, and the matter is one in regard to which the decision of the latter alone is of importance. It stands to reason that the Government will hesitate to impose a tax on a minority at the request of a majority. Unless there is almost complete unanimity among planters success cannot be hoped for. Again, we consider it a mistake to ask for an export duty. As a matter of fact, a levy on shipments is perhaps the only form of levy that could be successfully collected; but planters should show themselves willing to pay a cess on production, not on export alone, so as to avoid the stigma attaching in the mind of the Government to any export duty. We would suggest also that when referring to proprietors the Indian Tea Association should give them an idea of the manner in which it is proposed to expend the cess, if levied. There will probably be many planters who will want more than a general statement that it is to be expended on advertisements or canvassing in such and such countries. That a good scheme might be organised is certain. The general principle of subscribing proportionately towards a huge fund to be expended for the benefit of the Indian Tea Industry as a whole is a capital one. But there are doubtless some who will think the $\frac{1}{2}$ pie in hand better than the chance of a whole pie, or even a whole pice or anna, should the efforts of the Indian Tea Association be successful and demand for Indian Tea largely increased. The subject is one that deserves the earnest consideration of every tea-grower, and we trust that planters in Southern India will give it close study. We trust also that they will show that in enterprise and "go" they have not the slightest intention of falling behind their Ceylon brethren.—*Madras Times.*

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided ; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry ; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

STRAY NOTES ON MANURES.

Why we fertilize Land.—Prof. H. A. Huston, Indiana, writes in the *American Agriculturist*:—From time to time various theories of fertilization have appeared. One, which is apparently sound, is that as much plant food should be returned to the soil as is removed from it by crops. This theory can only be put into practice on lands where dairy farming or stock farming is the exclusive business. Even in these cases some little material would have to be brought from the outside to compensate for the necessary losses. It would be impracticable to use this theory with commercial fertilizers alone on account of the high cost and the fact that the grain will not stand up under full rations of available nitrogen.

The theory which is probably most generally used in Indiana, if we may be said to have any theory at all, is to supply some deficiency existing in the soil This may be done by either of two plans: Quickly available plant food may be used in sufficient quantities for a single crop, or less available and cheaper plant food for the more permanent improvement of the land.

Where commercial fertilizers are extensively used, the common practice is to supply the soil deficiencies for one or two crops at most. As for example, the wheat crop followed by grass, or the potato crop to be followed by grain. One of the most common questions asked in regard to fertilizers is, which element produces the straw and which the grain. I believe that little profit is to be derived from considering plants and fertilizers from this standpoint.

The sound position to take is to provide such plant food that To parts of the plant will make a vigorous and healthful growth. all be sure, where excessive quantities of nitrogen are present, the plant tends to produce an undue amount of leaf and reduced amount of grain, but in practice this seldom happens except on recently unclaimed muck lands or bottom lands.

Muriate of Potash and nitrate of soda give better results with grass and mangel wurzels than when the nitrogen and potash are secured in the form of nitrate of potash.

The Use of Gypsum about a stable where nitrogen is liable to escape as free ammonia is highly recommended. It is also valuable to sprinkle over manure heaps where ammonia is escaping.

Sandy Soil ought not to be heavily manured at any time, but should receive frequent small applications.

A TYPICAL TEA ESTATE IN THE HIMALAYAS.

The following is from the Travel and Colonisation column of *The Field*:—

Nearly 3,000 ft. above the sea stands a bungalow (like a Swiss chalet with overhanging balconies, and deep verandahs). on a small platform of rock, only reached by a steep zig-zag path up the mountain side. In this lives the owner or manager of the "tea garden," isolated from all other Europeans save, perchance, one or two in like position to himself, on different estates adjoining. On the mountains above is nothing but dense virgin forest, clothing their steep sides even to the depths of the river beds far below. From this solitary eyrie, stretched out in the valleys below, as far as the eye can reach (which on a clear day may be fifty miles), are endless tea gardens. Shall I describe such an one?

The tea-shrubs are planted about five feet apart, and instead of growing into tall, lanky bushes, are kept pruned and clipped into a round close bush about two to three feet high. The leaf is picked from the young shoots, the best and most delicately flavoured tea being that which is made from the topmost shoot, not yet unfolded. The picking of the leaf is carried on from March till November or December, according to the amount of rain. On the garden the writer is describing, the yearly rainfall is 230 in., and 12 in. is known to fall within twenty-four hours. When the tea-shrub becomes mildewed or attacked by red-spider, it is dusted over with sulphur, but the great enemy of the tea grower is the "stinging slug," whose chrysalis, unless minutely examined, cannot be distinguished from the actual seed-pod of the shrub, and the slug stings so horribly that the coolies refuse to pick where it is found.

Over each gang of pickers (consisting of men, women, and children) are men put in charge to see that the leaf is properly picked and placed in the baskets which each coolie carries, of a very curious shape, slung over the shoulder. Let us follow them to the factory, a large shed-like building covered with corrugated iron. The contents of each basket are duly weighed, emptied out on the factory floor, and then begins the process of tea making. The leaves are shovelled in between two huge rollers, and squeezed out on to the floor below, where they are spread into flat heaps, and generally left to ferment for twelve hours.

The next process is that of drying. The heaps on the floor are transferred to wire trays, in layers, in a huge furnace-like machine, and in a very short space of time the leaf is sufficiently dried. When at this stage, it should be of a dark bronze colour and crisp—very different to the sodden mass that appeared beneath the ruthless rollers. Next comes the sifting of the tea-leaf through gigantic sieves of different sizes. This makes and determines the various qualities of tea. The finest and best is Pekoe, the smallest leaf left in the topmost sieve; the next, Pekoe Souchong; and, finally, Souchong, the largest leaf of the three. The "Fannings" are inferior, composed of the general leavings and remnants. Now the tea is ready for packing, and is promptly ladled into wooden boxes and tin cases, all of which are made in the factory yard outside. The tea leaf can be used a few weeks after making, but is better kept a month or two longer. At the busiest time of year the whole process, from the picking of the leaf in the garden to the packing of it in boxes, can be accomplished in the twenty-four hours, the coolies often working till quite late at night.

On an estate of 900 acres about 900 coolies, including woman and children, are employed, and 258,000 lbs. of tea made and packed, though, of course, many more pounds of the natural leaf have to be packed to make this quantity. The ceaseless care and attention on part of manager or owner, the constant supervision of coolies on the garden and in the factory, the rising early, and late taking of rest, the perpetual anxiety as to when the rains will "break," and, when broken, the suspense of watching the roaring torrents through the valleys as to whether the bridges that connect the garden with civilisation and railways will not be swept away; all these can only be appreciated by those who have done it, or watched it done, in that far-off "land of regrets." How few think of this as they daily sip their cup of tea!

UNITED STATES TEA EXPERIMENT.

For three-quarters of a century, says the *American Grocer*, attempts have been made to make tea-growing a profitable industry in the United States. At the South Carolina Experiment Station, Doctor Shepard is endeavoring to utilize the labour of idle coloured folk, including children, with fair success. In his annual report to Congress, Secretary of Agriculture states that the experiments so far conducted have shown that tea may be produced in the United States in two ways: First, by families in their gardens, as was demonstrated years ago to be entirely feasible; second, on a commercial scale, after the manner followed by the British East Indian tea establishments and the beet-sugar industry.

The work at Summerville was started with a view of ascertaining whether under favourable conditions tea plantations could be made to yield as much as the average oriental production, and whether the crop could be marketed at a fair profit. The results obtained have been affirmative, the crop of 1900, although not so large as expected early in the season, exceeded that of any previous year by at least 12 per cent., and the entire product being sold before it was all gathered to a prominent Northern distributing house—F. H. Leggett & Co.—at a price that gave a fair profit.

As a further evidence that tea can be profitably grown in the United States, capitalists are already making preparations to begin the work in certain parts of the south on a more or less extensive scale. A company with a capital of $50,000 is being organized, and will endeavour to secure a location having soil and climatic conditions adapted to the growth of tea, and where labour, such as Doctor Shepard utilizes, can be secured.

From what has already been accomplished, it has been shown that a good grade of tea can be grown and put on the market in bulk at a cost not exceeding 15 cents per pound. Under average conditions an acre will yield 400 pounds of marketable tea, and this, at 15 cents per pound, would make the expense of growing it $60 per acre. The tea should sell in bulk for at least 30 cents per

pound, and the profit on this basis would be 100 per cent. Besides the cost of marketing, however, there are other expenses to be considered, namely, the salary of a superintendent and the interest of the money invested in the plant, which would, of course, cut down the profits.

From the foregoing, it seems that the commercial possibilities of tea production in this country can no longer be questioned, but there are still many points to be settled, especially as regards the improvement of the product. During the past year experiments have been undertaken for the purpose of determining the effect of irrigation on tea and of shading the plants from the direct rays of the sun. Work has also been inaugurated with a view of reducing the cost of the preparation of tea, especially the green tea. The experiments in irrigating and shading, which will be continued, have given promising results, the shaded plants giving nearly double the yield of the unshaded, and a much finer grade of leaf.

In the future special attention will be given to manufacture of pure green tea. This subject is now claiming the attention of both inventors and planters in the British colonies, as they begin to realize the hopelessness of bringing American tea-drinkers to use the black tea instead of the green. The manufacture of green tea in the United States can be made successful only by the invention of machinery which shall take the place of expensive hand labour and prevent the waste which accompanies the latter. The questions are all being investigated by the Department, and, in addition, it is giving special attention to a study of the conditions in various parts of the south, with reference to determining the localities where tea can be grown to best advantage. Experiments have been inaugurated by some of the experiment stations, and plants distributed witha view of putting the work on a substantial basis. Much need is felt for young men capable of taking up this important problem, and it would be well for the Agricultural colleges of the south to bear this matter in mind.

THE CEYLON TEA INDUSTRY.

[From the *Board of Trade Journal*, November 15, 1900.]

During the year 1898 it was supposed by local authorities that the tea planting industry in Ceylon was fast approaching its maximum of production, which would probably be reached with an export of between 120,000,000 lbs. and 130,000,000 lbs. Although, however, it is stated in the *Ceylon Government Gazette*, of 18th ultimo, that the raising of the rupee by the Indian Government to the value of 16d. gave a decided check to the further planting of tea, yet more liberal cultivation through the application of manure has let to increased crops—385,000 acres to 390,000 acres are now under tea cultivation —and the present year is likely to give an almost unprecedented advance. This will be seen from the following statement, the figures for 1900 being the revised estimate issued by the Committee of the Planters' Association a few weeks back:—

Total Exports of Ceylon Tea.

Years.	Quantity exported.	Increase on previous year.
	lbs.	lbs.
1896	108,141,412	10,000,000
1897	116,054,567	8,000,000
1898	119,769,071	3,700,000
1899	129,894,156	10,000,000
1900 (estimate)	142,000,000	12,000,000

This large increase of production, accompanied by similarly expanding crops in India, has caused anxiety lest consumption should be overtaken and exceeded; but hitherto, with the increased demand for Ceylon teas in Russia, America, and Australia, the surplus has been nearly all taken off. In the United Kingdom it was feared that the increase of the Customs duty from 4d. to 6d. per lb., as a war tax, would check consumption; but this has not been the case, although the average price realised for Ceylon Tea in Mincing Lane has fallen compared with the average in 1899—in which year there was a slight improvement in prices over the previous year. The average for the first nine months of this year of Ceylon tea in Mincing Lane is only about 7¼d. per lb. against 8d. per lb. for the same period of last year. On the other hand, the disturbances in China, leading to some interference with the usual overland transit of tea to Russia, may possibly lead to the transfer to Colombo of an increasing proportion of the trade. Already Russia is proving one of the best customers for Ceylon tea, as will be seen in the following table:—

Export of Ceylon Tea to Russia.

Years.	Quantity exported. lbs.
1896	201,313
1897	439,349
1898	2,714,003
1899	3,949,740
1900 (up to 8th October)...	6,584,343

As one of the results of the Tea Court at the Paris Exhibition, and of the work of the "Thirty Committee" through their special agent, an increased demand for Ceylon tea on the Continent of Europe generally, as well as in Russia, may be anticipated. Then, too, the endeavour to meet the requirements of the American market by a supply of pure green teas should gradually tell, while the shipment of ordinary black teas to the same market steadily increases.

Altogether, therefore, the prospects of the great tea industry of Ceylon are not unsatisfactory. although much may depend on the judicious management of plantations, in respect not only of the "plucking" of leaf, but also of the application of fertilizers calculated to sustain and invigorate, rather than unduly stimulate and possibly injure, the tea bush. There has been less trouble with blights—grey and brown—than last year, and the methods of dealing with these diseases are becoming well understood.

COFFEE-PLANTING IN SUMATRA.

An ex-Ceylon planter, who signs himself "W. T. McK.," sends to the *Ceylon Observer* a very interesting letter from Serdang (on the East Coast of Sumatra), accompanied by a photograph, which, our contemporary says, shows magnificent giant coffee trees (backed by Albizzias) laden with crop. The letter is as follows:—

NOTES FROM SERDANG, EAST COAST OF SUMATRA.

Some time ago I promised you Liberian coffee figures from here: and now by the kindness of the Chairman of the Serdang Koffie Planters, Vereeniging, I am enabled to send you a copy of the official figures of the district. By this post I also have the pleasure of sending you a photo, showing coolies picking coffee on Greahan Estate from trees not yet four years old. The gentleman in the hat is the Javanese Head Mandor, a much bigger swell than the head kankani, in Ceylon. The lady with the cane is the picking mandor, and the other figures on the ground and up the ladders are members of her picking gang [plump-looking females, not unlike Sinhalese women in size and dress.—Ed., *C.O.*]. The box she is examining is a framed kerosine oil tin, which, oddly enough, is our standard measure. Our coffee pioneer here (a genial Italian, rest his soul! his house is like Sheriff's in the old days at Helbodde) discovered that 60 kerosine tins of cherry gave one picul of clean coffee, and that standard has been universally adopted in Serdang.

To practical planters the figures will speak for themselves. When I came here early in 1895 there were three small estates, aggregating about 200,000 plants. The bulk of the district has been planted from '97 onwards. Planting distance varies; but an average may be calculated on of 400 plants to the acre, so that the 4,000,000 plants shown in the table represent roughly 10,000 acres. Three small estates give no return.

Transport is our great difficulty. The far end of the District is 40 kilometres, close on 25 miles, from the railway, over *mud* roads, which, though they harden well enough in the dry season, pull the legs off cattle in wet weather. From where I write it is three hours' driving to Loba Pakam in fine weather: and seven hours, if the roads are heavy!! Four years ago we were assured we should have a railway within six months. But at the present rate of progress, the trees from which the sleepers are to be cut, have not yet started to grow.

Apropos of the coffee figures, it is perhaps worth while repeating the following paragraph from my last notes:—"The old trees of Tanah Abang were planted in 1880 and are 20 years' old. They

were abandoned for seven years when Giovanni took them up, and all now that is left of them are bearing about four to five katties a year each. Enormous." One katti = 1⅓ lb. Avoirdupois

The following para. is from p. 346 of the *Graphic*, September 8, 1900:—"The Germans have been quick to recognise the possibilities of this region (Uganda), and their enterprise in East Africa is remarkable. Five years ago the home Government appropriated 800,000 marks *for the establishing* of a coffee plantation not far from Tanga. The first year, *I was told*, the yield paid expenses; the third year it equalled half the capital; fourth year, the entire capital; and in the last twelve months the plantation has made a profit of 400,000 marks." The italics are mine. The *Graphic* correspondent is careful to cover himself with "I was told." As to the letter, the wonder is that the young men did not arise, wind him up, carry him out, and bury him. Each of the five years is accurately accounted for, so this wonderful plantation must have paid expenses while the plants were still in the nursery! A planter in this district (Serdang) who went to German East Africa two or three years ago, returned here. I hardly think he would have done so if he had realised the prospects as described in the *Graphic*.

A friend recently pointed out to me what he called a "strange omission" in Ballardie's and Owen's, "Buildings." "There are no stables" said he, and I had to draw him a plan for stabling six horses, two carriages, harness-room and quarters for three syces. Horses and ponies are a necessity in this country: and I think many estates in Ceylon might be better worked if the assistants had ponies to help them from point to point, or to bring them home from work at mid-day after a stiff four or five hours on foot.

Here's to a good New Year to Ceylon. May prices rise, and all proprietors renounce the sweating system!

Liberian Coffee Estates, Upper Serdang, East Coast of Sumatra.

NAME OF ESTATE.	Actual crop, 1st January to 1st July, 1900.	Estimated crop, 1st July, 1900 to 1st January, 1901.	Estimated crop for 1901.	Total planted up to 1st July, 1900.	Proposed planting, 1st July, 1900 to 1st January, 1901.	Proposed planting in 1901.
Balvewa	12	50	500	165	50	...
Bangoen Poerba ...	Included in Damar Gloegoer			200	20	...
Greahan	1,750	1,650	4,000	300	...	...
Bandar Maria ...	576	700	2,500	265	...	...
Damar Gloegoer ...	1,950	2,000	5,000	200	...	...
Bah Blua	40	200	600	200	...	...
Sialang	6	65	400	120	40	20
Batve Gingging ...	420	500	2,000	200	10	...
Begarpang	580	600	3,000	330	120	...
Namoe Rambei ...	400	600	1,500	320	80	...
Soengey Karang ...	500	600	2,000	180	...	...
Kotangan	30	300	1,000	220	30	...
Soengey Karei ...	200	200	1,000	150	25	25*
Tanah Abang ...	296	360	800	90	...	...
Soengey Poatih ...	280	480	1,300	156	10	...
Soengey Galang ...	200	100	400	65	...	...
Sey. Galang Barat ...	10	50	200	40	...	...
Serbadjadi... ...	20	150	1,000	..	...	...
Bandar Kwala ...	1,300	1,400	3,300	270	...	...
Gallia	254	350	1,000	300	50	...
Damar Gloegoer Kiri ...	...	...	...	50	30	...
Sekalveni	25	120	500	...	...	...
Rambey Estate ...	...	...	200	200	30	...
Daisydale	54	100	300	..	...	...
Total ...	8,895	10,575	32,700	4,021	495	45
	Piculs.	Piculs.	Piculs.	Trees in thousands.	Trees in thousands.	Trees in thousands.

Clean Coffee.

* Not certain.

IMPORTS AND CONSUMPTION OF TEA IN THE U. S.

The last Treasury Bulletin reports the imports of tea for October and for the ten months ending October 31. The total imports at all ports were, says the *American Grocer*, 17,173,895 pounds in October, 1900, against 8,797,035 pounds for the corresponding month in 1899. For the ten months they reached 79,715,847 pounds, against 68,913,738 pounds for the same time in 1899, and 54,887,062 pounds in 1898. The imports came from the following countries:—

	Pounds
United Kingdom	1,867,310
British North America	1,026,068
China	42,710,639
East Indies	2,601,127
Japan	28,964,619
Other Asia and Oceanica	2,513,070
Other countries	33,014
Total ...	79,715,847

During the fiscal year ending June 30, 1900, the total imports were 80,088,328 pounds, valued at $10,835,194. Duty collected, $8,008,637. Average import value, per pound, ·135 cents; *ad valorem* rate of duty, 73·91 per cent.

The following statement shows the movement for the ten months ending October 31:—

	Pounds.
Tea in Warehouses, December 31, 1899	41,729,509
Imports for ten months, 1900	79,715,847
Total supply	12,1445,356
Less tea in Warehouses, October 31, 1900	47,183,653
Distribution for ten months	74,261,703
Exports of tea for first ten months, 1900	1,003,208
Home deliveries	73,258,495

Taking the above basis, we may look for a total consumption this year of 86,000,000 to 90,000,000 pounds, or a per capita consumption of about 1·13 to 1·20 pounds, which is a decided gain over recent years, but considerably lower than was the per capita use from 1885 to and including 1897. Evidently tea is regaining part of its lost position, and probably the consumption would mount up to over 100,000,000 pounds were the duty removed.

TEA MARKETS.

In a communicated article in *Capital*, 'J' says:—

As so much has been written in all our contemporaries regarding the benefits that might be derived from selling teas on the Calcutta markets, we see no reason why we should not have our little say in the matter as well, and, there are a few pertinent questions we should like our brokers and others, who uphold selling in Calcutta, to answer. First, and foremost, comes the very prominent one—Why do gardens not profit by it more than they do; if it be the case that the Calcutta market is higher than London? Have all our garden agents gone to sleep; or, what explanation can be given regarding their missing such a chance? How comes it, secondly, that the market lately has been considerably below London prices? If the great foreign markets, which are continually flaunted in our faces, are so poorly fed, why, do they not come forward now, when there are so many withdrawals, and get their wants supplied? Why do the brokers say that the Bombay buyers seem disinclined to act even at present very low rates? It seems quite impossible to reconcile the two statements, that the market is kept denuded of supplies, and, almost in the same breath, that the buyers seem disinclined to operate, at what might be termed, ruinous rates; in fact, they could hardly offer less, unless they wanted the tea as a gift! We have followed the course of the teas of several home companies, who, acting on the advice of their Calcutta agents, put a portion (the suitable one mark you) of their crop on the Calcutta market, but the result has not been what might have been expected, and the experiment is not likely to be repeated. After all is said and done, the London market rules the Calcutta one, and any amount of writing will not alter this, until such time as a taste for common teas is educated and pushed on in India, when it may pay

sell Souchongs, and fannings and the lower classes of teas; but til that is fairly established, the Russian market can be supplied cheaply from Mincing Lane as it can from Calcutta; in fact, eight in bond from London to Trebizonde is less than it is from alcutta to Trebizonde, more especially when landing and tranipping charges at Port Said are taken into consideration. A lcutta buyer lives upon what profits he can make out of the teas buys, and if an estate is in a strong financial position, it stands reason that it must pay to ship its produce to the ruling market: ere is no reason why it should not pocket the profit the buyer akes. We imagine we hear those most interested exclaiming Yes, quite so, when there is a profit!" We are well aware there ve been heavy losses this season, more so perhaps than usual, but, though losses are always dinned into one's ears, profits are seldom ard of; yet we see the buyers annually, like the swallows, appearg in the Spring, and we hardly think that this would be the case ere their losses perpetual. By all means let us have a alcutta market, but do not over-rate it and make it harder for e unfortunate manager, if his teas brings only 4 annas or so, for ou may rest assured he has it dinned into his ears from home at his neighbour, who sells in London, has got 6¾d. or 7d. verage, which is equal to, according to Calcutta brokers, about 5 to ¼ annas. From figures of several companies before us, it takes bout one penny to one penny farthing to sell teas in London, so that anna average is equivalent to 5d. or 5¼d. in London. How comes that our brokers then, in putting the correlative values of tea verages in pence and annas, allow from 1½d. to 1¾d. per lb.? Where oes the extra ½d. or ¾d. go? If a company can sell its teas at 1d. 1¼d. per lb., for freight charges, etc., why cannot a Calcutta uyer do the same? In the case of one company, whose figures are efore us, 91d. covers all charges from Calcutta to the nett proeeds paid into the Bank, but we have, no doubt, this is exceptionally ood management. Still, it shows that it can be done, and that it in the economical management in the handling of its crop that he tea industry must look for any relief from the present tight orner in which it is placed. On estates, economy has reached its mits. To pluck the leaf a certain amount of money must be spent, ust the same as an amount must be spent for manufacturing the ame, tilling the ground that gives the leaf must also be attended o, and a certain expenditure incurred. Establishments have been ut down as far as they can be economically, and we can only suggest that London, and Calcutta warehousing charges should be educed. The brokers say, no doubt, that they have to do double s much work for the same pay as they used to, but, it is the ame with the manager and assistant on the tea garden itself, but here seems no reason why lettering, marking, inspecting in alcutta, should not give way somewhat in the same way as the harves in London have done, and we hope will do, to a greater xtent yet. Far be it from us to deny the labourer hire in proporon to the work done, but, it has always appeared to us that this harge of 4 annas is excessive, and we have no doubt our brokers, properly approached, would be amenable to reason, and also that ose who have had such a sunny harvest in wharfage will meet he industry in its days of distress in a liberal way. At least, we enture to hope so.

TEA AND COFFEE.

A Parliamentary Return recently issued gives voluminous tatistics of the imports of tea and coffee into the principal ountries of Europe and into the United States. The follow-ng shows the exports of tea from the four principal countries f production during the past three years :—

Tea Exports.	1897.	1898.	1899
	lbs	lbs.	lbs.
ritish India	153,482,000	154,122,000	159,806,000
eylon ...	114,466,000	122,395,000	129,062,000
hina .	204,267,000	205,200,000	217,467,000
apan ...	63,906,000	61,532,000	———

It will be seen that China is still the largest exporter of tea, hough the quantity exported is, by no means, as large as it used to e; thus, in the period 1884—86 the amount of tea exported from hina averaged 282 million lbs., whilst in the period 1897—99 it veraged 209 million lbs., a decrease of 26 per cent. Meanwhile, the exports of tea from the three other producing countries have been constantly increasing of late years. In the case of both, British India and Japan, the exports have doubled in the last sixteen years, whilst in the case of Ceylon the export, which is now nearly 130 million lbs., was in 1884 only 2 million lbs. From the statements attached to the present memorandum it appears that the tea produced in British India and Ceylon is sent mostly to the United Kingdom, whereas the larger part of the tea exported from China goes to Russia, either overland or by sea; also in some measure to the United States, where the bulk of the tea exported from Japan also goes.

The production of coffee, like that of tea, is largely increasing, and may be said, speaking generally, to have doubled in the last ten years. The chief producing countries are all in America, Mexico being the most northern, and Paraguay the most southern of the countries of that continent where coffee is produced. The chief countries of production, in the order named, are Brazil, Venezuela, the United States of Colombia, Mexico, Costa Rica, Guatemala, and Hayti. The United States holds a very similar place in the coffee trade to that held by the United Kingdom in the tea trade, the relative consumption in each case exceeding that of all the other countries of the civilised world put together. The coffee trade of the United States, therefore, may be said to virtually control the trade, as well as to a certain extent the prices, of coffee throughout the world.—*Daily News.*

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION.

Extracts from Abstract of the Proceedings of a Meeting of the General Committee held at Calcutta, on January 8. There were present:—Messrs. H. C. Begg (Chairman); W. Brown (Vice-Chairman); H. S. Ashton; R. H. A. Gresson; R. Magor; A. Tocher; R. R. Toynbee, and T. Traill.

Letters, dated 7th, 14th, and 20th December, from the Secretary, Indian Tea Association, London, were brought up for final consideration and disposal, after previous circulation. The principal matters dealt with in these letters were—

British Import Duty.—With his letter, dated 14th December, Mr. Tye forwarded copies of a petition to the Chancellor of the Exchequer for the reduction of the British Import duty on tea from 6d. to 4d. per pound. In the letter of 20th December, it was stated that the petition had been presented to Sir Michael Hicks Beach, on the 14th December, but had been unfavourably received. Sir H. Seymour King, M.P., who presented it, had announced his intention of moving, in due course, a resolution in the House of Commons in favour of the reduction, and of pressing it to a division. An identical petition had been presented to the Chancellor of the Exchequer, on behalf of the Ceylon Association, by Mr. E. Thompson Sharpe, M.P., for North Kensington. It had likewise been unfavourably received; and in reply to an enquiry by Mr. Sharpe, Sir Michael Hicks Beach had stated that he declined to receive a deputation on the subject.

The General Committee noted the foregoing with regret. They considered and approved of the draft letter to the Government of India (referred to in the proceedings of the meeting held on 4th December), on the question of the duty, and directed that it should be issued forthwith. Copies were to be published to members of the Association and to the Press in due course.

Assam Labour and Emigration Bill.—With his letter, dated 14th December, Mr. Tye forwarded copies of two letters, addressed respectively to the Secretary of State, and to the Government of India protesting against the increase of the minimum rates of Labourers' wage, contemplated in this Bill. These letters dealt with the subject at length; and that addressed to the Secretary of State had been sent to Lord George Hamilton, with a letter in support, by Sir H. Seymour King, M.P.

On the 5th December, the Committee had addressed the Government of Bengal, in the Revenue Department, on the question of the imposition upon Indian tea of an Export duty similar to that which has been levied in Ceylon since 1892. That is to say, a duty, the

proceeds of which would be devoted to the work of pushing the sale of Indian tea in foreign markets. In the letter the Committee had dealt with the question in some detail They had referred to the precedent of Ceylon, and had submitted copies of the Ceylon ordinances imposing the tax. They had shown how by means of the funds raised by the tax, Ceylon growers had been able to make greater progress in foreign markets than Indian growers, and they had quoted figures in support of this statement. They had also referred to the present dangerous position of the Indian tea industry; and had laid stress upon the fact that the over-production from which it is now suffering is largely due to extensions which were planned and undertaken when the rate of exchange with Europe was at a low level. They had further pointed out that a tax of half a pie per pound of tea exported from India would yield about 4½ lakhs of rupees yearly, or four times the amount of the present voluntary collection. They had added that to secure unanimous support among proprietors to a levy, without the intervention of Government, had been found impossible; not, as they believed, because of any antagonism to the object to be attained, but because no organisation sufficiently comprehensive to ensure subscriptions being paid by all proprietors could be brought into existence without State aid. In conclusion, they had asked whether, in the opinion of His Honor the Lieutenant-Governor, the Government of India might be disposed to consider a proposal to institute a tax, if a large majority of tea proprietors expressed themselves in favour of it.

The Bengal Chamber of Commerce had also, at the request of the General Committee, addressed the Local Government in support of the representation.

A letter, dated 4th January, from the Government of Bengal, was now before the Committee. It was pointed out in it that legislation such as that proposed had been undertaken in India; and His Honor the Lieutenant-Governor doubted whether the Government of India would agree to an export duty in any circumstances, and least of all where the proceeds of the duty were not to be used for an Imperial purpose. If there were any doubt as to whether the proposal would really receive the practically unanimous support of the tea industry, the chances of a successful issue to the application would be extinguished. His Honor, therefore, recommended that the Association should take steps to ascertain the opinion of tea-growers regarding the proposal, and inform Government of the result.

The General Committee noted this reply with some regret. In view of it they determined to send copies of the correspondence to every Tea Company and proprietor in England and in India, together with a covering letter asking for their support to the proposal by an early date.

It was announced that the American and Foreign Market Fund for the current season had reached one lakh of rupees. In accordance with the decision previously arrived at (see Circular No. 66 of 16th November, (1900), the Secretary was instructed to publish a list of subscribing gardens.

Proceedings of a special General Meeting of the Association held on 8th Jan. There were present:- Mr. H. C. Begg, Messrs. Begg, Dunlop & Co.; Mr. W. H. Miles, Messrs. J. Mackillican & Co.; Mr. A. Tocher, Messrs. Duncan Brothers & Co.; Mr. R. Magor, Williamson, Magor & Co.; Mr. H. S. Ashton, Shaw Wallace & Co.; Mr. R. H. A. Gresson, Messrs. Jardine, Skinner & Co.; Mr. W. Brown; Messrs. Finlay, Muir & Co.; Mr. W. C. Aldam and Mr. E. A. Woodhouse, Messrs. W. S. Cresswell & Co.; Mr. E. S. Stewart, Messrs. Lyall Marshall & Co.

The meeting was called for the transaction of the following business:—

(*a*) The consideration, and, if so decided, the adoption of a resolution substituting the word "February" for the word "April" in line 6 of Rules of the Association.

(*b*) The consideration, and, if so decided, the adoption of a resolution, under which the year of the Association shall extend from the 1st January to 31st December, instead of from 1st March to 28th February as at present.

In opening the proceedings, the Chairman said:—Gentlemen,—This special General Meeting has been convened for the purpose of altering the date of the Annual Meeting from April to February. April, as we all know, is one of the hottest months of the year, when, I take it, few of us care to leave our desks to go and listen to a long account of the year's proceedings, however interesting that may be. But apart from that, the change will bring the Annual Meeting more into line with the tea season, and I venture to think in other respects it will likewise be more convenient. Your Committee therefore decided, in conformity with the Rules of the Association, to call a meeting with a view to obtaining your sanction to the proposed change, and I feel sure you will all agree to it. The change, I am afraid, will involve some extra pressure on our Assistant Secretary, whose duties at all times, but particularly during the cold weather months, are of an arduous nature, but I am confident if called upon to do so he will use his best endeavours to get the report out in time for the altered date of the meeting.

The Chairman then proposed and Mr. H. S. Ashton seconded the following resolution, *viz.*:—"(*a*) That the word "February" be substituted for the word "April" in line 6 of Rule 5 of the Rules of the Association, and (*b*) that on and from the 1st January, 1901, the year of the Association shall extend from the 1st January to 31st December, instead of from 1st March to 28th February as heretofore."

The resolution, on being put to the meeting, was unanimously adopted.

The proceedings then terminated.

THE CEYLON PLANTERS' ASSOCIATION.

PROCEEDINGS IN COMMITTEE.

Extracts from minutes of proceedings of a meeting of the Committee of the Planters' Association of Ceylon held at the Victoria Commemoration Buildings, Kandy, on 11th January, 1901.

VISIT OF THEIR ROYAL HIGHNESSES THE DUKE AND DUCHESS OF YORK.

Before commencing the business on the Agenda, the Chairman mentioned the notification made by His Excellency the Governor regarding the approaching visit of Their Royal Highnesses the Duke and Duchess of York and invited an expression of views as to the best form of entertainment in connection with the proposed stay in Kandy. Resolved:—"That a Sub-Committee be appointed consisting of the Honorable Mr. J. N. Campbell, Messrs. E. Webb, T. C. Huxley, the Chairman Planters' Association of Ceylon; and the Secretary, Planters' Association of Ceylon, to ascertain whether it is possible to obtain a sufficient number of subscribers to give a Planters' Ball in honour of Their Royal Highnesses the Duke and Duchess of York on their approaching visit to Ceylon."

THE TEA INDUSTRY AND OVER-PRODUCTION.

The Chairman introduced the question and a discussion followed thereon. Resolved:—"That a Sub-Committee be appointed to go into the question as to the best means to be adopted to cope with the question of over-production with power to add to their number to consist of the Chairmen of the various District Associations, members of the Kandy Committee, Chairman, Planters' Association of Ceylon, and Secretary, Planters' Association of Ceylon; and that the Committee of the Chamber of Commerce be also invited to serve."

THE IMPERIAL FISCAL FEDERATION FOR PROTECTION OF BRITISH INTERESTS.

Read letter from the United Planters' Association of Southern India, transmitting copy of the following resolution and inviting consideration and co-operation—"That considering the critical condition of the tea and coffee industries, this Association do communicate with the Indian Tea Association, the Ceylon Planters' Association, the Indian Chambers of Commerce, and the leading firms of merchants and brokers interested in tea and coffee, etc, in this country and in England and her Colonies with a view to ascertaining whether a movement in favour of a commercial combination of Great Britain and her Colonies and India against the world (which would by a system of differential duties afford some protection to British-grown products and manufactures) would receive support." Resolved:—"That the Committee does not feel able to co-operate in the manner suggested."

INCREASED CUSTOMS DUTIES ON TEA AND OTHER PRODUCTS ENTERING FRANCE FROM COUNTRIES WHICH DO NOT ENJOY MOST FAVOURED NATION TREATMENT.

Read letter from the Ceylon Chamber of Commerce transmitting copy of letter addressed to the Ceylon Association in London. Resolved:—"That the Ceylon Association in London be again invited to continue to watch further developments in this important question.

CEYLON ASSOCIATION IN LONDON.

Read correspondence with the Ceylon Association in London and submitted memorial transmitted by the Ceylon Association in London to the Right Honourable Sir Michael Hicks-Beach, M.P., Chancellor of the Exchequer, dated London, 10th December, which was presented by Sir H. S. King, M.P., and Mr. W. E. Thompson-Sharpe, M.P., as representing the Indian and Ceylon Associations in London.

Submitted sample of tea referred to in the letter of the Tea Buyers' Association, dated 2nd November.

Submitted copy of letter from the Tea Buyers' Association, dated 23rd November, and sundry papers connected with the Venesta chests with which fault is found.

Submitted correspondence between the Secretary, Ceylon Association in London, and Mr. J. R. Rae, of Chester.

REDUCTION OF THE BRITISH TEA DUTY.

Read letter to Government.

THE THIRTY COMMITTEE.

Minutes of proceedings of a meeting of the "Thirty Committee" held at the Victoria Commemoration Buildings, Kandy, on the 12th January, 1901.

CEYLON GREEN TEAS, 1900-1901 SCHEME.

Submitted letter from Mr. Edgar Turner. Submitted correspondence from various applicants for grants. Resolved:—"That in confirming the application to Government for Rs. 20,000, sanctioned by the Governor in Executive Council by letter of the 10th January, the sanction of the Governor in Executive Council be applied for to the appropriation of a third sum of Rs. 30,000 as desired and determined by the "Thirty Committee" for the purpose of payment under the grant for Ceylon Green Teas, New Scheme, in terms of resolutions on the subject of Ceylon Green Teas' Grant, 1900-1901 Scheme, referred to in letter of the 4th October, 1900."

COMMISSIONER ON THE CONTINENT OF EUROPE.

Submitted correspondence. Resolved:—"That the sanction of the Governor in Executive Council be obtained to an appropriation of £8,000 sterling for pushing and advertising Ceylon tea on the Continent of Europe for 1901."

PARIS INTERNATIONAL EXHIBITION, 1900.

Submitted correspondence. Read letter from Government requesting to be furnished with a cheque for the sum of £2,000 be remitted towards the expenditure connected with the representation of Ceylon at the Paris Exhibition.

Intimated that the cheque for Rs. 30,000 had been forwarded and an acknowledgment thereof received.

CEYLON TEA IN AMERICA.

Submitted correspondence. Resolved:—"That the sanction of the Governor in Executive Council be obtained to an appropriation of £8,000 sterling for pushing and advertising Ceylon tea in America during 1901."

CEYLON TEA IN SWEDEN.

Read letters from Mr. A. J. Austin Dickson acknowledging receipt of cheque for Rs. 230·63 in settlement of his claim for expenditure incurred in advertising Ceylon tea in Sweden under the provisional credit of 1899.

CEYLON TEA IN GERMANY.

Read letter from Messrs. Eck Brothers acknowledging receipt of cheque for Rs. 421·89 in settlement of claim stated for expenditure incurred in advertising Ceylon tea in Germany under the provisional credit of 1899. Intimated that a cheque for Rs. 3,320·49 had been forwarded to Mr. J. P. Ryan in connection with his expenses on his mission to Berlin.

CEYLON TEA IN MANILA.

Read letter to Mr. J. H. Stephens, Manila.

CEYLON TEA IN AUSTRIA.

Read letter from Mr. G. A Marinitsch, Vienna, acknowledging receipt of copies of Mr. Ferguson's pamphlet on Pure Ceylon Tea and asking for a few more copies, if available.

"GOLDEN TIPS."

Read letter from Mr. H W. Cave sending a copy of his book entitled "Golden Tips." Resolved:—"That a copy of the book be sent to Mr. Wm. Mackenzie and Mr. J. H. Renton with a request to give the Committee their views as to the value of the book as an advertisement of Ceylon tea; (2) that the thanks of the Committee be conveyed to Mr. Cave for the presentation copy and for his offer of copies on special terms."

HE WANTED NO SUCH PATIENT.

"There now," said the doctor, "you go on taking this medicine till it is all used up. Then come back and let me have a look at you."

This was in December, 1896. The woman put the package in her pocket and went home. When the stuff had been consumed, as directed, she called again.

The specialist looked at her and made up his mind in a minute, "I will have nothing to do with you as a patient," he said. "It's no use. You are past help; you are worse than when you were here before; I can see the bones through your skin now. What I tell is the truth, and you will be wise not to deceive yourself with hopes that can only break down under you."

Rather hard, ugly talk; but from a commonsense point of view the doctor was right. For four years Mrs. Agnes Briggs, of Norwood Terrace, Paddington, near Brisbane, Queensland, had suffered what she calls "dreadful torment and pain" from dysentery. She tried everything advertised or recommended to cure it, without success.

She was an out-patient at the hospital for more than a twelvemonth, and an in-patient for two months. The medical men interested themselves in the case; they tried right and left for the true treatment, but were not able to lay hands on it. This seemed strange to her, as she did not realise how persistent, and frequently fatal, an ailment dysentery is. She had never read the reports of Army Surgeons on that point, and possibly you have not.

"During my illness," says Mrs. Briggs, "I ate but little; food did not nourish me, and I grew worse and worse, and thinner and thinner. For three years I did a trifle of work, and then I had to give in."

(At this crisis she consulted the specialist, whose frank opinion has been quoted.)

"From January to October, 1897," continues the lady, "I could do nothing whatever. Even my children were cared for by friends. My mother did all the housework, and, on seeing me, she often burst out crying. I was so emaciated and weak, she was sure I must die soon.

"And now comes my extraordinary cure—a cure so wonderful and unexpected that my friends insisted on calling it a miracle.

"A lady urged me to drop all other medicines and use Mother Seigel's Syrup only. Before finishing the first bottle I was better, and after taking it three months I was in splendid health, and have been ever since. People can hardly believe that the strong, healthy woman they see now is identical with the skeleton they knew and pitied two years ago."

Mrs. Agnes Briggs, Sept. 21st, 1899.

Mrs. Annie Mathams, of Prince Street, Latrobe Terrace, Paddington, Brisbane, Queensland, who commended the Syrup to Mrs. Briggs, vouches, in writing, to the truth of the above statement.

MARKET REPORT.

[*Per Mail advices of 28th December* 1900.]

COFFEE.

The London Commercial Record says:—The public market being closed very little of interest is passing on the spot. Brazil futures immediately after our last advanced ½d to 9d per cwt. on good American advices, but the improvement was short lived, the market going back to almost its previous level on lower cables from the Continent. Yesterday a further depreciation of 4½d per cwt. was submitted to, March Santos selling at 31s 4½d, and May at 31s 7½d per cwt.; closing rates are:—

London ...	Santos ...	March delivery	... 31s 4½d.
New York	... No. 7 Rio...	,,	... 5·65 cents.
Hamburg...	... Santos ...	,,	... 31 pf.
Havre ...	... Santos ...	,,	... 37¾ francs.

Imports, Deliveries and Stock of Coffee in London, are as follows:—

	Stock.		Imports.	
	1900.	1899.	1900.	1899.
Tons ..	14,790	14,704	35,176	45,994

	Home Consumption.		Export.	
	1900.	1899.	1900.	1899.
Tons ...	16,473	16,621	18,560	29,048

	Tons.
The preceding figures exhibit—	
In the Imports a decrease this year of ...	10,818
Home Consumption a decrease of	148
Export a decrease of	10,488
Stock a decrease of	86

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	1,630,000	2,084,000	1,755,000	2,706,000
Santos ...	5,323,000	4,558,000	3,738,000	4,392,000
Total...	6,953,000	6,642,000	5,493,000	7,098,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange $10\frac{1}{32}$d, previous day $9\frac{7}{8}$d.

HAVRE, *Dec.* 27.—Good average Santos December opened quiet at $37\frac{3}{4}$f. and closed barely steady at $37\frac{1}{4}$f., March opened at 38f. and closed at $37\frac{3}{4}$f., May opened at $38\frac{1}{4}$f. and closed at 38f., September opened at 39f. and closed at $38\frac{3}{4}$f.

HAMBURG, *Dec.* 27.—Good average Santos December opened quiet at $30\frac{1}{4}$pf. and closed dull at 30pf., March opened at $31\frac{1}{4}$pf. and closed at 31pf., May opened at $31\frac{1}{2}$pf. and closed at $31\frac{1}{2}$pf., September opened at 32pf. and closed at 32pf.

NEW YORK, *Dec.* 27.—Closing prices of No. 7 Rio were as follow:—

	Dec.	Jan.	Feb.	Mar.	April.
December 27...	5·45	5·45	5·55	5·65	5·70
December 26...	5·50	5·50	5·60	5·70	5·75

TEA.

The market remains closed, and only the smallest of contracts have passed during the week.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated December 28th, 1900, says :—

Of the many lean years through which the Tea industry has recently passed, 1900 has proved the worst.

Heavy crops both in India and Ceylon resulted from the planting of considerable areas some few years ago, when Exchange was much below its present figure. Production has, in consequence, increased more rapidly than consumption, and occasioned a lower range of price. Poor Teas have been specially depressed, owing partially to the large proportion of this grade, and in a great measure to the additional duty placed upon Tea in March last, the 2d per lb. then added to the tax having proved a severe burden upon all low priced Tea.

Happily, the remarkable value obtainable has had the effect of attracting foreign markets to our Teas and occasioning a welcome expansion in this increasing trade, which absorbed about 82 million pounds of British grown Tea, against 69 millions in 1899.

PRODUCTION.—The total crop for export from India (*including Travancore*) is expected to reach about:—

	Lbs.		Lbs.	
	183,000,000	against ...	175,000,000	last year.
From Ceylon ...	142,000,000	,, ...	130,000,000	,,
Total ...	325,000,000	Total ...	305,000,000	

while the Consumption at home and abroad was about:—

Indian ...	170,000,000	against ...	164,000,000	last year.
Ceylon ...	140,000,000	,, ...	124,000,000	,,
Total ...	310,000,000	Total ...	288,000,000	
Surplus production	15,000,000	against ...	17,000,000	

Hence there is again an accumulation of stock on the year's working.

INCREASE IN DUTY.—The year 1900 will be memorable for the rise in the duty from 4d to 6d per lb. It is hard that an Industry which has already been heavily weighted by a rise in Exchange should have this additional burden placed upon it, especially when beverages like Cocoa and Coffee are only taxed to a slight extent. The effect has been very marked during the last few months in the fall which has taken place in the value of low grade Teas.

HOME CONSUMPTION does not appear to have increased during the year, but it is impossible to ascertain accurately from figures, owing to their disorganisation by very large duty payments just before the declaration of the Budget.

NEW MARKETS.—New markets have taken about lbs. 13,000,000 more than last year; a very satisfactory increase. This is doubtless in part due to recent low prices. The greatest expansion has been in Russia, due partly to the above mentioned cause, and probably also to the troubles in China. The Tea trade in the United States of America has lately been depressed, and consequently progress has not been as rapid as might have been wished. Australia continues to be the largest external consumer of our Teas.

WAREHOUSE CHARGES.—Some slight relief has been afforded the industry by a reduction in the Warehouse Charges, together with a slight modification in the system of Customs weighting.

INDIAN.—The quality of the crop has not been up to the average, except in parts of Assam and Darjeeling. Really fine Teas commanded high prices on account of their scarcity.

The regulation of sales was discontinued. Had it not been for the delay in bringing Teas to the warehouse, occasioned by the Lightermen's strike, auctions in October-November would probably have been sufficiently heavy to still further depress the market

The average price obtained for the Teas sold on garden account in London during the year was 7·74d per lb., against 8·75d per lb. in 1899. From the 1st June to the end of December it was 7·60d, against 8·49d per lb.

CEYLON.—The crop has been a heavy one, probably occasioned by the unusually favourable weather for flushing and the extensive use of manure. The quality from some estates has been very good; on the other hand there was a larger proportion of poor liquoring Teas. The average price for Teas sold in London on garden account was 7·20d, against 7·96d in 1899.

GREEN TEA.—In order to encourage the manufacture of Green Tea suitable for the American market, a bounty for its manufacture is being offered by India and Ceylon. Much relief might thus be afforded to the Tea industry, especially as for every pound of Green Tea manufactured, the production of Black Tea will be reduced by a similar amount.

COARSE PLUCKING.—If the planters could be induced to avoid coarse plucking, it would probably be much to their advantage, and result in higher quotations for the smaller crop.

JAVA.—The quality of many of these Teas is now very suitable for the London market, especially where they have been grown from Indian seed. 61,662 packages were sold in London, against 56,126 packages in 1899.

EXCHANGE.—Averaged $1/4\frac{13}{32}$ during 1900, against $1/4\frac{15}{32}$ in 1899.

COCOA.

A dull tone prevails, and business is practically *nil.*

PEPPER.

BLACK is very firm and slightly dearer, with moderate sales at $6\frac{15}{32}$d to $6\frac{1}{2}$d per lb. for Singapore March-May shipment, whilst buyers have paid $6\frac{1}{4}$d for spot "fair"

WHITE is quiet but steady. Singapore on the spot is worth $9\frac{1}{8}$d and for January-March shipment $9\frac{1}{4}$d, while Penang is quoted at $8\frac{7}{16}$d spot and $8\frac{5}{16}$d per lb. February-April (s.).

CINCHONA.

The auctions to be held at Amsterdam on January 10, 1901, will consist of 6,105 bales and 185 cases (weighing 551,266 kilos.) Java cinchona, consisting of 414,241 kilos. Ledgeriana, 85,008 kilos. Succirubra, 52,017 kilos. Hybrid.

QUININE.

The second-hand market closed dull on Friday at 1s $1\frac{1}{8}$d per oz., 1s $1\frac{3}{4}$d for March, and 1s 2d for May, and since then there has been no change.

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

VOL. VI.] MADRAS, SATURDAY, JANUARY 26, 1901. [No. 4.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 1st proximo. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Coorg.

POLLI BETTA, *22nd Jany.—Weather.*—This is, without exception, the most extraordinary season witnessed. Clouds are still hovering about, and the East wind is still conspicuously absent. There has been no bright, clear, cold weather and chapped hands, etc. It seems due to the above facts that the crop has been ripening-up so satisfactorily. The rain, already reported, has brought out a sprinkling of blossom in these parts; but out West of this (especially beyond the Kauveri river at Sidapur), the display is reported as being heavy comparatively. There has been some improvement in general health.

TEA—SUPPLY AND DEMAND.

THE fall in the value of Tea has caused much tribulation among planters and has induced them, Ceylon men in particular, to write lengthy epistles to the press, expressing opinions as to causes and remedies. Among these there is much that is of a purely ephemeral character, but some suggestions have been considered worthy of discussion. For our own part, we consider that Ceylon is on the verge of a precipice. We cannot say that it contemplates deserting a wise in favour of an unwise course, but it certainly has under consideration a policy, the acceptance of which would involve some neglect of a system that has worked fairly well in the past. The cry of over-production has been raised, and one result is that Ceylon tea-planters are discussing how the production of Tea is to be prevented from increasing, if indeed it cannot be actually reduced. Now, in the first place, a reduction in Ceylon would be useless if accompanied by a corresponding reduction in India. We might even go further and assert that the over-production problem could only be so dealt with as to bring about a permanent rise of values if uniformity of action were agreed upon by the chief producers, *viz.*, China, India, Ceylon and Japan. If any one of these holds away from the general agreement and sets itself to extend the cultivation of Tea, it may upset the policy of the rest, and hold prices down, or even bring about a further decline in values. Certainly, Ceylon working jointly with India—which is, we believe, what most of the Ceylon suggestions have in view—might work more effectively than Ceylon alone. Yet, despite all the endeavours that have been made to train the public taste, and to push British-grown teas into favour, we believe that the chief factor in influencing the consumer (by which we mean the average consumer) is cheapness of price, so long as it relates to some commodity not quite unworthy of being designated Tea. If this be the case, a reduction of output in India and China, if accompanied (as it might well be) by a corresponding increase in the output of China and Japan, would have no material strengthening effect upon the prices of even Indian and Ceylon descriptions alone.

Our contemporary, the *Times of Ceylon*, has made special mention of the following suggestions:—

(1) That 10 per cent. of the acreage in bearing be rested for two years. (Mr. Rosling's proposal).

(2) That Government be requested to enforce this by legislation. (Mr. Rutherford's proposal).

(3) That steps be taken to limit the output of each estate to, say, the average yield of the last three years.

[*1, 2, and 3 conditional on 80 per cent. supporting, and on India agreeing to take the same course.*]

(4) That Government be requested to sell no more land for opening up in tea.

(5) That Government be requested to prohibit any lands privately owned from being planted up in tea, where such work has not actually been commenced, this restriction, and any others, to be brought up in review three years hence. The first three, it will be seen, refer to joint action on the part of India and Ceylon. Our contemporary remarks:—"The equity of proposition 3 grows upon us. The chief responsibility for the state of affairs lies with those who have been greatly increasing their output per acre—those who of late years have gone in for wholesale extensions are partly responsible, but their new tea has been, and is, coming on

gradually—by 'high cultivation;' and such would have to forego more than those who have continued a normal output. It is the only proposal which we think would be tolerable, if it were by legislation." To us the suggestion appears not only absurd, but unfair. It would impose restraints upon improvements of systems of cultivation. At present, a particular planter may be able to produce tea of an equal quality to that of his competitors at a lower figure. By dint of mere scientific manuring, or by the favour of atmospheric conditions, or with the help of good fortune or "luck," he may have an advantage over his rivals, or the majority of them. Is it fair to ask him to relinquish this? We think not; and we hold also that there are insuperable objections to all the above schemes, so long as China and Japan cannot be induced to co-operate in him. The possibility of this is too remote to need discussion.

To our minds, neither planters nor Governments have a right to impose restrictions upon the output of Tea. Every planter is entitled to produce as much as he can at the lowest possible cost; any interference with this right would be an unjustifiable interference with the liberty of the subject, and even though planters who objected to it might be standing in their own light, their equitable and moral right to do so should not be withdrawn from them. The more natural and more proper remedy for the present condition of affairs lies in the development of demand or consumption. True, this may involve an increase of the very danger—over-production—that has been found to have such serious effects; but this cannot be helped. The Tea industry, like others, must adapt itself to the laws of competition. The "survival of the fittest," is a doctrine that holds good in the growth of agricultural products as well as in the growth of nations. Whether India decides to canvass jointly with Ceylon—whether South India elects to stand in with Northern India, or to push ahead separately—these are points of detail. The broad principle we lay down is that, while Government and planters, as a body, may help as much as they please to increase the consumption of tea, they have absolutely no justification for attempts to inteffere with the extent or the cost of its production on estates already opened. It seems to us that Indian planters cannot well urge upon Government what amounts to the fixing of the maximum production and aims at fixing the minimum cost of production of tea, after remonstrating, as they did, against the fixing of the sterling value of the rupee. They cannot blow hot in regard to one class of interference with their rights and cold as to another; or, if they do, they deprive their representations of force. What is required for the resuscitation of the Tea industry in India and Ceylon is (1) earnest efforts to increase the consumption of tea generally, and of Indian and Ceylon teas in particular; and (2) steadfast representations against the enormous impost that is, in effect, levied upon the industry by the maintenance of the rupee at an artificially inflated gold value.

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nicholson's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf people, unable to procure the Ear Drums, may have them free.

Address—No. 989 D, THE NICHOLSON INSTITUTE,
Longcott, Gunnersbury,
London.

[w. 26-5-00—26-5-1901.]

CINCHONA IN MYSORE.

The reader will probably smile at this headline, thinking that he is to see something after the style of the chapter on Snakes in Iceland, which read "There are no Snakes in Iceland." We have no such plagiarism in view, however, for there actually *is* cinchona in Mysore. That it is apparently not worth removing the bark from is quite another matter. Official statistics show the following figures for 1898-99 :—

		No. of Plants.		
		Mature.	Immature.	lbs. of bark.
Kadur	C. Succirubra ...	49,160	43,200	25
	,, var. Condaminia ...	9,840	4,500	...
Mysore	C. Succirubra ...	1,749	75	...
	,, Calisaya	...	...	..
	,, var. Condaminia ...	502	19	..
Hassan	... ,, ,, ,, ...	1,940	120	...
		63,191	47,914	

In 1894-95 there were 350 acres under cinchona in Mysore, in 1898-99 only 279; in 1894-95 there were 207,783 cinchona plants in permanent plantations in Mysore, only 111,105 in 1898-99; the quantity of bark collected had decreased from 160 lbs. in the former year to 25 lbs. in the latter. Can any Mysore planter oblige us with a historiette of the Rise (?) and Fall of the Cinchona Industry in the Mysore State? The above figures suggest that there is something to be told that is worth the telling: 279 acres, 111,105 plants and yield—25 lbs.!

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

The British Tea Duty.

The Indian Tea Association (Calcutta) has addressed the Secretary to the Government of India, Department of Revenue and Agriculture, as follows, under date 9th instant :—

I am directed by the General Committee of the Indian Tea Association to address you on the subject of the recent enhancement of the British import duty upon tea, with a view to the Government of India urging the Chancellor of the Exchequer, through the Secretary of State, to reduce the duty to its former level of 4d. per pound of tea imported.

2. The general question of the relation of the import duty to the prosperity of the Indian tea industry has, during the last two or three years, received the serious consideration of the General Committee. That in ordinary circumstances the consumption of a commodity upon which a duty is levied tends to decline with the enhancement of the duty, and to advance with its reduction, is an economic law which applies with equal force to tea as to any other commodity. The whole history of the tea duty strikingly exemplifies the truth of the latter part of this proposition. Between 1815 and 1820 the duty was practically 4s. per pound—the highest rate which obtained during the nineteenth century. The average annual consumption per head of the population was 1 lb. 4 oz.—the lowest level reached during the century. From 1820 to 1864 the duty was gradually reduced from 4s. to 1s. 4d.; and during that period consumption increased from 1 lb. 4 oz. to 2 lbs. 8 oz. or 100 per cent. In 1865 the duty was further lowered to 6d., at which rate it remained until the 1st May 1890, when it was brought down to 4d. per pound.

Consumption has nearly doubled in the thirty-five years which have elapsed since 1865; for in that year it stood at 3 lbs. per head of the population, while it is now almost 6 lbs. per head. It is unfortunately true that since 1881 the price of tea in bond has been steadily declining; and the Committee quite recognise that that decline has materially aided the extension of consumption, because, like a reduction in the duty, it has lowered the price paid by the consumer. But even so, it is, they hold, indisputable that the reductions of duty which have been effected since the time when it stood at 4s. per pound, constitute one of the main causes of the great increase in consumption in the United Kingdom during the last half of the century. They hold further that any enhancement of the duty must have, and that the recent enchancement has had, the opposite effect of diminishing, or at least of checking this increase in, consumption. And it is because this diminution, or check, entails most serious consequences upon the Indian industry in its present state that they regard the enhancement with the gravest alarm.

3. It will be inferred from the foregoing that the Committee—looking at the matter from the point of view of the Indian tea producer—consider the import duty, at whatever rate it may be fixed, as a hindrance to the extension of the consumption of tea. Its adverse effect upon consumption is, they contend, in proportion to its rate; and they believe its gradual reduction, and ultimate abolition, would be of the greatest possible advantage to the Indian industry. In thus stating their views the Committee desire it to be understood that they are not overlooking the importance of indirect taxation as a means of raising revenue. Nor has it escaped them that the exceptional circumstances of the past year have rendered increased taxation imperative. The point they desire to urge is that, while as the Chancellor of the Exchequer observed in his Budget Statement, the population at large have not much ground of complaint against the increase, the burden of it really falls upon the producers of tea. It is true that the consumer pays a higher price by reason of the enhancement, but it is no less true that the producer, from the same cause, receives a lower price for his product. This must be, and is so, because the rise in the price to the consumer tends to diminish the demand, while there is no force at work tending to reduce the supply.

4. This brings the Committee to the chief reason which has induced them to seek the intervention of the Government of India in behalf of Indian tea growers. Not only is there no force working to reduce the supply of Indian tea to the markets of the United Kingdom; but, on the contrary, the quantity sent annually to London is increasing rapidly. The Committee have ventured, on more than one occasion recently, to bring the facts regarding the present position of the industry to the notice of Government. But the crisis through which tea, as a commercial product, is passing is so serious, and is moreover so intimately connected with the subject of this letter, that they feel no apology is necessary for again referring to it. They have already stated that the price of tea in bond has been declining—it might almost be said rapidly declining—since 1881. At that time the average price of Indian tea in London was about 1s. 5d. per pound; ten years afterwards it had fallen to 10½d.; while at the present time it is about 7d.; and low grade teas do not command more than 3½d., or even 3d. per pound. The duty in 1881 was 6d. per pound. It represented, therefore, a charge of rather more than 33⅓ per cent. on the average price in bond; while now it is equivalent to nearly 100 per cent. on the average price, and 150 to 200 per cent. on the price of common teas—an overwhelming addition to the cost of financing the trade. It will, the Committee think, be readily conceded that in asking for the reduction of such charges upon prices which are themselves—in the case of much medium and low quality tea,—actually below the cost of production, and which consequently must, if continued for any length of time, mean ruin to a number of tea concerns, they are making only a most reasonable and moderate demand.

5. In this connection the Committee would point out that from the 61 Tea-growing Companies which appear in the Calcutta Share Lists (Capital Rs.2,02,42,850) the average rate of dividend for 1899 was 3·92 per cent. Eliminating six companies which have been largely developed out of Revenue (Rs.17,00,000 Capital—dividend Rs.2,65,000 or 15·6 per cent.), so that the area planted is disproportionate to the Capital Account, there remain 55 companies with an aggregate Capital of Rs.1,85,42,850 on which the payments to Shareholders averaged 2·81 per cent. This unfavourable result will be seriously aggravated in the current season the price of tea both in the Calcutta and London markets having declined to the lowest point on record. The figures are :—

			Packages	Average per lb.
Calcutta Sales	1st May to 15th December,	1899	484,531	6 as. 0 p.
Ditto	Ditto ditto	1900	475,154	5 as. 6 p.
London Sales (on Growers' account).	1st June to 30th November,	1899	617 628	8·55d.
Ditto	Ditto ditto	1900	611,798	7·72d.

But the present depression is worse than these figures indicate, the current quotations for Pekoes and Pekoe Souchongs—which represent about 70 per cent. of the total production—being from 1¼d. to 2¼d. per lb. under the rates ruling a year ago, equal to a decline of 22 to 34 per cent. The average price of all Indian tea sold in Calcutta for the week ending, 15th December, 1900, was 4 annas 10 pies per lb., against 5 annas 10 pies in the same week in 1899; the corresponding figures of the London sales (week ending 19th December) being 6¾d. and 8⅛d.

6. Intimately associated with the question of low prices, is the advance, since the Mints were closed in 1893, in the sterling value of the rupee. It has just been stated that the supply of Indian tea to the London market is annually increasing. Production during the past five years has increased by as much as thirty per cent.; and this has been mainly due to large extensions of the cultivated area which were planned and undertaken when the rate of exchange with Europe was at a low level, and in the expectation that it would so remain. Had it so remained, a large number of tea concerns, which are not at present remunerative undertakings, would be yielding a return upon the capital invested in them. But the currency policy of the Government—although it may have proved of benefit to the country generally—has made it impossible for such concerns to pay dividends, without higher prices in London. To secure the latter, the diversion of Indian tea in increasing quantities to foreign countries is essential. The Committee have already pointed* out to Government the difficulties which they have had to face in connection with the raising of funds for promoting the sale of Indian tea outside Great Britain. They have also suggested the adoption of measures by which more ample funds can be

* (Letter No. 845-O., of 5th December, to the Government of Bengal—copy attached.)

provided; but even should those measures be successfully put into force, the difficulty of restoring prices in London to a remunerative level will be greatly enhanced if the present rate of duty be not reduced.

7. There is one further point to which the Committee respectfully venture to draw the attention of the Government of India. While, to a certain extent, they agree with the Chancellor of the Exchequer in thinking that that "very large class of the population who do not pay income-tax, who do not consume alcohol, and do not smoke" should contribute towards the expenses of the South African war, they do not consider it to be equitable that tea alone of the commodities used by that class of the people of England, should be singled out for an increase of duty. There are other commodities which appear to the Committee to be very lightly taxed when compared with tea. The duty on cocoa, for example, in whatever form imported, is not higher than 2½d. per pound; and on raw cocoa it does not exceed one penny—or one-sixth of the tea impost. The cocoa duty has remained stationary for many years, while the consumption of cocoa has rapidly increased. The quantity of raw cocoa entered for home consumption in 1879 was 10,111,526 lbs., and in 1898 it had risen to 32,087,084 lbs.—an increase of more than 200 per cent. in twenty years. The consumption of tea, on the other hand, has not increased by as much as fifty per cent. in the same period, the figures being about 160½ millions of lbs. in 1879, and 235½ millions in 1898. Although, no doubt, some of the raw imports are manufactured into chocolate, it is clear that, with such a rate of increase, cocoa is rapidly becoming, if it is not already, an important competitor with tea. And while the Committee do not suggest that the duty upon it should be raised to the level of that now charged upon tea, they certainly are most distinctly of opinion—as they believe are all interested in the tea industry—that the present great disparity should be removed, preferably by a substantial reduction of the tea duty, and by a moderate addition to that upon cocoa. In venturing to make such a suggestion the Committee do not disguise from themselves the fact that, if it were adopted, the amount—£1,800,000—which, it is estimated, will be raised annually by adding 2d. to the tea duty, might not be forthcoming. But the inequality is so patent that they think the attention of Sir Michael Hicks Beach should be very strongly drawn to it.

8. The Committee have now stated why they consider it to be imperatively necessary, if the cultivation and manufacture of tea are to continue to form one of the leading Indian industries, that everything should be done to extend, rather than to restrict, consumption in the United Kingdom and elsewhere. They have further shown why, in their opinion, the recent enhancement of the import duty will have the effect of restricting consumption in the United Kingdom; and they now venture to ask H. E. the Viceroy to press upon Her Majesty's Ministers the urgent necessity for the reduction of the duty to at least its former level. They trust His Excellency will see his way to take such action, and will lend to the movement all the weight of his influence and support.

9. In view of the fact that the new Budget Statement will be presented to the House of Commons in the course of a few months prompt measures are essential. The Committee, therefore, venture respectfully to suggest that, in the event of His Excellency being disposed to take action in the direction they have indicated, a telegram should be sent, as soon as possible, to the Home Government protesting against the enhancement, and pressing for a reduction of the duty to its former level.

[ACCOMPANIMENT.]

From the Secretary, Indian Tea Association, to the Secretary, Government of Bengal, Revenue Department.

CALCUTTA, *5th December*, 1900.

SIR,

I am directed by the General Committee of the Indian Tea Association to ask you to be good enough to draw the attention of H. H. the Leiutenant-Governor of Bengal to the necessity which exists for the imposition, upon Indian tea, of an export duty, similar to that which has been levied in Ceylon since 1892. That is to say, a duty the proceeds of which would be devoted to the work of pushing the sale of Indian tea in foreign markets.

2. Before referring to the reasons which, in their opinion, necessitate such a tax, the Committee propose briefly to state the origin, nature, and advantages of the Ceylon impost. The latter was instituted in 1892, by an Ordinance which provided for the collection by the Customs Officers of a duty of 10 cents per 100 lbs. of tea exported. It was primarily designed to provide the Ceylon Planters with funds for the adequate representation of their teas at the Chicago Exhibition of 1893. For that purpose it proved successful; so successful, in fact, that in 1894 it was converted by a further enactment into a permanent tax. The rate was raised from 10 cents to 20 cents per 100 lbs.; and it was decided that the proceeds should be "applied towards increasing the consumption of Ceylon tea in foreign lands."

Ordinance No. 15 of 1892. An ordinance to levy an export duty on tea.

Ordinance No. 4 of 1894. An ordinance to provide for the continuance of the export duty on tea levied under Ordinance No. 15 of 1892.

3. The amount raised by the Ceylon tax is, on the average but little short of 2½ lakhs of rupees yearly. In India—as is already known to H. H. the Lieutenant-Governor—a voluntary levy is in force. It was instituted in 1893, and has since been continued annually. But the subscribers to it do not represent more than 75 per cent. of the industry; and the some collected is somewhat less than half that raised by means of the Ceylon tax. The Indian industry, therefore, has only been able to make about half the progress that Ceylon has made in the direction of opening foreign markets. To North America alone has the Indian industry been able to devote serious attention. Ceylon, on the other hand, has made sustained and liberally supported efforts, not in America only, but in France, Germany, Russia, Austria-Hungary, Belgium, Holland, Sweden, Norway, South Africa, Australia and elsewhere. The net result—to take last year's figures—is that while Ceylon, with a production of 150 millions of pounds, sent about 37 millions or 29 per cent., to foreign countries, India, with the larger production of 175 millions, sent only about 32 millions, or 18 per cent., to markets other than those of Great Britain and Ireland.

4. Owing to the great increase in the production of Indian tea during recent years—the increase between 1895 and 1899 was 30 per cent.—the supply to the markets of the United Kingdom has been continuously in excess of the demand. The growth of the foreign demand has been altogether incommensurate with the increase in the quantity of tea yearly produced in excess of the needs of the United Kingdom; and millions of pounds not required in London have been able to find no other market during each of the last few years. The result has been that medium-quality tea, which forms the great bulk of the Indian product, has been continuously falling in price until at the present time much of it is being sold below the cost of production. In fact, prices generally have now fallen to so low a level that if tea growing is to continue to be a remunerative undertaking, comprehensive measures must be promptly taken to improve them.

5. It may be said that if Indian growers had taken the precaution to restrict their production, they would have provided themselves with a simple and efficient remedy for this evil. But in that connection it must not be forgotten that the recent rapid advance in production is mainly due to the large extensions, both in India and Ceylon, which were planned and undertaken when the rate of exchange with Europe was at a low level. The closing of the Indian Mints, and the subsequent rise in exchange to 1*s.* 4*d.*, had an adverse effect upon the tea industry; and many tea estates, which, with a low rate of exchange, would have been remunerative

undertakings, are not now dividend-earning. Moreover, any general diminution of Indian production would be of only doubtful advantage to growers, so long as the present rapid rate of increase is maintained by Ceylon. The result of any such diminution would only mean a transference of part of the trade to Ceylon growers, without any corresponding upward movement in prices.

6. The diminution of production in India, therefore, even if it were possible would not be likely to have a favourable effect upon prices The only really effective remedy for the present state of the industry is the institution of measures the operation of which will ensure the diversion of increasing quantities of tea to foreign countries. In other words, to follow the lead of Ceylon, and to put into force a scheme by which sufficient funds can be raised to extend the efforts that have been made in America, during the past seven years, to other countries where there is a likelihood of large quantities of tea being consumed. Past experience in India has shown that it is not possible, by means of a voluntary levy, to collect enough money to carry on work upon an extensive scale; while, on the other hand, the case of Ceylon proves conclusively that it is not at all a difficult matter to raise ample funds by an export tax. Such a tax, had it been in force in India last year at a rate of only half a pie per pound of tea exported, would have yielded about 4½ lakhs of rupees, or four times the amount of the voluntary collection. The Committee have every reason to believe that its imposition by Government would be welcomed by a very large majority of tea proprietors. To secure unanimity among proprietors without the intervention of Government has been found to be impossible; not, as the Committee believe, because of any antagonism to the object to be attained, but because no organisation sufficiently comprehensive to ensure subscriptions being paid by all proprietors can be brought into existence without State aid.

7. The Committee, therefore, now desire to ask whether, in the opinion of His Honour Sir John Woodburn, the Government of India might be disposed to consider a proposal to institute a tax, if a large majority of tea proprietors expressed themselves in favour of it. It is true that, in view of the number of ports in India, the collection of the impost would present greater difficulties than in Ceylon. But it seems to the Committee that if instructions were issued to every Collector of Sea Customs in India, similar to those governing the collection of other export duties, those difficulties would be readily overcome. In Ceylon no charge for collection is made by the Government, the whole of the proceeds of the tax being handed over to a joint Committee—the "Thirty" Committee—of the Ceylon Chamber of the Commerce, and the Ceylon Planters' Association. The Government, however, retain the right to see that the funds are not distributed otherwise than in a manner likely to be beneficial to the industry.

8. In conclusion, the Committee would beg to be allowed to press the great importance of the proposal upon the attention of His Honor; and they would further venture to express a hope that he will see his way to submit it for the consideration H. E. the Viceroy, and in so doing to lend to it the weight of his influence and support. It is a proposal which affects the tea industry only; its adoption can have no possible adverse influence upon any other trade, or industry, or upon any community. The tax will be paid by tea-growers, and its proceeds will be expended by them; and the assistance of the State is only sought because it is not possible to devise any other plan by which funds can be collected from the whole industry.

9. Copies of the two Ceylon Ordinances, referred to above, are attached for information.

I have the honor to be,
Sir,
Your most obedient servant,
W. PARSONS,
Secretary.

ORDINANCE ENACTED BY THE GOVERNOR OF CEYLON WITH THE ADVICE AND CONSENT OF THE LEGISLATIVE COUNCIL THEREOF.

No. 15—1892.

An Ordinance to levy on Export Duty on Tea.

A. E. HAVELOCK.

Preamble. Whereas, in order to provide towards the cost of the adequate representation of this Colony at the World's Colombian Exposition at Chicago in 1893, it is expedient to levy a duty on all tea of the produce of this Island exported therefrom: Be it therefore enacted by the Governor of Ceylon, by and with the advice and consent of the Legislative Council thereof, as follows:—

Export duty to be levied of 10 cents per 100 lbs. of tea.

1. (1) There shall be raised, levied, and paid upon all tea of the produce of this Island exported beyond seas a duty of ten cents per one hundred pounds, and such duty shall be independent of, and in addition to, any duty which may be imposed under the provisions of "The Medical Wants Ordinance, 1880, Amendment Ordinance, 1882."

(2). The duty under this Ordinance shall be levied at the Customs on the entry for exportation of tea, and shall be payable to, and shall be collected and received by, the proper officers of the Customs Department, and the payment thereof shall be enforced under the provisions of the Ordinance No. 17 of 1869, intituled "An Ordinance for the general regulation of Customs in the Island of Ceylon."

Commencement and duration.

2. This Ordinance shall come into operation on the first day of January, one thousand eight hundred and ninety-three, and shall cease to be in force from and after such time as the Governor in Executive Council shall appoint by Proclamation published in the *Government Gazette.*

Passed in Council the Twenty-sixth day of October, One thousand Eight hundred and Ninety.

H. L. CRAWFORD,
Clerk to the Council.

Assented to by His Excellency the Governor. the Second day of November, One thousand Eight hundred and Ninety-two.

E. NOEL WALKER,
Colonial Secretary

ORDINANCE ENACTED BY THE GOVERNOR OF CEYLON WITH THE ADVICE AND CONSENT OF THE LEGISLATIVE COUNCIL THEREOF.

No. 4 OF 1894.

An Ordinance to provide for the continuance of the Export Duty on Tea levied under Ordinance No. 15 of 1892.

A. E. HAVELOCK.

Preamble. Whereas it is expedient to provide for the continuance of the export duty on tea levied under the Ordinance No. 15 of 1892, after the expenses of the World's Columbian Exposition of Chicago shall have been paid and discharged, in order that the proceeds of such duty may be devoted to increasing the consumption of Ceylon tea in foreign lands: Be it therefore enacted by the Governor of Ceylon, by and with the advice and consent of the Legislative Council thereof, as follows:—

Commencement of levy of export duty, and rate of duty.

1. So soon after the Ordinance No. 15 of 1892, intituled "An Ordinance to levy an Export Duty on Tea," shall have ceased to be in force, there shall be raised, levied, and paid upon all tea of the produce of this Island exported beyond seas a duty not exceeding 20 cents per one hundred pounds, the rate leviable to be determined by the Governor in Executive Council from time to time, upon consideration of such recommendations as may be made by the Joint Committee appointed by the Planters' Association of Ceylon on the 15th of June, 1894, and by the Chamber of Commerce on the 18th June, 1894, or the successors in office of such Committee, to administer the funds raised under this Ordinance, and such duty shall be independent of, and in addition to, any duty which may be imposed under the provisions of "The Medical Wants Ordinance, 1880, Amendment Ordinance, 1882."

Levy of export duty to be enforced under Ordinance No. 17 of 1869.

2. The duty under this Ordinance shall be levied at the Customs on the entry for exportation of tea, and shall be payable to, and shall be collected and received by, the proper officers of the Customs Department, and the payment thereof shall be enforced under the provisions of the Ordinance No. 17 of 1869, intituled "An Ordinance for the general regulation of Customs in the Island of Ceylon."

Proceeds of duty how to be applied.

3. The proceeds of the levy hereby enacted shall be applied towards increasing the consumption of Ceylon tea in foreign lands in such manner as may from time to time be desired and determined by the Joint Committee appointed for the purpose by the Planters' Association of Ceylon on the 15th of June, 1894, and by the Ceylon Chamber of Commerce on the 18th of June, 1894, or the successors in office of such Committee, provided that

such manner of application of the proceeds of the said levy be subject to the approval of the Governor in Executive Council.

4. This Ordinance shall cease to be in force from and after such time as the Governor in Executive Council shall appoint by Proclamation to be published in the *Government Gazette*.

Duration of the Ordinance.

Passed in Council the Twenty-ninth day of August, One thousand Eight hundred and Ninety-four.

H. WHITE,
Acting Clerk to the Council.

Assented to by His Excellency the Governor, the Twenty-ninth day of August, One thousand Eight hundred and Ninety-four.

E. NOEL WALKER,
Colonial Secretary.

* * *

Bounty on Green Teas.

The information contained in the following correspondence is of general interest to tea planters in Southern India :—

From the Secretary, Indian Tea Association (Calcutta), to the Secretary, U. P. A. S. I.

CALCUTTA, 14*th January*, 1901.

Copy of letter, No. 31-O, of 14th January, from the General Committee to Mr. Drummond Deane, Stagbrook, Peermaad, Travancore.

"With reference to previous correspondence ending with my No. 633-O, of 22nd September, 1900, I am directed to enclose for your information a copy of the marginally noted letter upon the subject of this bounty.

Yours faithfully,
(Signed.) H. M. HAYWOOD,
Assistant Secretary.

[INCLOSURE.]

No. 31-O.

Indian Tea Association,
Royal Exchange Buildings,
CALCUTTA, 14*th January*, 1901.

H. DRUMMOND DEANE, Esq.,
Stagbrook, Peermaad,
Travancore, S. India.

DEAR SIR,

The General Committee have noticed in the current issue of 'Indian Gardening and Planting' a letter from you, in the course of which the following remarks are made upon the subject of this bounty, *viz.* :—

'We are shamefully treated I consider, in that owing to red tape rules of the I. P. A. we are in practice debarred from getting 'the Grant in-aid.' Theoretically we can do so by sending samples to Calcutta from our Shipping agents at Cochin, but we are told that the teas must *not be shipped* until the samples have been reported on and results made known, otherwise we lose the grant; this would mean a delay of three weeks at least and if a steamer was missed during the interval, perhaps seven or eight weeks.'

'Common sense, one would think, would suggest that, the samples having been drawn and despatched to Calcutta by the Cochin agents the teas might be allowed to depart by first steamer, the Grant-in-aid being sent to the shippers if the teas passed the standard.'

The object of the Committee, in making this ruling was to prevent shippers despatching the teas immediately after drawing the samples, in the expectation that the bounty would be paid irrespective of the expert's report. There is no objection, so far as the Committee are concerned, to the method of procedure described in the second para. of your remarks above quoted. That is to say the shipper, after drawing the samples, is at liberty to send away the teas at his own risk. If he does so, and if the samples are passed by the experts, the bounty will be paid; but if the samples are not passed, the bounty will not be paid. The Committee much regret that their letter, dated 22nd September last, to Mr. Ormerod, the Secretary of the United Planters' Association, Southern India, upon which your remarks are evidently based, has been misinterpreted; and should you care to claim the bounty on any of your teas they will be glad to receive samples for submission to their experts.

* * *

NOTES

The Brazilian Coffee Crop.

London brokers still estimate the current crop of Brazil Coffee at fully 9,500,000 bags.

Colombo Tea Sale.

At the public sale of tea at Colombo on the 16th instant about 17,360 packages = 1,355,243 lbs. were offered, of which about 12,081 packages = 1,009,311 lbs. were sold.

Calcutta Tea Exports.

The total amount of tea exported from Calcutta, from 1st April to 31st December, 1900, was 161,674,115 lbs.; while the quantity exported from Ceylon, from 1st January to 17th December last, was 139,270,495 lbs.

Amsterdam Bark Market.

The main catalogue for the Amsterdam bark auctions, to be held on Thursday, January 10th, shows that 7,487 packages would be offered containing 657,316 kilogrammes (about 1,446,006 lbs.).

Thibet.

The Indian Tea Association has decided to apportion a small sum of money for the purpose of giving effect to a suggestion made by the Government of Bengal that some of the Thibetan traders in wool should be asked to take consignments of Indian tea into Thibet.

The American Tea Duty.

A member of the Committee on Ways and Means of the House of Representatives writes as follows :—"I think it is due to the tea trade to know that there is no chance for any reduction of the duty on tea during this session of Congress, even to take effect a year hence."

Java Cinchona.

The shipments of Java Cinchona for the month of December were 1,090,900 Amsterdam lbs. compared with 626,000 Amsterdam lbs. in December 1899, and 1,018,000 Amsterdam lbs. in 1898, the total for the year being 10,845,300 lbs., contrasted with 11,390,800 and 11,133,000 Amsterdam lbs. in the two previous years.

Brazilian Coffee Statistics.

The Government of São Paulo has given instructions for the organisation of thorough statistics relating to the coffee industry. The details will comprehend the area of each separate plantation, number of trees, their age, yield, etc. With such a basis to work upon, forecasts of coming crops would be greatly facilitated.

The British Tea Duty.

The Indian Tea Association has addressed the Government of India on the subject of the recent enhancement of the British import duty on tea, with a view to urging the Chancellor of the Exchequer, through the Secretary of State, to reduce the duty to its former level of 4d. per pound. A copy of the letter is given in our U. P. A. S. I. section.

Prospects of Coffee.

The *Produce Markets Review* of 29th ultimo observes :—No fresh news of the next crop has been received, and, as all accounts still

oint to a large out-turn, there is a strong feeling against ny material rise being likely to last. Beyond the small busiess that has been done in the terminal market very little has aken place, and until the public sales re-commence on Janury 8, 1901, it is unlikely that there will be much change.

The Ceylon Tea Crop. A planter writes to the *Ceylon Observer* :—"I hear a well-known V. A. (the apostle of large yields) is giving the managers of estates, of which he is V. A., instructions to pluck finer ; and on one estate I passed through the other day, such instruction means at any rate 20 per cent. in 1901 less than the yield of 1900. So Messrs. Forbes & Walker are quite right to lead the readers of their circular to believe that the output of 1901 will be 6,000,000 lbs. less than 1900 in Ceylon."

A large Cargo of Coffee. Last week, says the *American Grocer* of the 19th ultimo, the steamer *Rossetti* arrived at this port with 126,000 bags of coffee from the port of Santos. That single cargo is larger than the total exports of coffee from all Brazil in 1821, about one-half the total exports in 1826, one-third those in 1835, and one-tenth the total in 1844. Quite as notable as the increase of production has been the increase in the size of cargoes brought by a single vessel. Over one-half the *Rossetti's* cargo, or 73,000 bags, was for W. H. Crossman & Brother.

Tea in Canada. "Busy ? Well I should think so," said Mr. Larkin, of the "Salada" Tea Co. to a representative of the *Canadian Grocer*. "We have never yet experienced a week in December that was even two-thirds as large as every week we have had so far in this December. We started in on Monday morning of this week with a full week's work ahead of us. Of course, the green Ceylon teas are accountable for this to some extent, as they are taking like 'wild-fire.' There is a great future before them, not only in Canada but in the United States also."

Currency. The Hon'ble Mr. Buckingham has directed the attention of the Bengal Chamber of Commerce to a "Notice" issued by the Treasury Office of Sibsagar, stating that "in future on receiving payment of Rs.200 and above, half of the amount will have to be taken in gold and currency notes, and the other half in silver and copper." Government currency notes and gold, he says, are not of the slightest value to the people in Assam, as it is impossible to pay coolies in gold, and such notes as are required can be got by post from Calcutta, and he desires the Chamber to urge the Government of India to substitute rupees for the gold and notes in the Assam Treasuries.

The London Tea Market. Messrs. Gow, Wilson & Stanton cable, dated 17th instant, to Colombo, reports that the market generally, as well as for medium liquoring pekoes and broken pekoes and for common pekoes and broken pekoes, is steady. The price of fair liquoring Ceylon Pekoe Souchong is 5d. and the average price of Ceylon tea sold on garden account this week was 6½d. (both same as last week)—as against 6¾d. and 7¾d., respectively, in the corresponding week last year. *Reuter* reports that common qualities of Ceylon tea are steady ; others firm : 30,000 packages of Ceylon tea were offered for sale, of which 28,000 were disposed of ; while of the 55,000 packages of Indian tea offered, 50,000 found purchasers.

Calcutta Tea Sale. We have again to report a better tone at the weekly tea auctions held on the 19th instant, possibly, to some extent, the reflection of the better enquiry for the article reported from London. Buyers, however, showed some disposition to secure, but at the same time paid most attention to teas possessing fair to good cup, which were not in great supply, and also to buy ordinary tea with black leaf. Though, at this late period of the season the supply is, as customary, somewhat limited, any teas possessing either of these characteristics realized higher rates than at closing last week. Ordinary brownish to reddish sorts sold steadily at only purveyor's prices, the teas most difficult to move being very red slacky ones.

Rubbishy Tea. "The *Grocers' Gazette*, of the 22nd ultimo, has an editorial dealing with the complaints which have recently been made about the rubbishy tea put up for sale in Mincing Lane, and urges that the trade should steadfastly refuse to buy inferior tea, no matter how low the price—that they should act on the principle that whatever is nasty is dear at any money. The reputation of tea, as a pleasant and wholesome beverage, has, by these recent importations of rubbish, says our contemporary, been placed in jeopardy with the public, and it behoves all concerned to do their utmost to save the trade from this danger, and to raise and maintain the standard of quality. In the *Gazette's* weekly tea report the matter is also referred to, it being added "a real censor is certainly wanted at the Custom House just now."

State Quinine in Italy. The Italian Chamber of Deputies has accepted the Bill, to which we recently alluded, making the sale of quinine a State monopoly. It will be sold by pharmacists and by all sellers of other State monopolies (tobacco and salt), provided they are not within 500 metres of the nearest pharmacy. It will be put up in tablets of 20 centigrammes each, ten tablets in an air-tight tube, and sold at the rate of 40 centesimi per tube for the hydrochloride, and 32 centesimi for the sulphate. The profit accruing from the sale will be devoted to devising means for the prevention of malaria. A law is also under consideration to compel all employers in malarial districts to provide the latest remedies for curing it, and to give the necessary medicaments to their workmen, free of charge. They must also see that proper dwelling-places and sick-wards are provided, and for this they will get loans at low interest from the public treasury and a reduction in taxes.

Cinchona Cultivation. Prof. Verne, of Grenoble, in the course of an interesting report on a scientific mission to British India and Java, says he finds the Java method of cultivation in advance of the British Indian plan, both as regards the cultivation of the bark and the manufacture of quinine. The report concludes that *Ledgeriana moens* is most suitable for cultivation, that *Succirubra* should be limited, and other species abandoned, and that if the trees are not barked till they are ten or twelve years old it not only ensures the preservation of the plantations, but a bark rich in quinine. Stress is also laid on the necessity of establishing quinine factories in the country where the cinchonas grow, so that small pieces of bark which would otherwise be wasted

can be advantageously utilised. The cultivation of cinchona, the report finishes by saying, is only suited for tropical and subtropical countries, a warning perhaps to the French Government not to be reckless in regard to the French colonies. The report appears in the *Jour. Phar. et Chem.*

Tea in the Caucasus.

The woes of the planters of Ceylon are, says the *Times of India*, as naught when compared with the tribulations of the cultivators of tea in the Trans-Caucasus. Tea can only be cultivated at a profit where labour is plentiful and cheap; and unskilled labour can only be obtained south of the Caucasus at wages varying from 1s. 6d. to 2s, per day. Even at these rates, labourers are scarce. Russian capitalists are, therefore, beginning to look askance at the appeals made to them to sink their money in tea plantations in this region. The firm of Popoffs, of Moscow, has tried the experiment for eight years. It has three extensive tea plantations near Batoum, and has also laid out a considerable sum upon a tea factory. According to Mr. Consul Stevens, the firm is about to sell its estates, being unable to cultivate them at a profit. The tea produced is not of a high grade, and is said to have an astringent taste; but experts declare that with scientific handling it might be materially improved. The difficulty lies in the cost and scarcity of the labour supply. For this reason, Russian tea is not likely to compete in the markets of the world for a good many years to come.

Care of Coffee Beans.

According to Mr. C. J. Blanke, the care of coffee, from the time it is harvested to the time it is ready for the table, is a very important matter for a good cup of coffee. A coffee berry is sensitive, especially so after it is roasted; still more so after it is ground. For this reason, a coffee after it is once roasted and put in a can to go to the consumer's kitchen just the way it comes from the roaster, is at once improved in quality. The air-tight tin receptacle preserves the rich, delicious aroma and flavor. as well as preventing the contamination of foreign matter. The cost of the can is more than made up in the preservation in quality and strength. The bag of coffee that has gone to the roaster for roasting by the old-time retail grocers and taken back to his store in a sack, has deteriorated in value 25 per cent. compared with that same coffee if roasted and put in a can. The coffee put in a dirty sack is subject to dust and dirt, as well as foreign odors. I have always advocated coffee to go to the consumer in tin cans; if not to go to the consumer in tin cans, to go to the retailer's store in tin cans.

Rubber in Assam.

The Charduar rubber plantation in Assam yielded last year 4,502 lbs. of clean rubber, 4,280 lbs. of which were sold in London at the price of 3s. 7d. per lb., and the Agents reported that it was the finest rubber ever sent from Assam and that if it could be delivered in larger quantities and with regularity it would realise a price still nearer to the rate paid for fine Para rubber. The year's working of the plantations resulted in a profit of nearly Rs.7,000, and as the present tappings have only been in the nature of experiments there appears to be a prosperous future before the rubber industry of Assam. The outturn of rubber other than the yield from the Charduar plantations also increased to 5,502 maunds—a considerable increase on the outturn of the previous year. This was due to the opening of the Manipur forests, which were hitherto closed to rubber exploitation, and to an increased outturn from the Lakhimpur district, the demand for rubber on the Calcutta market being very great, and partly to stock accumulating owing to the disturbed state of the Mishmi country.

The Prevention of Plant Diseases in Ceylon.

The *Ceylon Government Gazette* announces that it is proposed to introduce an ordinance, which may be cited as "the Insect Pest and Quarantine Ordinance," the object of which is to make provision for preventing the introduction and spread of insect or fungus pests or plant diseases by giving power to the Governor to make regulations for "prohibiting the importation into this Island from places beyond sea of plants; for prohibiting the landing of plants from vessels or boats, either absolutely or conditionally; and for cleansing or disinfecting by the consignee in the manner prescribed by and to the satisfaction of the Director, Royal Botanical Gardens, and, if expedient, destroying, without compensation, all plants or the packages, cases, pots, or covering in which they may be packed which shall be found or suspected to be infected with any insect or fungus or plant disease." Any person guilty of an offence against this ordinance, it is proposed shall be liable on conviction before a police magistrate to imprisonment of either description for a term not exceeding six months or to a fine not exceeding one thousaud rupees, or to both.

Fertilizers in 1900.

A Home firm reports:—Fertilisers generally have been steady throughout the year. Nitrate of soda developed unexpected strength in February, but subsequently sagged away, until re-stimulated by reports as to the formation of a powerful combination on the coast; since then it has just about held its own. Sulphate of ammonia has been subjected to fluctuations, though not of so violent a nature as in some past years. Early on there was a moderate rally in sympathy with nitrate of soda, followed however, by a sharp decline, owing to the lateness of the season, prices reaching "bottom" in the beginning of October. A reaction then took place, followed by a hardening market, which has since continued with very little interruption. Stocks are in small compass, and prospects favor a further improvement in values. Dried blood and superphosphates show scarcely any change, though the former has hardened slightly of late. Sulphate of copper has been controlled to some extent by the Syndicate of Manufacturers, but at times there has been a very marked difference between official quotations and those of re-sellers. Fluctuations have been caused by the vagaries of the metal market, but prices are again in the neighbourhood of figures current twelve months ago.

LETTERS TO THE EDITOR.

"FOXY COFFEE."

DEAR SIR,—In reply to Mr. Percy Tipping's letter, in your issue of the 5th instant, I should put "Foxy Coffee" down to a great percentage of half-ripe cherry found invariably in the first pickings of the season which, when pulped and placed in the fermenting vats, does not get a healthy fermentation on account of the "Cherry," cherry being immatured. I would be pleased to know if any "planters" agree with me.

F. REAY.

GENERAL ARTICLES.

GROCERS' COFFEE SALES.

The Philadelphia Grocers' Review gives the following account of an address given at a meeting of the Retail Grocers' Association by a Mr. Quinn, on the subject of increasing coffee sales:

"In commencing he stated there were

FOUR ARTICLES

that every grocer who wished to build up a good business should pay particular attention to, *viz.*: Coffee, tea, flour and butter. Coffee especially was a thing that people would travel a great distance to obtain good. Such being the case it would pay every grocer to make an especial study of his coffee trade. To do this it is necessary that the grocer himself should know

HOW TO MAKE COFFEE

properly so as to be able to speak with authority on the subject. Not only about coffee, but about everything else in his line of business, he should be wide awake and willing to learn. As a general rule the man who knows it all, generally knows it all wrong.

"As it is impossible to build up a trade on poor coffee it is necessary the grocer should have

GOOD COFFEE TO BEGIN WITH.

But this is not all. Seven out of ten of the complaints the grocer receives about his coffee comes from its not being made properly and not from any fault of the bean. This is shown when the customer comes and complains about the coffee she got Friday saying that which she bought Tuesday was all right, when both are part of the same roast. Which shows that it is just as necessary that

THE CUSTOMER SHOULD KNOW

how to use the coffee properly as it is that the grocer knows he has sold good coffee; and that he also knows how to make a good cup of it himself. How shall he do when someone complains to him? It is a case of keeping a customer or losing one. Which shall it be?

"It is here that his knowing how to make it himself will stand him in good stead. First of all he should ask the complaining customer a question or two and find out the cause of complaint. Sometimes they will say that the

COFFEE HAD A BURNT TASTE.

This, instead of being caused by poor roasting, is oftener caused by people putting the coffee in the bottom of the pot and letting it sit on a hot stove, where it will get as thoroughly burnt and spoiled as any roaster could do it in roasting it. Boiling coffee also spoils it, as the caffeine and oil which contains all the flavor is thus lost and an excessive amount of caffeine is extracted. Boiled coffee is not fit to drink.

THE PROPER WAY.

"The proper way to make coffee is to pour boiling water on it and let it stand five minutes, at the end of which time all the flavor in it has been extracted. Mr. Quinn stated that at his place of business he tests his coffee right before his customers, as demonstrated merit is something they cannot get away from. After tasting a certain kind of coffee, they will know it is their own fault if it is not as good when made at home. He had his testing apparatus with him, and proceeded to give those present a demontaration. Some years ago, to keep coffee good after making it, it was necessary to have an expensive coffee urn; now,

THIS IS DONE AWAY WITH

by a simple filter bag, which will fit the inside of any coffee pot. Under the old way of making coffee, unless it was used immediately it was made, the coffee would spoil by standing. By using a filter bag, however, the coffee may be left standing for hours and will still be good. First

HAVE BOILING HOT WATER,

then put your dry coffee in the filter bag (Mr. Quinn allowed 6 oz. dry coffee to make 4 qts. liquid, which is less than the average housekeeper uses, to obtain poorer results), and pour the boiling water through it into the pot. The coffee can be made stronger by repeating the operation and repouring the coffee through the filter bag.

PULVERIZED COFFEE

is not so good to use as the ground coffee, as it cakes and does not allow the water to circulate freely through it. Remove filter bag with exhausted coffee from the pot, as nothing of flavor remains in it, and your coffee will be as good three or four hours after as when first made. In pouring the coffee into cups, always put the cream in first, as the hot coffee scalds it.

"Mr. Quinn made four quarts of coffee in exactly four minutes in the manner just stated. The coffee he used he retails at 25c. per lb., and those who were fortunate enough to get a cup said it was excellent. His testing outfit consisted of a four-quart agate pot (coffee made in metal pots turns black from the action of the tannin on the metal), a dozen cups and saucers, the filter bag and hot water. The outfit could be

BOUGHT FOR A FEW DOLLARS,

yet Mr. Quinn says by using it he has sold as much as 350 lb. of one kind of coffee in 10 days of work, without other advertising. He also sells, to those customers who want them, filter bags like he uses in demonstrating, so as they will have at their disposal the means of making good coffee.

"He had a number of these bags for any of the grocers who wanted them, and there was a grand rush towards the platform by those present to obtain them."

TOBACCO AND NICOTINE AS INSECTICIDES.

Some interesting particulars as to the use of tobacco and nicotine for insecticidal purposes have been given in the course of a series of articles in *L'Economiste d' Orient*. Tobacco juice produced under State control has long, it is said, been employed for such purposes. The Excise has sold for some years in the retail shops and warehouses tins of a new kind of juice, called "jus riche," which contains more nicotine than the old juice sold, and which has the special advantage of presenting a constant standard (100 grammes to the litre). This new liquid was chiefly intended for the treatment of sheep scab, for which it has given the best results, but it has been extended to other uses. To economise and facilitate its action on plants, other ingredients are added, the following being a formula adopted for the spraying of plants:—

"Jus riche"	10 ccs.
Black soap	10 grammes.
Commercial carbonate of soda	2 "
Wood naphtha	10 ccs.
Water	1 litre.

This preparation is said to kill plant-lice (*pucerons*), caterpillars, etc.; the soap increases the adhesiveness, and the spirit, though not necessary, it is stated, increases the action. The Government also sells solutions of sulphate of nicotine (10 per cent. strength). Of this, 10 ccs. are taken and diluted with water to make one litre, and the addition of soap and carbonate of soda is recommended in this case also. In some of the public conservatories the tobacco juice is vapourised by plunging red-hot iron bars into the juice, which gives a dense cloud that reaches all parts of the plant and condenses on them.

ENTOMOLOGY.

We recently announced in our columns, says the *Englishman*, that Mr. Lionel deNiceville, F.E.S., F.L.S., C.M.Z.S., has been nominated to the post of Entomologist to the present staff of the Imperial Museum in Calcutta. Previously to this we published certain correspondence that had passed between the Calcutta Chamber of Commerce and the Government of India on the importance of having a State Entomologist for India. The necessity has been admitted by the Government and by the Secretary of State for India, with the satisfactory result noted above. Quite recently Mr. E. Ernest Green was appointed Government Entomologist to Ceylon. Every Colony in Australia has its own separate officer engaged in inquiring into the life-history of noxious insects and insects of economic importance; so have Tasmania, New Zealand, the Cape Colony, and Canada; while the United States of America has at least fifty different experimental stations, one in almost every State of the Union, and in some more than one, in which trained entomologists are engaged in practical work. Great Britain also has an entomologist, though only an honorary one, in the well-known person of Miss Eleanor A. Ormerod, who has done invaluable work as regards the insects which affect the crops, fruits, and

domestic animals throughout the country for a great number of years From this it will be seen that India is only falling into line with the rest of the English-speaking race in employing a State Entomologist. It is a little remarkable in this connection that no foreign country has seen the necessity of employing anyone to study the insect-pests that ravage the crops of all countries, and suggest remedies for them.

In appointing Mr. deNiceville to the new post, the Government of India expresses the hope that the Trustees of the Indian Museum will take steps to make his services freely available to Local Governments, to the Agricultural and Forest Departments, and to the public, in the matter of economic entomology; that they will require him to regard research in this field as his primary, if not sole, work; and that with this object they will set him free to travel for at least five or six months in the year. The Government of India, in consenting to add an Entomologist to the present gazetted staff of the Museum to assist the agricultural interests of India, by means of entomological research, trusts that Mr. deNiceville will strictly subordinate his special studies to this important end, and that his annual programme of work will be arranged accordingly, also that the Trustees will continue to be responsible for the annual course of lectures in entomology at the Forest School at Dehra, and that it is thought that this duty, if assigned by them to Mr. deNiceville, will not make excessive demands on his time, and that it may result in the establishment of useful relations between him and the officers of the Forest Department. On the other hand, it is left open to the Trustees to make other arrangements if they think fit. We feel sure that agriculturists, planters, fruit-growers, and everyone in India who, directly or indirectly, derives a living from the soil—and nine-tenths of the population of India is agricultural—will hail with satisfaction the news that Mr. deNiceville has taken up his new appointment, and that his services are immediately available. Correspondence should be addressed direct to him at the Indian Museum, Calcutta, regarding all matters relating to economic insects. We look forward with confidence to seeing the "Indian Museum Notes," which is a publication solely devoted to Economic Entomology, greatly increasing in bulk and usefulness under Mr. deNiceville's editorship.

CONTINENTAL MARKETS FOR INDIAN TEA.

THE BLENDING METHOD ADVOCATED.

The following is a copy of a letter which has been addressed to the Editor of the *Home and Colonial Mail*, by "C. B." :—

A good deal of interest attaches to the recent report by Mr. Harrington on "The Position and Prospects of the Continental Markets for Indian Tea." The real hope for the future of Indian tea lies in those markets. I have been a planter in India for many years, and have watched with much interest the gradual development of the market for our teas in England itself. One thing which has all along struck me forcibly is that our Indian teas cannot force any market by a direct frontal attack. In England we had from the first a great deal in our favour, from the mere fact that Indian tea is grown by our own countrymen and with our own capital, but for all that it took many years to educate people up to the fact that the Indian article was better than the China. People now fully acknowledge that it was only by *blending* Indians with Chinas that the market was captured at all; so that until about eight or ten years ago it was practically impossible to buy pure unmixed Indian tea in any town outside London.

It was the same with the American campaign; no success attended the efforts of the commissioners for India and Ceylon until they worked through the *existing trade*, and subsidised the *dealers* who were already in possession of the market for Chinas, when they made purchases of Indians, either for selling pure or for blending as they might think fit.

The frontal attack is an old mistake, but it is still being repeated. The Indian Tea Association is attempting to force the consumption of our tea on the Continent in direct opposition to the merchants engaged in the China trade. Even Mr. Harrington still clings to the idea, although he admits that the only progress made hitherto has been by blending, and, what is more, that the only hope in the future for strong Assams is by blending. Then, further on, in his report he makes a sort of forced admission that "blending with Ceylon or even China leaf should not be entirely barred."

In the Continental market we have to face three things:—

1. The general dislike of everything British, and the jealousy generally regarding our Colonial possessions and trade.
2. The existing taste for China tea, as distinguished from Indian.
3. The merchants engaged in the China trade.

The third item is by far the most formidable, if we attempt to set up an "opposition shop."

Let the Committee of the Indian Tea Association modify its policy. Don't *push* the establishment of separate houses for the supply of pure Indian tea, but work mostly through the merchants already in the tea trade; bring persistently to their notice the *fact* of the superiority of our teas for *blending* purposes. In doing this, a double purpose will be served—the consumer will be gradually trained to appreciate a stronger and better tea, and the merchant will gradually use a larger proportion of Indian, until in course of time there will be no China left in his canister; our tea will beat it purely on its merits.

This has been exactly the course of events in Great Britain, in the Colonies, and will be everywhere.

RAMIE FIBRE.

Among the passengers stranded in Ceylon for a fortnight or so, by the break-down of the French steamer *Sydney*, is Mr. H. C. Bluntschli, of Siak, Sumatra, who, for seven years, has been giving his attention to the cultivation of fibre-yielding plants, chiefly Ramie, and the preparation of the fibre therefrom. Mr. Bluntschli (who has, for many years, been a reader of the *Tropical Agriculturist*) has just returned from Europe, where he has been making a systematic study of fibres in many of the Continental centres of manufacture, as well as in Bradford, and other places in the United Kingdom, and he has entered into an advantageous contract for a steady supply of his raw product. Mr. Bluntschli says the great matter is to get the right plant to grow (and he purposes visiting China to see some of the fibre plants there, specially China Grass). He cuts a crop from his Ramie fields every six weeks—save that twice a year or so, there is a rest from growth during the dry weather. The machines he uses, give from 1 to 3 per cent. of clean fibre fit for shipment, while some use is made of bye-products. Mr. Bluntschli has experimented with pine-apple fibre, getting £30 a ton for two tons to Europe, with an order for any quantity; also with Aloe and other plants. But he deems Ramie, so far, the best and most profitable—the drawback, however, for the planter being that there are at present so few buyers, most of the Bradford spinners, after certain unfortunate experiences, refusing to touch Ramie. Mr. Bluntschli is to send us his latest report on the subject. He is to visit each of the local Botanic Gardens and Kandy and Nuwara Eliya, and we bespeak attention, hoping he will have a pleasant and interesting time. Our visitor, who is a Swiss, speaks English well; and we only wish we had a capitalist of his calibre to develop a new industry in fibres in Ceylon.—*Ceylon Observer.*

MANAGEMENT OF TEA GARDENS.

The following report by Mr. Harold H. Mann, to the Secretary, Indian Tea Association, Calcutta, dated 2nd November, 1900, on the management of tea gardens, is published in the Proceedings of the Assam Branch of the Association. Mr. Mann is the Scientific Officer recently employed to report on these and cognate matters :—

At the conclusion of the stay, just finished, in the Darjeeling district, I have completed a short tour of observation in the principal parts of the tea area connected with the Indian Tea Association. Of the three separate journeys, of which the whole tour has been composed, I have presented short reports embodying the most striking matters I have noticed during my travels. I have further indicated the lines, on which I think my own investigations might most profitably be carried out; but it remains for me now to place before you a larger and more comprehensive scheme for experiments in the field in some of the matters which still remain obscure.

In the management of the tea garden there are, undoubtedly, two natters of primary importance in the cultivation of tea which need nost careful investigation. Of these, the one is the question of the ermanence of the tea plant and how this should be retained, and he other is that of pruning. Perhaps it may be said that these are nter-dependent, and so they are, but for my present purpose they nay be regarded as distinct.

To take pruning first. The cultivation of a plant for the commercial production of leaf, as in the case of tea, is an agricultural process of extreme rarity: in fact, in precisely the present form it s all but unique. To attempt, therefore, to apply the botanical and agricultural principles recognised in fruit culture, for instance, is absolutely out of place. Of course, an ordinary gardener knows that if he wishes to encourage leaf-growth, he must have the largest possible root development and prune after the plant has ceased growing for the season, that is, during the quiescent period of its life. But to do this occasionally for ornament, shade, or any other similar purpose, is very different from cultivation that the plant may produce successive "flushes" of young succulent leaves during the greater part of the growing season,—a process which is an extremely exhausting one for the bush in any case. The object of pruning is practically to enable the bush to continue to give the same series of leaf flushes year after year for an indefinite number of years. But as to the means by which this can best be accomplished, those who have had the largest and widest experience hold diametrically opposite views, all of which are based on facts undoubtedly carefully observed.

In former years it was the custom to prune constantly, so that just the "crow's feet" were annually removed. But this, continually repeated, was found to give a gradually diminishing yield of tea, and so at a later date, when the cultivation was older, it became customary at more or less frequent intervals to cut down below the knots in the wood, and so to *bich kalam* the bushes, leaving after the pruning season just the straight stem with the remains of the main branches above it. Then, again, the fashion came on to leave, at still rarer intervals, just a single stem above the ground, six or eight inches long; and, finally, more especially in Assam during the last five years, collar-pruning, or cutting right down to, or below the surface of the ground, has been extensively adopted for the renovation of a garden which has ceased to yield the quantity of leaf which it might be expected to give.

As I stated above, opinion as to the actual method best to be adopted varies with every garden, and this is only to be expected, for nearly all that has been done in the past in the way of experiment has been done, not under carefully regulated conditions but in the ordinary course of garden practice. The whole matter forms a question which demands most careful experiment.

The second point I have raised is the permanence of the tea plants and the means by which it can be retained. In my report to the Indian Tea Association, dated July 9th, 1900, on my tour in Assam in June and the early part of July, I expressed the view that the older gardens were manifestly deteriorating. This is a position, of the truth of which I am becoming more and more convinced. In every district the older gardens are going down the hill, and apparently little effort is being made to stop this, short of planting out new extensions. But this leads to the presence of a large amount of semi-abandoned or abandoned tea, the very existence of which seems almost a confession that tea cannot be regarded as a permanent investment, but that slowly and surely every plot of tea is bound to go out of cultivation owing to exhaustion of the soil or plant I hope that the series of analyses of Assam soils I shall undertake on my return to Calcutta will give some indication of the needs of these pieces of tea which are now the eyesores of almost every garden and every district, but I wish to impress upon you now the necessity of actual field experiment into the manuring best suitable for bringing back these plots of tea to their normal condition. It might be said that we need only apply the experience of Ceylon to our Indian conditions, and go in for manuring on their lines. This, I think, is an error, for the position of Ceylon renders artificial manures cheaper there than here. Further, they have little facility, compared with us, for obtaining local sources of supply, and they are not nearly so conveniently situated for making the soil itself produce its own manure. Nevertheless, this side of the matter might perhaps stand over until my work on the Assam tea soils indicates more definitely the lines on which profitable manuring will most probably be carried out. Not so the other question of pruning. I suggest that in Assam, at any rate for the present (and later at several places in other parts of tea area), four places be taken of about five acres each, containing tea which badly requires treatment of some sort, and that these five acres be treated according to my directions, and careful accounts kept of the different methods of pruning adopted, the yield of leaf, and the cost of each plot. Thus, for instance, suppose five acres be taken of this sort, I might first give the whole a good dressing of manure, local or artificial, and divide into five plots and treat as follows:—

Plot I.—Leave alone and light prune.
Plot II.—*Bich kalam.*
Plot III.—Prune six inches above ground.
Plot IV.—"Collar-prune."
Plot V.—Uproot the whole, fallow with a crop of *muttee kalai* to be ploughed in later, and fresh plants of tea put in June.

A profit and loss account would be kept in each case against each plot, and after, say five years, we would be able to give definite results and planters would have the conclusions of experiments made under identical conditions. I propose that there be four such stations in Assam—one on the north bank, say at Tezpore or Bishnauth, one in Dibrugarh, one in Sibsagar, and one in Nowgong. Such a set of experiments would cost the Association some money for manures, etc., and I suppose the Association would be found to be responsible for ultimate damage done to the area. The whole expense I might put down at not more than Rs. 500 per annum, unless the managers of the gardens involved received an honorarium for carefully attending to my instructions and reporting to me the results throughout.

The only points on which I should insist in this matter are that—

(1) I should have absolute control of the area chosen.

(2) The managers should be men who would *take the trouble* to make the necessary weighings and reports.

(3) The experiment should be permanent for at least five years.

During my present tour in Assam I should like to be able to select the gardens and make arrangements if possible. I have already gardens in my mind's eye which would be suitable in three out of the four districts mentioned above, but should like to have authority to definitely make arrangements if you consider the whole experiments as wise and a step in the right direction. I may say that the above ideas embody the result of a long discussion I held with Dr. Watt on this subject, in the Darjeeling district, a few days ago.

Thus would be commenced the first step in the comprehensive scheme I have placed before you for field experiment on pruning and manuring. It must only be considered as a step, but as a true step towards placing the agriculture of tea on a sound and solid basis of experiment and definitely ascertained fact.

Hoping to hear your decision in this matter at your earliest opportunity.

NOTES FROM THE *I. P. G.*

Last year's crop of tea on the estate of the Russian Ministry of Apanages, in Tschakva, amounts to 150 poods, against 19½ poods last year. The whole crop has been sold to a Moscow firm at 1r. 50k. per Russian pound. It is said to resemble Ceylon tea very much in taste.

Up to 1892 Annam tea was cultivated only for use among the natives, and the proposition to cultivate it for European consumption seemed a chimera. But the consumption of tea in France was increasing very rapidly. From 1,447,635 lbs., consumed in 1892, the quantity rose to 1,794,832 lbs. in 1898 and increased by nearly another 100,000 lbs., in 1899. The supply was almost entirely from China and Ceylon.

The tea from Annam is said to equal the finest article produced in China. It is in very general use in the French army in Annam, and it is only believed to be a question of time when it will meet the entire demand in France. The production is daily increasing. The old colonists are going into the business of growing tea, finding it more profitable than any other occupation.

The above statements, culled from a French report, are not very favourable as to the prospects of Indian and Ceylon tea in France. They must, however, be accepted with a considerable "pinch of salt," as it is highly improbable that Annam tea will ever be able

to compete with the British-grown product. It is hoped that the standard of tea will be raised in France and that the Ceylon staple will be supplied to the army. Strenuous efforts are being put forward to achieve these most desirable results.

Mr. Rosling's suggestion to give up plucking 10 per cent. of the area in cultivation is exciting very opposite opinions. The *Ceylon Observer* does not think it likely that India will be got to agree. In an article on the subject of Mr. Rosling's proposal, it says that it "is practicable and sufficient on the face of it *if* only unanimity and a sense of honor in its support could be calculated on to prevail throughout the tea districts of India as well as of Ceylon. There lies the difficulty. Did the issue depend on Ceylon alone, Mr. Rosling could make quite sure at once of his 80—nay 90—per cent. But how is it possible, in view of past experience, to expect any such result in the case of India?"

The writer's views may appear to savour of selfishness, but they appeal to common sense. It is a law of nature that the weakest go to the wall, and a process of weeding out is constantly going on. Mr. Rosling's scheme is practicable if proprietors of Indian and Ceylon estates could be induced to combine; but we have not yet reached the millennium, so we fear there is little likehood of unanimity. "Each one for himself" is at present the rule, and is likely to remain so, until human nature is different to what it is.

A letter from a Ceylon planter lately asserted that the Island and South India generally could in the future turn out tea cheaper than Assam and Bengal, but though the Brahmaputra Valley may be handicapped by its greater distance from the coast, the railway should ensure teas from the Surma division being laid down at Chittagong at least as cheaply as either at Colombo and Beypore, or whatever may become the tea export for Travancore and the Wynaad.

That Chittagong must eventually become the outlet for tea and other products east of the Jamoona is inevitable, and now that facilities for reaching it are inexpensive and rapid, we see no valid reason for objecting to this. Tea is of course chiefly dealt in for export, and the sales would still be held in Calcutta, for brokers can do the necessary sampling and valuation work, at the port and, certainly, there is not much chance of any keen competition at the auctions. Buyers attend with their minds fully made up beforehand as to how far to go, as has been the rule for some time past, so that producers, inclined to doubt whether they will get as fair play as under existing circumstances, may rest satisfied on that head.

CEYLON TEA ON THE CONTINENT OF EUROPE.

Mr. J. H. Renton has written as follows for the information of the Planters' Association of Ceylon :—

DISPOSAL OF PLANTING EXHIBITS AT THE EXHIBITION.

MY DEAR ROSLING,—I ought ere this to have advised you that in accordance with arrangements made with Sir William Mitchell, I prepared and made up full and complete exhibits of tea, cocoa, cardamoms, and coffee for the following institutions which were to accompany Sir William Mitchell's commercial exhibits to the same places:—

1. Imperial Institute, London.
2. Colonial Institute ,,
3. Kew Gardens, ,,
4. Industrial Museum, Rouen.
5. ,, ,, Lyons.
6. Stadtisches ,, Bremen.
7. Jardin Colonial, Paris.
8. State Museum of Philadelphia.
9. British Chamber of Commerce, Paris.
10. Stadtisches Museum, Hamburg.
11. Imperial Museum, Vienna.

Through a misunderstanding Nos. 9, 10, and 11 were sent to me by Mr. Davidson, and did not accompany the other Commercial Exhibits. I forwarded the first two, but not the last, which I transferred instead to the Agricultural Museum in Berlin. When in Vienna next month I shall see if they want specimens of tea, cocoa, and cardamoms, and write you. The Hamburg people think it would do more good if I allowed the samples to be taken round the country by the travellers of one of the large firms. They can afterwards be placed in the museum. I find the specimens of gold and silver tip tea have excited a great deal of attention, and so have our cocoa, vanilla, and cardamoms. I may mention that I distributed the gold and silver tip tea amongst as many museums as possible. I also gave full samples of commercial teas—Broken Orange Pekoe, Pekoe and Pekoe Souchong. Before dealing with exhibits of tea I obtained permission from the head office in London, of those companies who had directed that the exhibits were to be returned to them, to deal with the exhibits as I judged best.

I had to pay duty on all the tea sent for exhibition. I recovered the greater part of the amount from sale of the balance of the tea which I did not require for specimens for the museums, but as Government have paid the duty on all the other planting exhibits, I do not understand why tea should be the only exception, and think the difference between the amount I paid, and the amount I recovered should have been refunded.

Sale of cheap Ceylon Tea.—I enclose two cuttings from the *Daily Telegraph*, of 12th and 13th, calling attention to the sale of Ceylon tea at 2d. per lb. in London. The sale of tea of this description, and the prominence given to the sale by a leading London newspaper are immediately seized upon by our opponents on the Continent. It is not much good issuing pamphlets describing the purity and merits of Ceylon tea, when Dutch and French firms are able to prove from English sources that Ceylon does export rubbish.

Tea in Austria.—I am glad to be able to report that one of our Paris friends has established an agency for sale of pure Ceylon tea in Vienna. Another has also been established in Berlin.

Tea in Italy.—I hear from Florence that tea-rooms have been started in Rome and Florence and Ceylon tea is making way there considerably now.

ECONOMIC PRODUCTS ON THE NILGIRIS.

In August last, says the *Nilgiri News*, the Curator of the Government Gardens, submitted a proposal to the Nilgiri Agri-Horticultural Society, for encouraging Economic Products in this district, by awarding prizes for such articles as were produced in any stage of progress at its periodical shows. The matter, at that time, was thought to be worthy of discussion.

When it came up for consideration at a subsequent Committee Meeting of the Society in December, Mr. Standen suggested that the Government should be requested to espouse the cause of Economic Products, by allowing the Curator to establish experimental plots in the Botanical Gardens, as more likely to yield good results than small money prizes awarded by the Society at its shows.

The Honorary Secretary on the same occasion thought the awards, if given by the Society, should take the form of honorary recognition by medals, rather than that of money prizes, and these ideas, with Mr. Proudlock's original minute, were referred to a Sub-Committee consisting of Messrs. Weir, Barber, Standen, Minchin, and Proudlock.

On the 4th instant, this Sub-Committee finally dealt with the subject. It reviewed the list of Economic Products exhibited on the 2nd June last, consisting of 12 specimens of Phormium Tenax Fibre, 5 of Ordinary Plantain Fibre, 1 of Musa Textilis, 5 of Cordyline Australis, 2 of Lasiosiphon Eriocephelus, 4 of Nilgiri Nettle, 1 of Potato Starch, 1 of Camphor Leaf Oil, 1 of Ficus Elasticus, 5 of Ooty Timbers, 18 of Ceara Rubber Products, and 1 Rubber Tapping Knife, and came to the conclusion, that the offering of prizes for new Economic Products would not of itself induce the investment of capital by private individuals in untried industries.

It also resolved to suggest to Government, in the spirit of Mr. Standen's advice, that some land situated conveniently near Ootacamund, should be placed at the disposal of Mr. Proudlock, for experimental cultivation of industrial products, together with a small grant of money for this purpose.

A very important matter that has been overlooked by the Sub-Committee, is the change that has come over the views of the Madras Government in respect to Economic Products of this Presidency, and the duties of the Government Botanist in relation thereto, during last year. Mr. Barber, in accordance with those views, will hereafter devote preferential and increased attention to Economic Products, so long as he is the Government Botanist of Madras, and if he does so, it will conduce to confusion to have two independent officers working in one field, where none worked before. Probably Government may not overlook this important element in deciding upon the Agri-Horticultural Society's proposals when they come before it, as we presume they will in due course.

NOTES FROM BRAZIL.

(From the *Brazilian Review.*)

Coffee.—The Santa Barbara cane crop is a short one this year.

A coffee cleaning mill was destroyed by fire on 1st instant in Botucatú.

Planters in Uberába and neighbouring districts are giving their ttention to viticulture on a considerable scale.

In Ityrapina, in consequence of the low price of coffee, buyers are epositing it in private warehouses, there being already a stock of ver 2,500 bags stored in this way.

Santos, December 8th, 1900. —The improvement of last week was ot of long duration, although there was a sudden rise of prices on Monday and Tuesday owing to some odd report of *rains* having done lamage to the next crop. Now, although we do not believe that ll those promises of an exorbitant yield for next year will be fulilled, for reasons given in our last report, we do not think that the ast rain has done any damage, rather the contrary.

However it may be, speculators in consuming quarters, who must e now rather for the fall than for the rise got frightened and covered hastily by buying whatever was offered in c. & f. and the sales again brought buyers here into the market at prices which were very near 7$000 for *superior*, but as dealers stuck out for the round figure, only comparatively little was sold at the advance which was very shortlived and gave place to a dreary collapse aided by large arrivals. Dealers were too greedy and, therefore, missed a good opportunity of getting rid of a certain quantity at least of their over-large holdings.

We quote 6$300 to 6$800 for *superior* as extremes during the week. A further collapse of prices was only prevented through the extreme weakness of exchange which fell to 9 3/4d. yesterday, but closed firmer at 9 7/8. Coincidently the coffee market got livelier and a fair amount changed hands for export at about 6$400 to 6$500 as orders could easily be filled with the low rate of exchange.

The demand has usually been for medium and lower grades, the Americans having come in again lately. *Fine* qualities continue neglected. *Peaberry*, more in good demand, but mostly medium grades *Goods* were asked for, quotations for this kind remain the same as last year.

Receipts have been larger again during the week under review and have almost reached the total of 5,000,000 for the crop year. To look for any causes to explain this increase is very difficult, some people say the fine weather following the heavy rains of the last week of November are answerable for it, others, the better currency prices. If it is the weather, we should look for smaller receipts again during next week, as heavy rains have set in again.

Shipments have been light on account of little steamer room for Europe, they will be large from now onward, as Europe, especially Havre, has bought a fair quantity at prices ranging from 32/6 to 34/- for *good average* and 34/- to 35/3d for *superior*. Rotterdam and Hamburg also took a certain amount at similar prices, freight for these ports being 3d. higher, so that we can look forward to a decline of our stock at the end of this month. The States have not bought anything worth mentioning.

December 18th.—Entries during the week ending, 16th instant, were 17,266 under those of the preceding week and even 9,172 less than those of the corresponding week last year. Whether the shrinkage is to be considered as a sign that up-country supplies are getting exhausted or merely that planters are keeping coffee back in anticipation of higher prices at S. Paulo as they are reported to have been doing in Rio and Minas, would, however, be premature yet to decide.

Taking the balance of the current crop to be probably about equal to that for the same period last year, the total yield for Santos and Rio will amount to 10,201,059 bags against 9,956,547 bags for last crop.

With the enormous stocks already in hand and the almost certainty of a monster crop next year, the prospects of coffee, as far as prices are concerned, certainly do not seem rosy, the only consolation being that when they have touched bottom they can go no lower, and that with quotations at 9$000 per *arroba* in Santos it must be already nearly reached as far as we are concerned. It is true that foreign prices may be pushed down still further, but only successfully should exchange fall too simultaneously. At present, it does not seem likely that a campaign to bear exchange would prove successful unless coffee sales were practically suspended. The anxiety to dispose of the heavy existing stocks will, however, probably prevent that and keep up a sufficient supply of bills to meet trade demands even in face of falling prices, here and abroad. It is, we believe, possible that currency prices for coffee already brought down may have to give way further still, but as regards the new crop there is clearly a limit which cannot be passed without affecting supplies and causing a reaction That limit seems to have been reached, nor does it seem probable that coffee would, except in exceptional circumstances, be marketed here at much under that figure. There will, no doubt, be a determined effort to bear exchange, and thus ease prices here; but whether in the state of the market such an attempt could be long successful seems very doubtful. The probabilities seem, therefore, to tend to temporarily lower currency and gold prices with a firm or even rising rate of exchange, and a reaction next year when current stocks have been disposed of and only new coffee can be relied on

Exchange.—Extremes during the week ending, December 7, were 9 11/16—10 1/16d. for 90 d/s Bank paper, and 9 29/32—10 1/8d. for private

The average Bank 90 d/s counter-drawing rate for the week comes out at 9 59/64d., the corresponding sight rate being 9 55/64d. against 9 61/64d., the average sight rate of the *Camara Syndical.*

The average depreciation for the week, calculated on the basis of the Banks' sight rate, is 63·25 % and the premium on gold 172·09 % against 62·84 % and 169·05 % last week.

Rio, December 10th, 1900.—Ninety days' rate on London opened on Monday, 26th ultimo, at 10 11/32d., fell to 9 13/6d. on the 28th, rose again to 10d. on the 29th, and after opening this morning at 9 13/16d., rose to 9 7/8d., and finally closed at 9 25/32d.

Since we last wrote, a fortnight ago, rates have been all over the shop and gone up and down without rhyme or reason at the behest of sentiment and speculation. As far as real factors go, we can see absolutely no causes for weakness and are convinced that, unless something should occur to seriously alarm the market and precipitate remittances, there is no more reason for rates to be slumping now than a month ago, indeed much less. The balance sheets of the Rio, S. Paulo, and Santos exchange Banks (all of which have been received, except the German from S. Paulo) show that the liquidation of the bull deal of July is nearly complete, cash showing 8,713 contos less than on 30th October, whilst the nett debit to Home Office and other Branches is reduced from 17,161 contos to only 7,714 contos. The cash in these 12 Branches only exceeded their deposits in account current by 6,870 contos and though, of course, it is possible that these may be utilized, as last year, for purchase of bills it does not seem probable that such will be the case in view of the delicacy of the situation and necessity of holding good reserves. This time, last year, the cash balance was even lower than now and in lieu of a debit the balances showed a considerable credit with Home Office and Branches.

It is, of course, possible that if what is termed the Elias Fausto bill should pass, a panic might ensue in consequence of which remittances would be so considerable as to force exchange lower still; but, as a matter of fact, fixed deposits, which are the kind that would be chiefly remitted, have never been lower than at present and do not exceed 40,000 contos for all the 25 Branches, a very large proportion of which is unqestionably local money. We do not, therefore, attach much importance to such anticipations, as, should rates fall much, remittances of this kind would soon stop, and, moreover, there seems but little chance of the bill becoming law in its present form or of being put into execution if it did. Looking, therefore, to the real factors of supply and demand we find that the value of both coffee and rubber to be shipped to the end of the crop is more considerable than last year, whilst the stringency of money is even greater. If, with circumstances certainly less favourable last year, a decided upward movement of exchange set in in January we see no reason whatever to anticipate that the present weakness should be more than transitory or that a reaction may not begin from one moment to another. There is every likelihood next year of an early crop and, consequently, of the annual boom in exchange setting in earlier than usual.

With such prospects and the probability that Banks will not utilize deposits to any extent to take exchange, it seems that a bear movement is particularly dangerous. Last year, in spite of the Banks taking so heavily that cash fell considerably below their liability for current accounts, rates were maintained almost level from October to December and in January commenced to rise. The supply

of bills was, in fact, not only sufficient to satisfy market requirements, but the remittances of the Banks as well. This year, with a higher value for coffee, we see no reason why, even should that policy be repeated, rate should not be at least maintained, if even they do not rise. The only factors for the fall are, we repeat, of a sentimental or moral character that may change at any moment and the present tendency be replaced by an equally optimistic and bullish movement. It is true that towards the end of the year remittances are generally more considerable, but against this must be placed this year the peculiar position of the market and the extraordinary stringency of money all over the country. If stringency is a bull factor at all, it may be expected to excercise its influence now when cash balances at the Banks are lower than they have ever been.

December 17th, 1900.—Ninety days' rate on London opened on Monday, 10th instant, at 9 13/16d., rose to 9 7/8 on Wednesday, and finally closed this evening at 9 11/16d.

Whatever the cause may be, whether the proximity of the liquidation or the irresistible logic of over-supply, the fact is indisputable that the rampant pessimism has disappeared and, in spite of falling coffee prices, given way to a feeling of almost hopefulness. No exertions of the bears have succeeded in forcing rates to 9 1/2d. as was promised and even should coffee continue to fall, the heavy amounts still to go forward will make up in value what is lost in prices. So far rates at Pará have been weaker even than here a sure sign that all available bills are absorbed locally leaving nothing yet available for this market. This is, however, an annual occurrence, but in a month at latest local requirements may be expected to be satisfied and a balance of rubber bills spill over to this market.....

The worst feature is, as we have said, coffee, but as stocks are almost double last year it is clear that a very considerable fall in sterling prices could be suffered without the value of exports and, consequently, the supply of bills falling below last years.

It is possible, of course, that speculation may attempt to push rates lower, but the general feeling seems to be that the market is already over-bought and cannot carry much more.

COFFEE IN CEYLON.

EARLY DAYS.

Under the heading of "Ceylon in the Twenties—A Peep into the Past," the *Times of Ceylon* gives some very interesting extracts from writings of the late Mr. John Capper. Among them we find the following references to the early days of coffee in the island :—

COFFEE.

As a country gentleman, he had long been engaged in farming, taking great interest in all agricultural operations; and, though his ability to guide the plough, mowing and reaping, could not have enabled him to succeed in coffee cultivation, this aptitude, no doubt, gave him some advantage in the pursuit of the new industry. Very cordially received by Sir Edward Barnes, he lived for some time with his brother, who was appointed Commandant of Kandy, and during his residence in that town, had opportunities of seeing the coffee plant growing in great luxuriance in the vicinity of Buddhist shrines and in native gardens, for the sake of its pretty jasmine-scented flowers, rather than for its fruit. It was for this purpose that the first coffee seed taken to the island some centuries ago by pilgrims from Mecca, and by them presented to the Sovereign, was shown in the Royal Garden at Hanguranketa, fifteen miles from Kandy. Thence young plants of coffee were in later years distributed to various Vihares and gardens throughout the country, and their produce eventually became an article of barter with Moormen traders, who carried it to Colombo for sale.

The beautiful flowers of this plant attracted the attention of Mr. Moon, the first Superintendent of the recently formed Botanic Gardens of Peradeniya, who, with the Governor's assistance, procured a supply of Arabian coffee from Mocha, which he grew in his garden in order to compare its produce with the coffee grown in the island, but without detecting any material difference. For a short period Mr. Bird succeeded Mr. Moon in the charge of the Peradeniya Garden, and it was with young plants and stumps from older plants from seed, which had germinated under the bushes in the garden, that the first coffee estate was planted at Gampola on the site of the present Mariawatte plantation.

OBSTACLES SURMOUNTED.

The earliest and most series difficulty which beset the introduction of coffee cultivation into Ceylon was the absence of any kind of suitable tools. The sole agricultural industry of any importance was that of rice-growing, and the only implements employed were the light Kandyan axe, the cattle, or billhook; the heavy, cumbrous kodalie or rice-hoe; and the diminutive wooden plough. These, however, could be rarely purchased; when required they were made at one of the Gampola forges from native ore, and so rude and tedious was the process, that an ordinary gun could not be produced in less than three months. The course followed in those days, when tools were required, was for the cultivator in need of them to proceed to the district of Dolosbage, where iron mines existed; there he purchased one or two pingo loads of the ore and, with a supply of charcoal, he returned to one of the Gampola smithies where, according to custom, it was incumbent on him to ply the bellows whilst the Vidhany or smith, worked at the anvil. To have adopted this primitive method of obtaining a supply of tools for his estate, would have involved a delay of possibly two years; and Mr. Bird, not being inclined to toil at a village forge for that space of time, deemed it preferable to send an order to London for such tools as he required, similar to those employed in the West Indies. This course required, however, fully a year before the order could be executed and received, for the opportunity of sending letters to England was so precarious that it was found an economy of time to despatch the order by one of the sailing ships leaving Madras every three months, the letter being carried thither by a Post Office runner, who, in rainy weather, took about the same time to reach Madras as that in which the Mails now reach London by the Suez Canal.

THE FIRST COFFEE ESTATE.

The first estate opened and planted up by Mr. Bird on land attached to what had once been a royal residence at Gampola, a dozen miles from Kandy, was not his original selection. He had in the first instance chosen a tract of flat alluvial land at Peradeniya, afterwards known as a sugar estate. This he cleared from low jungle, and had commenced preparations for planting it with coffee, when the Governor expressed a desire to have it to cultivate on Government account as an adjunct to the Botanical Gardens, offering Mr. Bird any other block of land he might select, and recouping him for his outlay; and this resulted in his taking possession of a tract of level land close to the small village of Gampola. It was supposed by the earlier pioneers of coffee planting in Ceylon that the shrub could be cultivated only on comparatively level ground, and on the same system as that adopted by the natives, and left to grow naturally and untouched by a pruning knife. The soil on the land selected was, however, eventually found unsuitable for coffee, and, though a huge elephant plough was employed to turn over deep furrows between the rows of plants, and so promoted a more vigorous growth of plants, the yield of fruit was small.

BRAZILIAN COFFEE.

The Santos correspondent, of the *Brazilian Review*, writes under date, 15th December, 1900 :—

Our coffee market eased off further during the week owing to the decline in the consuming markets and which were adversely influenced by larger receipts than anticipated and favourable crop news. Exchange fortunately kept low and so dealers had at least the satisfaction of being able to sell at a fair price, as plenty of orders were sent out at the decline. Yesterday, when European markets certainly improved, an extensive business was done, but to-day, however, with very discouraging news from consuming quarters buyers here have almost entirely withdrawn, although we have to mention that dealers are not anxious sellers at present prices and give way very reluctantly. We quote: 6$000 to 6$400 for *superior goods* rule 400 reis, and *regulars* 609 to 800 below, *prime* 300 to 500 reis above that price. The demand ran chiefly on medium lots, *primes* remain neglected and so are low grades, as the States are out of the markets. There was some demand for *Peaberries* which were sold at 8$700 to 9$000 for *superiors*, 8$200 to 8$500 for *goods*. For some specially fine *Peaberries* as much as 10$000 was paid for small lots. Demand for these goods has since fallen off.

Receipts, notwithstanding low prices, have kept up. We presume planters think it is better to have the goods in Santos on the spot in order to be able to profit by any sudden improvement than keep the goods on the *Fazenda*. Our dealers facilitated this up till now by advancing money on goods consigned to them, but they are going to strike, now, as they see what bad policy it was to allow the accumulation of such an enormous stock here.

Shipments have been large as could be foreseen and the stock diminished by about 15,000 bags daily. Some very large estimates for the next crop, both in Santos and Rio, seem to have gone forward ately as anticipated by this *Review*. However justified, these crop guesses might be just at present, one very important point is entirely lost sight of, that is the labour question and specially the ow price.

The writer of the leading article, on law 184 in No. 50 of this *Review* says:—"In addition it seems likely that the coffee crop will be the largest on record and that the difficulty in disposing of a surplus of, perhaps, 2,000,000 bags may drive down prices abroad and, with prices, exchange, he says further." It is equally certain that currency coffee prices here have nearly reached bottom and cannot be reduced much lower, no matter what the crop be.

One naturally deducts therefrom that there is no hope for either coffee or exchange, one must bring or keep the other down, but is it likely or is it possible that in view of such a miserable state of affairs all the produce which has grown will be gathered? First all those plantations lying far back from railway stations as in the sertão of Jaboticabal, Jahú, Serra dos Agudos, Avaré will be eliminated as producers, as cost as transport would swallow up everything. Further, a great many planters are dependent for the maintenance of their farms on the monthly allowances made by the *commissario* for that purpose only, from the month of December onwards till the new crop is gathered in May to July. These advances will be largely curtailed now as it is beyond doubt that *commissarios* will be extremely careful, the more so as large capital is still locked up in the depreciated coffee lying here; the difficulty or impossibility of getting sufficient funds to pay for the necessary agricultural work must inevitably bring about a further reduction of the output.

Adverse climatic influences we shall not take into consideration here, although dry, hot weather from January onward would be sufficient to produce the contrary effect of what the rains did at the beginning of this year, *i.e.*, reduce the yield 10 or 15 % less on a crop the prophesied magnitude of which runs up to an important figure. Last, but not least, the Labour question which in former years has often been wrongly used as an argument for higher coffee prices threatens to become at length acute.

We read in No. 501 of this *Review*, that the excess of exits over immigration up to 30th September of this year was, for our State alone 13,259 persons, the natural consequence of the unprecedented rise in exchange in June and July, which for the first time for years allowed the labourer to leave this country with an appreciable sum of money in gold. The agricultural labourers amongst these immigrants were experienced and accustomed to the work required, some of these may come back, but most of those to arrive now have to start learning their work.

Now the number of immigrants during November was 2,266 and although more are expected, it is doubted by many competent people that a sufficient number of hands will arrive to prepare the coffee fields for the crop and gather the produce, and complaints about insufficiency of labour are heard everywhere. It has often been said, that as soon as economical conditions of Italy would improve, we should feel the counter-effect of it here and there cannot be any doubt that this is the case now. Readers in Europe who are better able, as they are near, to form an opinion about economical conditions of the country which supplies by far the largest number of our agricultural labourers can judge for themselves.

Should the currency price of coffee continue to remain as low as at present, a great many of our planters will not even be able to have labour and we presume from all we said before, that however brilliant the outlook for the next crop may be now, a large percentage of it will not be harvested unless currency prices rise again, and that in the near future, because the preparations for the crop have to be undertaken in a short time.

It is, therefore, foolish on the part of Brazilian financiers and of coffee dealers in consuming countries to base any calculations on the fact that a large crop of coffee may be on the trees.

When currency prices last year in the beginning of the crop were reduced to about 6$, planters had already gathered the crop and had nilly willy to submit to the price their produce would fetch, as they had to pay the wages incurred. This year it is different, as prices have fallen towards the end of the crop year and a great many will prefer to abandon their next crop than incur a debt for wages, which the market value of the produce hardly covers, but in no case can leave anything for the planter himself.

Difficult and anxious times are again in store for the Brazilian coffee grower.

To come back to our market report, we have to state that Havre has again been our principal buyer at prices from 31s. 6d. to 32s. 6d. for good average, and 32s. 6d. to 33s. 6d. for superior. Rotterdam also bought a little more actively, Hamburg was quieter, and New York did not do anything at all.

AN UNPROFITABLE TEA TRADE.

Those engaged in the tea industry in Ceylon are much exercised over the unprofitable business which a number of companies engaged in the trade have experienced.

All are agreed that the heavy quantities of Indian and Ceylon tea, and particularly the former, are the cause, but all are not agreed as to the ways and means of remedying it.

One thing is certain, there is not likely to be much improvement until there is a marked curtailment in the quantity of low-grade tea, which year after year is thrown upon the market.

On the Canadian market, the excess of low-grade tea has frequently been such as to maintain a local weakness when values ruled strong abroad.

Although the consumption of Indian and Ceylon teas is increasing, and that rapidly, there is no immediate prospect of the increase being so great as to overtake the supply.

It is estimated that the increase in 1900 in the consumption of Indian and Ceylon tea in countries other than Great Britain will be about 12,000,000 lbs., but it is also estimated that the increase in production will be still larger. Then, China is shipping some 17,000,000 lbs. more than in 1899 to Russia, Australia, North America, and parts of the world other than the United Kingdom. To the United Kingdom the quantity is 6,000,000 lbs. less. The increase in the shipments of China tea is explained to be due to a desire to avoid the risk that would be entailed by keeping it at home while the country is in such a disturbed condition.

One of the features of the situation from which some consolation can be drawn is the relatively better position on the market of the finer grades of teas. There is a demand for these on both sides of the Atlantic that exceeds the supply.

The pendulum is evidently swinging in the direction of better goods in practically all lines of merchandise. And it is certainly not to be regretted.—*Canadian Grocer.*

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION.

The following is an Abstract of the Proceedings of a Special Meeting of the General Committee, held on the 11th instant:—

There were present:—Messrs. H. C. Begg (Chairman), W. Brown (Vice-Chairman), H. S. Ashton, R. H. A. Gresson, R. Magor, A. Tocher, and T. Traill.

A letter had been received from Mr. R. R. Toynbee regretting his inability to attend.

Considered the following telegram, dated 8th January, from the Secretary, India Tea Association, London:—"Movement initiated, curtail output 10 per cent., India, Ceylon. Would a proposal be entertained, urge the matter, forward all you can." The Committee discussed this telegram and decided to submit copies of it to the members of the Association for their consideration. They were not prepared to express an opinion as to whether any scheme for reducing output could be successfully put into force. But in the course of the discussion the following suggestions came under review:—

(1) The temporary abandonment of 10 per cent. of the area in full bearing.

(2) The fixing of a date for closing manufacture in each district.
(3) Generally finer plucking.

Mr. Traill expressed himself as being in favour of a general adoption of finer plucking. In the event of the output not being thereby sufficiently reduced, he suggested that a percentage of the crop, consisting of low grade teas should be made over to the Association to be disposed of in encouraging the consumption of tea among the Natives of India.

It was agreed that any action in the direction of an attempt to reduce output must be in the nature of a combination between India and Ceylon. Isolated action on the part of either Indian or Ceylon growers would, the Committee considered, merely result in a transference of a portion of the trade either to India or Ceylon as the case might be. It was thought to be very desirable that a combination should be formed, but the Committee fully recognised that it would be a matter of great difficulty to put any scheme for reducing output into successful operation. Finally, it was decided to send copies of the telegram from the London Branch to Proprietors and Agents generally, and, at the same time, to ask them whether, in their opinion, any one of the proposals noted above, or any combination of them, was practicable. Reference was also to be made to a letter lately addressed by the Chairman of the Ceylon Planters' Association to a Ceylon newspaper on the subject. In this letter, Mr. Rosling expressed the opinion that by resting for two years a certain percentage of the acreage in bearing a sufficient reduction of outturn would be effected.

The Committee inspected six samples of Travancore green teas made by Mr. H. Drummond Deane, of Stagbrook, Peermaad. These samples which had been submitted by Mr. H. St. John Jackson, the Editor of *Indian Gardening and Planting*, had been favourably reported on by Messrs. Moran & Co.

The Secretary was instructed to express the acknowledgments of the Committee to Mr. Jackson for having placed the samples at their disposal.

It was also decided to write to Mr. Drummond Deane with reference to certain remarks made by him in the same newspaper regarding the procedure under which the bounty paid by the Association upon the manufacture of green tea was allotted. Mr. Deane complained that shippers of green tea from coast ports in Southern India would not have the bounty paid to them if they shipped the teas before the report of the Association's experts upon the final samples had been received. There appeared to the Committee to be some slight misapprehension on the point. They had no objection to shippers in such cases despatching their teas to America at their own risk. They only required that samples should be drawn from the manufactured teas and submitted to their experts. If the experts reported favourably on the samples, the bounty would be paid whether the teas had or had not been shipped in the meantime. But if the experts reported unfavourably, the bounty would not be paid in any case.

It was agreed to set aside a sum of Rs. 100 from the American and Foreign Market Fund for the purpose of giving effect to a suggestion made by the Government of Bengal (*see* Circular No 73, of 12th December, 1900) that some of the Tibetan traders in wool should be asked to take consignments of Indian tea into Tibet. Messrs Kilburn & Co. were to be asked to arrange for a small quantity of tea to be made into bricks suitable for the Tibetan markets at their Pashok garden.

CENTRAL TRAVANCORE.

The Annual General Meeting of this Association was held at Arnakal Bungalow, on Saturday, January 12th, 1901. PRESENT:—Mr. W. H. G. Leahy (Vice-Chairman), Hon'ble Mr. G. L. Acworth, Messrs. B. Lawrie, H. D. Deane, R. S. Imray, G. N. Thomson, E. Latter, F. Bissett, H. S. Holder, H. J. Blandford, E. R. Williams, R. W. Cole (by proxy), and A. E. Veale (Honorary Secretary).

The Honorary Secretary having read the notice calling the meeting, the minutes of the last meeting were taken as read. The Chairman then addressed the meeting as follows:—

GENTLEMEN,—It is usual and I think the duty of the Chairman to report progress for the past year at the Annual General Meeting, therefore I will ask your indulgence for a short time, while I give you a brief resumé of the year's work of the Association and draw your attention to other matters of interest to us.

It is exceedingly gratifying to see the keen interest taken by all in Association matters as shown by the full attendance at all our meetings. Twenty estates are on the rolls of the Association, of which 6,429 acres are in tea and 222 acres in coffee. The past year's accounts are placed before you, duly audited, and I am glad to say show a credit balance of Rs.91-6-9.

Three of our principal requests have been granted by H. H. Government, *viz.*, building of a new Peryar bridge (for which Rs.52,400 have been sanctioned), the building of a travellers' bungalow in Peermaad, and the free importation of 500 head of cattle for each estate. Gentlemen, this does not sound as if your Association had accomplished much, and there may be some amongst you who may ask, is this all I have got for my 5 annas per acre subscribed? We should not be actuated by that kind of spirit, rather should we ask, would we have got what we have, had no Association existed, or if we had applied individually? You will not always get everything you ask for on the spot, and our policy with regard to Government should be one of persistency, not the persistency that is akin to obstinacy which does not yield to argument or reason, but the persistency which combines persuasion. The principal requests not granted are the Railway survey, the gun license, and the covered landing stage at Cottayam. As regard the Railway survey, I am perfectly certain H. H. Government will more fully recognize and appreciate the benefit of Railways, when the present Quilon-Tinnevelly line is completed. We trust the future policy of H. H. Government in regard to Railways will be a progressive one, and that the talent which at present lies wrapt up in a napkin, to which Lord Curzon referred, will be put out and utilized for Railways and better roads and communications. I think this is a favourable opportunity to again draw the attention of Government to the need of a gun license. You are all aware of the recent accident, whereby a native was killed, due, no doubt, to the ignorance of the native of the mechanism and destructiveness of English firearms. The present Game Act is a dead letter without a gun license, and game is fast being destroyed all over the district. A covered landing stage at Cottayam is also a very important matter on account of the increased traffic, and the granting of this would be a great boon not only to us, but to all shippers of produce and to passengers on the backwater. Another matter to which I wish to draw your attention is the telegraph subsidy, which we have been called upon to pay for last year, although we understood by the agreement between H. H. Government and ourselves that we should only pay for five years. We have been given up to this meeting to decide what we will do, if we withdraw the line will be stopped, and I think we all recognize the importance of a Telegraph Office, and personally I think we should pay our share, but at the same time I may tell you Government are endeavouring to lighten our burden of the share of the subsidy by opening an office at Kanjerapalli as well as keeping the one here.

Gentlemen, the last year of the past century will be a memorable one to the tea industry. Never before has such a concurrence of evils fallen upon us basking, as we were, in the sunshine of prosperity. The South African war upset the tea trade considerably and plague and famine have helped to cripple business generally, but over-production, which was bound to come sooner or later, is, you will admit, the chief cause. We read everywhere of the tea crisis, and things have indeed come to a crisis when we read of large tea concerns going into liquidation. The present low prices have been put down to several causes, amongst them being that poorer teas are being sent home than formerly; but you will note from your brokers' reports that, when the market is good, prices are

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

ood and teas are good: on the other hand, a bad market means bad rices, bad tea, and surely nobody can say that British-grown teas ave become poorer in quality by two to three pence per lb. in the ourse of a year. Several remedies have been suggested in the lanting papers, but I am afraid anything that may be done to ease ne present state of the market will be but a temporary relief, and, n the end (which for some does not seem far off), it will be the urvival of the fittest. But can we do nothing to delay the dreaded ay, when estates have to stop work is a natural question? We can o a great deal; but nothing better, in my opinion, than by every tea state in India subscribing its full quota to the foreign market nd for exploiting British-grown teas, especially on the continent, here only 10% of British teas are consumed to the 90% of China nd other countries' teas, whereas, in Great Britain and her colonies, ne percentages are in the reverse order. In these days of com- nercial enterprise and consequent fierce competition, push and dvertisement are the two essential qualities for success, but you annot utilize either without money. Money makes money, and noney is what the Indian Tea Association requires to push and dvertise our teas all over the world. I would, therefore, appeal o all to subscribe their full share to the fund (this district has lways paid its full quota), and I trust the two largest tea concerns n Travancore (who, I hear, refused to subscribe last year, but I peak open to correction) will subscribe this year.

Sweet are the uses of adversity, but sweeter are the uses of dvertisement; the powers of advertising are well known. Ask ny of the proprietors of successful businesses, what has given them he large profits and why their goods are known all over the world, hey will tell you—push and advertisement. To those who have ubscribed to the fund, I would say you are helping to raise the narket and have the satisfaction of knowing that you are doing the ight thing not only for your own benefit, but for others as well. To those who do not subscribe to any fund, I wish to point out hat your policy of drift will land you sooner than you expect on the shoals, and that by lying low and pocketing the profits vhich others have helped to give you is conduct unworthy of the community to which you belong. The question of reduced sup- olies as a remedy for the present state of the market is impossible, out the alternative remedy of increased consumption is within our reach.

Mr. Rosling's (Ceylon) scheme in the *Ceylon Times* is practi- cable, except as regards the 3rd condition, which is the most import- ant, and that is the resting of 10% of the acreage on all estates in India and Ceylon for two years. This would hit South India very hard, in view of the fact that vast extensions have taken place within the last few years in tea, and most of the tea will be in bearing this next year, and how can proprietors who have sunk their "little all" be expected to wait another two years before getting any return for their money, The scheme for India. without a doubt, is the tea cess of which this Association approves, and which it would like to see put into force. All voluntary schemes are objectionable, but a compulsory cess, on the same lines as the one in Ceylon, would leave no loop-hole for the present defaulters. It would be fair to all, and would give ample funds to push our tea thoroughly instead of the present half- hearted manner. The Indian Government are unfortunately blind to their own and our interests, and I am afraid the com- pulsory cess will not be sanctioned, but we can still join the other cess scheme known as Mr. Bruce's scheme, and I trust those who took it up originally will try and bring it into force. This Association is also in favour of this scheme.

In conclusion, gentlemen, if my views given to you are at all pessimistic, I have only endeavoured to put things straight to you, and, if any good wishes for the future from me can help you, they are yours. I sincerely trust things will improve and I wish you all, collectively and individually, a Prosperous New Year. I thank you for the honour you have done me in electing me your Vice-Chairman for the past year. My best thanks are due to the Com- mittee for their assistance and advice To the Honorary Secretary I wish to offer my grateful thanks for having made my task such a light and pleasant one—his advice from his knowledge of Association and local matters has been freely given me at all times—and it would be difficult to find a Secretary who has so devoted himself to the interests of the Association. I would also like to thank the Honorable Mr. Acworth for his counsel and information given me, and I know I voice not only my own sentiments, but those of all present when I say that we consider it a great privilege and honour to have had him present at our meetings and for him to be a resi- dent in this district.

I now call upon the Honorary Secretary to read his Annual Report.

Honorary Secretary's Annual Report.

MR. CHAIRMAN AND GENTLEMEN,—The year that has just closed has not been a prosperous one for the tea-planter. Tea prices have now fallen so low that it is only with the greatest care and economy that tea can be made to yield a dividend. Neither do the prospects for the current year seem any more hopeful. Such being the case, it is only natural we should seek the reasons for the present depressed state of our industry. Without a doubt three of the causes are: (1) over-production; (2) the enhanced import duty on tea in Great Britain; (3) the high rate of exchange. With regard to the first, the remedy is in our own hands, and there are only two possible ways of equalizing the supply and demand; one is by discontinuing all further extensions, and the second by push- ing our tea in foreign countries and ousting the China article, as we have already done in England. The Indian Tea Association are doing their utmost in this respect, but it is useless to expect them, or, indeed, any other Association to do this effectually unless suffi- cient funds are placed at their disposal for the purpose. Why Indian planters should be so apathetic in this respect is hard to imagine, more especially when they have before them the splendid example set by the Ceylon planter who, by his push and energy, is slowly but, nevertheless, successfully making a name for his tea in nearly every country in the world. The Ceylon planter, however, has a great advantage in that his funds for this purpose are with the help of Government obtained by a compulsory cess, whereas in India the sum required is met by voluntary subscriptions only, but why this should prevent the Indian planter from loyally supporting the American and Foreign Market Fund of the Indian Tea Association is inconceivable. This Association has, however, nothing to blame itself with, for we have always contributed our just quota.

Further, we have always been in favour of a compulsory cess, and at our last meeting we approved of what is now known as Mr. Bruce's scheme. This scheme has been laid before the U. P. A. S. I., who will, I am sure, not lose sight of it, for the Chairman, Mr. H. P. Hodgson, is keenly alive to the necessity of opening out new markets for our produce.

The enhanced import duty in England has put a stop to all increase in consumption even if it has not had the effect of decreasing it. The U. P. A. S. I. is now considering the advisability of approach- ing the British Government with a view to the removal of the extra 2d. on the introduction of the next budget.

The high rate of exchange at which we have to get our remittances is also a severe handicap, but nothing can be done to alter this now that Government has fixed the rate of exchange.

U. P. A. S. I. Annual Meeting.—The Labour Law has not yet come into force, and all Mr. Acworth was able to tell us was that it had not been lost sight of. The delay is, I believe, due to the Supreme Government, to whom the Bill was sent for their approval. I trust, however, that the Bill will soon be passed.

One of the most important subjects brought forward at the meeting was that of differential duties, and is one that merits your careful consideration during the present year.

There was a considerable balance of the funds subscribed towards the Paris Exhibition Fund, and it was decided that, after reserving a small sum to meet any future liabilities, the remainder should be uti- lised for advertising our tea and coffee. It is now proposed that a portion of this sum should be handed over to the Indian Tea Associa- tion who are about to open a tea establishment in one of the best parts of Paris. The U. P. A. S. I. have been asked to guarantee one-third of the expenses in connection with this shop, the I. T. A. paying two-thirds.

Bounty on Green Tea.—The Indian Tea Association has decided to offer a bounty of $1\frac{1}{2}$ annas per lb. on shipments of green tea sent direct from India to America. The conditions under which this bounty is obtainable have been previously circulated.

Paris Exhibition.—The Indian Tea exhibit at the exhibition seems to have met with considerable success, but whether the good impression that Indian tea has produced will have a lasting effect remains to be seen.

As you are already aware the exhibit sent by this Association

received honorable mention. Let us hope that our tea may receive a higher award at any future exhibitions to which it may be sent.

Travellers' Bungalow.—Messrs. Jopp & Sealy have been deputed by Government to submit plans and estimate for a travellers' bungalow to be erected on a suitable site in Peermaad, but I have not heard whether the same have been submitted.

Cattle Trespass.—H. H. Government regretted their inability to introduce a Cattle Trespass Act on the lines of the Ceylon ordinance, but promised to give the Association's proposals their consideration when the present Act is brought up for reconsideration.

Cattle-grazing Rules.—H. H. Government have agreed to modify para. 1 of these rules as published on 16th December, 1899, thus allowing planters to import 500 head of cattle, free of tax, but no notice to that effect has as yet been published in the Government *Gazette*.

Game Laws.—Our endeavours to induce Government to introduce a licensing clause into the Game Preservation Regulation have so far proved futile. Until guns and game licenses are made compulsory, the game laws are practically useless.

Rifle Corps.—The British Resident has formulated certain rules for the working of rifle clubs and has forwarded same to the Madras Government who, in turn, have forwarded them to Government of India for approval and sanction.

Ammayanayakanur Agency.—Mr. Kriparam Singh was appointed Association Agent in August last, from which date the Shoranoor agency ceased. The agent, however, says several members are still making use of other agents for getting up parcels, etc. If such be the case, I fail to see the use of the agent.

H. E. The Viceroy's Visit.—We can only regret that time did not permit of H. E. the Viceroy visiting this district and the Peryar works on his recent tour in South India, and also that his time was so fully occupied as to prevent him from receiving an address from the planters of Travancore.

Railways.—The first Railway in Travancore is now in course of construction, and it is to be hoped that others will soon follow, more particularly one to the foot of these hills; but at present H. H. Government do not see their way to undertake the preliminary survey asked for.

Roads and Communications.—Although the district roads, as well as the main road down the Ghaut, have much improved, the road from Moondahyam to Cottayam still leaves much to be desired. During the monsoon it was in such a state that it was only with the greatest difficulty a bandy could get along it. Several new diversions have been made and will require to be thoroughly well metalled if they are to remain in good repair. While these diversions have been in course of construction, the old part of the road seems to have received but little attention. The worst part of this road is, I believe, from 7th to 13th mile. Along this portion there is no side drain at all. The mud scraped off the road from time to time has been heaped in such a way to act as a drain, only to be washed away again by the first shower. I recently forwarded to the Chief Engineer a petition signed by over 100 cartmen in which they complained of the state of this road, but have received no acknowledgment of its receipt, although sent over a month ago.

Several bridges still remain to be completed. Why they should take so long to build is a mystery.

His Highness the Maharajah has sanctioned Rs.52,400 for reconstruction of the Peryar bridge, and it is to be hoped that this sum will not be spread over a series of years as is so often done with large works in the Travancore Public Works Department. I feel sure that many of the large engineering firms in the Madras Presidency would be only too glad to tender for such works were they asked to do so; and were the Government to adopt such a course, I think they would find it as advantageous to themselves as it most assuredly would be to the public.

Never has a year passed that this Association has not found it necessary to draw the attention of Government to the state of the roads either in or leading to the district. Were the Chief Engineer and some of the principal officials of the State to visit this district more frequently than they have done in the past, it would, I feel sure, be beneficial to all, for they would then be able to see for themselves the requirements of the district which is yearly increasing in importance, and the produce from which will more than double itself in the course of the next two or three years.

Covered Landing Stage at Cottayam.—This has not as yet received the sanction of H. H. Government. The need for such a landing stage is as great, if not greater, now than when we first asked for it two years ago, and I would suggest that it be again brought to the notice of Government.

Telegraph Subsidy.—The agreement entered into between this Association and H. H. Government expired on 25th April, 1899, and it was, therefore, with much surprise that a communication from the Dewan was received requesting payment of our share of the subsidy for year ending 31st March, 1900. This letter was followed by another to the effect that, if the Association was not prepared to renew the agreement, Government would ask the British authorities to discontinue the Peermaad line. After corresponding with the Dewan, the British Resident and Director-General of Telegraphs with a view to obtaining (*a*) a reduction in the cost and maintenance, and (*b*) fuller details of revenue and expenditure, but without result, you will be asked to-day to decide whether the agreement is to be renewed for a further period of five years. During the next five years our liability may possibly be less, as it has been proposed to open a combined Post and Telegraph Office at Kanjerapalli, the net proceeds of which will be credited to the Travancore Durbar.

Membership.—Twenty estates have been borne on the rolls of the Association with a total cultivated area of 6,661 acres, of which 6,439 acres are under tea and 222 acres under coffee cultivation.

Finances.—The accounts have been audited by Mr. E. Latter and are laid on the table. The expenditure for the year amounted to **Rs.2,116-4-0** inclusive of the subsidy paid to the Government Medical Officer and leaves a balance of **Rs.91-6-9** to be carried forward.

In accordance with the resolution passed at the General Meeting held on 12th May, 1900, **Rs.250** standing at credit of the Cheroot Fund was paid to the Travancore Branch of the Indian Famine Charitable Relief Fund through Mr. H. D. Deane.

In conclusion, I wish to tender my best thanks to the Committee, more especially to the Chairman, for the valuable help they have always so willingly given me, and to you, gentlemen, for the honour you have done me in intrusting to me the duties of Honorary Secretary during the past two years.

(Signed) A. E. VEALE,
Honorary Secretary.

The Hon'ble Mr. G. L. Acworth proposed that the report be adopted and the accounts passed. Seconded by Mr. H. D. Deane. Carried *nem. con.*

Rifle Clubs.—Read and recorded correspondence on the subject.

The Honorary Secretary was requested to circulate Madras G. O., No. 1137, dated 3rd November, 1900, for information of members.

Cardamoms.—The Honorary Secretary informed the meeting that the Cardamom Hills and Kanan Devan Planters' Association had declined the invitation sent them after the last meeting asking them to come to Peermaad and discuss the Cardamom policy of Government with a view to a satisfactory settlement of the points at issue.

Telegraph Subsidy.—Read and recorded correspondence with the British Resident, the Dewan, and Directer-General of Telegraphs.

The meeting having gone into Committee, after some discussion, the following resolution was proposed by Mr. R. S. Imray and seconded by Mr. G. N. Thomson:—"That this Association regrets, owing to the serious depression in the Tea industry, its inability to guarantee the present very heavy telegraph subsidy, and would, at the same time, point out that the general public, apart from the planting community, is benefited by the line without being called upon to contribute thereto."

The resolution on being put to the vote in general meeting was carried unanimously.

Tea Pests and Blights.—Read and recorded with satisfaction letter from Dr. Watt addressed to Hon'ble Mr. Acworth to the effect that he would visit this district either in March or April, provided he could obtain the sanction of the Government of India to his doing so.

London Dock Charges.—Read and recorded letter from the Chairman, U. P. A. S. I., giving cover to copy of a letter from Mr. H. M. Knight. Read and approved Honorary Secretary's letter, No. 19, dated 25th December in reply. The Hon'ble Mr. Acworth pointed out that Mr. Sanderson was the accredited representative of the U. P. A. S. I. on the London Chamber of Commerce. Such being the case, he was at a loss to understand Mr. Sanderson's refusal to give evidence before the Royal Commission now sitting.

Tea Cess.—Read and recorded correspondence.

Proposed Tea Establishment in Paris.—Read and recorded correspondence.

Proposed by Hon'ble Mr. Acworth and seconded by Mr. Veale:—"That this Association, whilst sympathizing with the coffee-planters, considers that the U. P. A. S. I. should not allow its name to be used as a guarantee for funds, other than those accruing from the Paris Exhibition, for the purpose of pushing tea, coffee, cinchona, or any other product in foreign markets. Carried *nem. con.*

Cart Rates and Cart Loads.—After considerable discussion, the following resolutions were proposed by Mr. G. N. Thomson and seconded by Hon'ble Mr. Acworth and carried unanimously:—"That the Honorary Secretary do instruct all Cottayam agents that the rates for carts plying between Cottayam and Peermaad will be 1½ annas per mile for full and ¾ annas per mile for half hire from November 1st to May 31st, and from June 1st to October 31st at 2 annas and 1 anna per mile for full and half hire, respectively."

"That loads be fixed at 5 full chests down and not less than 800 lbs. up."

The above resolutions to take effect from 15th February, 1901.

Land Tax.—Proposed by Mr. Leahy and seconded by Mr. Laurie: "That owing to the extreme depression in our staple industry, and to the falling off in consumption of the product, H. H. Government be respectfully approached with a view to a reduction in the tax of uncultivated lands." Carried *nem. con.*

Rule 4.—The amendment, as suggested by the Committee not meeting with general approval, was withdrawn.

Association Subscription.—Resolved "That the subscription for the current year be fixed at 2 annas per cultivated acre for the Association and at 3 annas for the Medical Fund."

Mr. Thomson proposed and Mr. Veale seconded "That a hearty vote of congratulation be sent to Mr. G. T. Mackenzie on his appointment as Britsh Resident in Travancore and Cochin.

Election of Officers.—The ballot resulted as under:—

Hon'ble Mr. G. L. Acworth, *Chairman.*
Mr. R. S. Imray, *Vice-Chairman.*
Mr. W. H. G. Leahy, *Honorary Secretary.*
Mr. H. M. Knight, Mr. B. Laurie, } *Committee.*

Votes of Thanks.—The Hon'ble Mr. G. L. Acworth, in proposing a vote of thanks to the retiring Honorary Secretary, said:—"I have the permission of your Chairman to carry out a duty, and I am sure you will all agree with me that it is a very pleasant duty. It is to propose a very cordial vote of thanks to our retiring Honorary Secretary. Mr. Veale. You all know how hard Mr. Veale has worked in our interest, but nobody who has not carried out the duties of an Association Honorary Secretary knows how very hard a tax the work is, if it is to be carried out efficiently. Mr. Veale has carried out his work most efficiently; he has spared himself neither time nor trouble, whilst his letters have been models of courtesy and lucid argument. I think you must all have been struck with them, as also with the businesslike manner in which he has transacted his business: in fact, Mr. Veale has brought up this Association to a point of perfection which is, I think, attained by very few District Associations in South India. I am sure I may say for you all that we thank him most heartily for what he has done for us; that we wish him a pleasant time at home, and a safe return to this country."

Seconded by Mr. Leahy and carried with acclamation.

Mr. Veale briefly replied thanking Mr. Acworth for the complimentary terms in which he had proposed the vote of thanks and the Association for the cordial manner in which they had carried it.

Mr. Veale proposed a hearty vote of thanks to Mr. Leahy for the efficient manner in which he had conducted their meetings. Carried with acclamation.

The meeting then terminated.

The following papers were laid on the table:—

Proceedings of the Wynaad Planters' Association (2).
Do. Nelliampathy „ „ (2).
Do. South Mysore „ „
Do. Shevaroy „ „ (3).
Do. Travancore Cardamom Hills Planters' Association.
Do. Nilgiri Planters' Association.
Planting Opinion, Vol. 9, Nos. 39 to 51, and Vol. 6, No. 1.
Travancore Government Gazette, Vol. 38, Nos. 39 to 52, and Vol. 39, No. 1.
Indian Tea Association Circulars.

PEERMAAD, *January 15th*, 1901.

(Signed) A. E. VEALE,
Late Honorary Secretary.

MARKET REPORT.

[*Per Mail advices of 4th January* 1901.]

COFFEE.

The London Commercial Record says:—The public market continues closed and auctions will not be resumed till the 8th instant. There has been scarcely any demand privately and no sales have been reported, so that quotations are nominally unaltered. In the market for "futures" there has been slight fluctuations, but the general tendency has been to rather higher prices. No auctions to-day. We quote:—

London ...	Santos ...	March delivery	... 32s 3d.
New York	... No. 7 Rio...	„	... 5·85 cents.
Hamburg...	... Santos	„	... 32 pf.
Havre	... Santos ...	„	... 39¼ francs.

Imports, Deliveries and Stock of Coffee in London, are as follows:—

	Stock.		Imports.	
	1900.	1899.	1900.	1899.
Tons ...	14,988	14,641	35,534	46,307
	Home Consumption.		Export.	
	1900.	1899.	1900.	1899.
Tons ...	16,566	16,787	18,627	29,270

	Tons.
The preceding figures exhibit—	
In the Imports a decrease this year of	10,773
Home Consumption a decrease of	221
Export a decrease of	10,643
Stock a decrease of	347

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	1,655,000	2,114,000	1,836,000	2,762,000
Santos ...	5,428,000	4,632,000	3,869,000	4,489,000
Total...	7,083,000	6,746,00	5,705,000	7,251,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 9 3/32d, previous day —d.

HAVRE, *Jan.* 3.—Good average Santos January opened steady at 38¾f. and closed quiet at 39¼f.; March opened at 39f. and closed at 39¼f., May opened at 39¼f. and closed at 39½f., September opened at 40f. and closed at 40¼f., December opened at 40¼f. and closed at 40½f.

HAMBURG, *Jan.* 3.—Good average Santos January opened steady at 31½pf. and closed quiet at 31pf., March opened at 32pf. and closed at 32pf., May opened at 32½pf. and closed at 39½pf., September opened at 33¼pf. and closed at 33pf, December opened at 33¾pf., and closed at 33½pf.

NEW YORK, *Jan.* 3.—Closing prices of No. 7 Rio were as follow:—

	Jan.	Feb.	Mar.	April.	May.
January 3...	5·65	5·75	5·85	5·90	5·95
January 2...	5·70	5·80	5·90	5·95	6·00

TEA.

INDIAN.—Business was resumed after the holidays on the 2nd instant when 24,500 packages were brought forward against 37,900 packages in the first week of 1900.

There was a fair all-round inquiry for useful descriptions on the basis of rates current at the closing sale of last year but the easier tendency on common. Quality generally was of an ordinary character, and at present fewer autumn flavoured parcels than usual have come forward, though several now catalogued.

For 22,100 packages on Estate Account 7⅛d per lb. was obtained, compared with 8d per lb. for 33,600 packages, and 8⅝d per lb. for 27,400 packages in the two preceding seasons.

It is satisfactory to note that deliveries are going on well, those for December being 12,345,000 lbs. versus 11,311,000 lbs. in 1899. Also that although for the six months ending 31st ultimo they were disappointing, owing to the heavy Customs payments prior to the advance on the duty in March, taken from 1st January to 31st December they totalled 144,704,000 lbs. whereas for the whole of 1899 they only reached 140,481,000 lbs.

CEYLON.—The market reopened on Tuesday with an auction comprising 21,700 packages opposed to 24,700 packages for the corresponding period in the twelve months before.

A good deal of irregularity in quotations was apparent, and on the whole inferior kinds passed in favour of buyers. Medium grades for the most part met a steady demand, but finest, though sparsely represented, occasionally received less attention.

The average is slightly over 7d per lb. On the 20th December, it was 7⅛d per lb. and 7¾d per lb. in 1899.

Clearances from the London Bonded Warehouses seem to have been favourably affected by the depressed prices existing for some time past, the amount withdrawn from 1st to 31st ultimo being 7,932,000 lbs making for the year just concluded 105,931,000 lbs. in contradistinction to 94,226,000 lbs. in 1899.

JAVA.—Rather more than 900 packages of direct import were submitted. The upper lines went without material alteration but there was a weaker feeling for the lower ones. For next Thursday 2,100 packages are advertised.

Deliveries.—The clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 31st December,	1900	16,302,079 lbs.
Do. do.	1899	15,615,813 ,,

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	22,367	2,114	24,481
Ceylon	19,783	1,926	21,709
Java ...	643	295	938
Total ...	42,793	4,335	47,128

Also 27 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated January 4th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1900-1901	931,505	739,562	30,528
1899-1900	1,002,651	710,767	33,875

25,138 *pkgs.* INDIAN
22,034 ,, CEYLON
938 ,, JAVA
} Total 48,110 packages were offered in public auction this week.

Duty last month was paid upon 16,302,079 lbs. of Tea, against 15,615,802 lbs. during December, 1899. This is the first instance since the declaration of the Budget in March last that the *duty payments* have shown an increase over the corresponding period of the previous year. It is therefore possible that the large quantity of Tea cleared in anticipation of the Budget may now be nearly worked off, and that figures may shortly assume their normal condition.

There is a strong feeling amongst some of the larger Indian and Ceylon Tea producers, that in view of the over-supplied condition of the market, it would be advantageous to resort to finer plucking during the coming season, with the double object of reducing the supply and improving the quality of the crop.

INDIAN.—The market re-opened with a small sale, comprising 25,138 packages; prices, except for commonest descriptions, showed little change from those ruling before Christmas. The Official wire gives exports to U. K for second half of December as 7,260,000 lbs., against 6,200,000 lbs., making the total from the commencement of the season to the 31st December, 144,690,000 lbs, against 135,992,000 lbs. same period 1899.

Week's average of Tea sold on Garden Account 1901, 21,718 pkgs., av. 6·89d. 1900, 33,972 pkgs., av. 8·07d.

Total Tea sold on Garden Account 1st June 1900 to date, 757,770 pkgs., av. 7 58d. 1900, 761,858 pkgs., av. 8·47d.

CEYLON.—The opening sale passed with slightly easier prices for poor liquoring Teas, other grades remaining at about previous quotations, except that there was rather more enquiry for Teas of really good quality. The Official telegram gives exports to U.K. for December as 11,250,000 lbs., against 11,000,000 lbs. in December, 1899, and estimates quantity for January as 10 to 10½ millions, making the exports from 1st January to 31st December 114,500,000 lbs., against 103,500,000 lbs. in 1899. Average for week 7·07d, against 7·76d in 1899.

Ceylon Tea sold on Garden Account 1st January to date, 18,387 pkgs., av. 7·07d. 1900, 25,413 pkgs., av. 7·76d.

JAVA.—938 packages were brought to auction representing Invoices from six Estates. The sale passed somewhat slowly at rather easier prices, several parcels being withdrawn.

COCOA.

The market is quiet, operators generally awaiting the auctions of Tuesday next. Private transactions include greyish red Trinidad at 68s, fair to good Grenada at 68s to 70s, fermented Dominica at 66s to 69s and Ceylon at 80s to 82s per cwt.

PEPPER.

BLACK is dearer. About 100 bags fair Singapore sold on the spot at 6¼d for fair, also some Tellicherry at 6¼d. For arrival about 100 tons sold—January-March and March-May (s.) at 6$\frac{7}{16}$d to 6$\frac{9}{16}$d per lb.

WHITE is also rather higher. Singapore on the spot selling at 9¼d, Penang at 8½d to 8$\frac{9}{16}$d, and to arrive at 9$\frac{9}{16}$d and 8$\frac{13}{16}$d per lb. respectively for February-April shipment.

CINCHONA.

To the Amsterdam auctions to be held on January 10, 1,170 bales and 27 cases have been added, so that the total amount to be offered on that date is now 7,275 bales and 212 cases, weighing 657,316 kilos. The shipments from Java during December amounted to 1,091,000 Amsterdam lbs.

The exports from British India for *six* months ended September were:—

	1900.	1899.	1898.
Lbs....	1,525,617	1,379,508	818,283

The exports from Holland for the ten months ended October were:—

	1900.	1899.	1898.
Kilos.	4,002,000	4,712,000	4,050,000

QUININE.

QUININE has been a dead letter on this market, and not a single transaction has been reported; prices are, therefore, nominal. The nearest spot price is 1s 1¼d, with sellers of March at 1s 1d and May at 1s 1½d. At the auction of quinine held in Batavia on December 28, 3,900 kilos. Ed. II. were sold at the equivalent of 19fl. per kilo. (against 22fl. paid at the November auctions), while Ed. III. was bought in. The next auction will be held on January 16.

(AVERAGE FOR ALL INDIA 6·89d., JANUARY 4TH).

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.
Travancore ...	275	5·72												
Fairfield ...	103	6½	22	7	35	5½	26	9	14	4⅜	1	4½	5	4¾
Trav T Est Co BA...	172	5¼	52	5¾	63	4⅝	57	5	...	...	...	...	...	...

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

VOL. VI.] MADRAS, SATURDAY, FEBRUARY 2, 1901. [No. 5.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 8th instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad. *January* 22*nd*, 1901.—*Crop*—Progressing very slowly from there being so much white fruit. *Blossom*—On most estates a small blossom of about ½ a cwt. an acre has been out since Monday : some estates have had much more. We shall have to be prepared to pulp in September, or by the 1st of October this coming season. *Labour*—Abundant. *Health*—Good.

THE POSITION OF THE TEA INDUSTRY.

SINCE writing last week on "Tea—Supply and Demand," we have received a copy of a circular issued by the Indian Tea Association dealing with the subject of the Position of the Tea Industry. This circular is reprinted in our U. P. A. S. I. section, and copies have been circulated by the Secretary, U. P. A. S. I., to the various District Planting Associations in Southern India. From one point of view, it seems a pity that the members of the Committee of the I. T. A. should not have expressed their own opinions more definitely. Possibly, however, they wished to avoid any appearance of a desire to dictate to planters, or even bias their opinions, and as they have to deal with a few planters in the South, with whom they are not in touch, as well as a good many in the North, whose feelings they may be in a position to gauge ; this cautious procedure may be wise. Their statement of the position and of the main remedies suggested is not quite the same as that which we gave last week, though, as far as it goes, it is sufficiently near to our statement to call for little special comment. The suggestions they put forward for consideration are, in addition to that of Mr. Rosling (Ceylon) :—

(*a*) The temporary abandonment of 10 per cent. of the area in full bearing.
(*b*) The fixing of a date for the closing of manufacture in each district.
(*c*) Generally finer plucking.
(*d*) That a percentage of the crop, consisting of low grade teas, should be placed at the disposal of the Indian Tea Association to be utilised for encouraging the consumption of tea among the Natives of India.

Though slightly different in detail from the proposals alluded to in our last, they have the same general characteristic, in that the successful application of any one of them would involve a practically unanimous agreement among Indian and Ceylon tea-planters. To our mind, they would involve even more, for we should have no faith in such an agreement unshared by tea cultivators in China and Japan.

On two points, at least, we are in full accord with the General Committee of the I. T. A. : "(1) It seems clear that any action, to be effective, must be adopted, and carried out simultaneously, by Indian and Ceylon growers. Diminution of production by India alone, or by Ceylon alone, would merely mean the transference of a portion of the trade from one to the other without any rise in prices ; (2) But the circumstances and conditions of the industry, not only as between India and Ceylon, but even as between the different tea-producing districts of India itself, are so diverse as to render effective combination peculiarly difficult." To our eyes this extreme difficulty amounts to an impossibility, but it will be interesting to note what opinions are expressed by the Planting Associations concerned and by any individual planters who may express their personal opinions without reference to those of Associations. We would also lay stress on the fact that Proprietors and Agents are invited not merely to state what they think of the suggestions put forward, but also to make any other proposals and to offer any remarks they may think appropriate. A wide field of discussion is thus opened. Practically, a *plébiscite* of planters' opinions is opened, and while the I. T. A. does not promise to commit itself to the opinion of the majority or of any section or individual, it obviously intends to

give deep consideration to a matter that is felt to be of vital moment to the Tea industry.

As often occurs in such cases, a point not touched upon by the circular is perhaps as important as any with which it deals. The absence of reference to China and Japan is remarkable. It appears to be assumed that India and Ceylon can fix the prices of their own teas without reference to the competition of China and Japan. That we differ from this view, has been shown in our previous remarks on the subject. Whether we deal with fine teas or coarse, with black or green leaf, we have to take Far Eastern rivalry into consideration. Not more than a few weeks ago, the London *Daily Mail*, which had, but a short time earlier, staunchly advocated the claims of British-grown teas, alluded to a certain blend of China leaf (consumed by her late Majesty Queen Victoria) as the finest in the world. It is clear from this that India and Ceylon have not yet convinced the world that the finest teas are to be had alone from them, or one of them. As for coarse sorts,—well, we do not suppose that any planter will deny that the competition of China should not be lost sight of, or that if Indian and Ceylon prices are raised a considerable demand for inferior leaf will be diverted from British teas to those of the Celestial Empire. If, then, coarse and fine teas would probably be affected by an enhancement of price such as is now under discussion, what about mediums? It can scarcely be urged that a different law applies to them, or that the circumstances affecting consumption are so entirely different as to preclude mediums from feeling the effect of prices that would influence both fine and coarse sorts. If our view be right, any scheme of reducing production must fail so long as India and Ceylon act without the co-operation of China and Japan. We doubt if a sufficient approach to unanimity can ever be attained on the part of British growers; we are sure that no such unanimity would be of permanent benefit to them if these competitors pushed ahead with production, at the same time pushing demand.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

The Demise of Queen Victoria.

The Chairman of the United Planters' Association of Southern India (Incorporated) has despatched the following telegram to H. E. the Viceroy :—

"This Association desires to convey through Your Excellency its heartfelt sorrow for irreparable loss sustained by the death of our beloved Queen and respectfully to express deepest sympathy with the Royal Family in its bereavement."

* * *

A Circular of the Indian Tea Association, Calcutta, under date 17th January 1901, issues the subjoined papers upon this subject for information.

No. 36-1901, dated Calcutta, 9th January 1901.

From—THE SECRETARY, Bengal Chamber of Commerce,

To—THE SECRETARY, Indian Tea Association.

Prospects of Indian Tea in Russia.

I am directed by the Committee of the Bengal Chamber of Commerce to forward, for the information of the General Committee of the Indian Tea Association, copy of an interesting letter, dated 29th November, which they have received from Major G. Chenevix Trench, Her Britannic Majesty's Consul in Seistan, communicating the purport of an interesting conversation which Major Chenevix Trench has had with the Russian Vice-Consul in Seistan on the subject of Indian tea.

It will be seen from the letter that the Russian Vice-Consul having tasted some Indian tea which Major Chenevix-Trench had received, and which had been bought in Calcutta at 14 annas per pound, remarked that if such flavoured tea could be sent to St. Petersburgh by the Seistan route, and not by sea, he was sure it would fetch a good price and very soon oust Chinese tea in Moscow and St. Petersburgh. The price of tea in Russia is apparently governed by the mode of its transit to that country, as there appears to be a prejudice against teas transmitted by sea, the idea being that the flavour was spoilt by the sea route. The information given appears to be of importance to the tea trade, and your Committee will, no doubt, see their way to make use of it. I shall have much pleasure in passing on any further communications I may receive from Major Chenevix-Trench as the result of the reference which the Russian Vice-Consul has made to St. Petersburgh and Moscow.

No. 202, dated Seistan, 29th November, 1900.

From

MAJOR G. CHENEVIX-TRENCH,
Her Britannic Majesty's Consul,

To

THE BENGAL CHAMBER OF COMMERCE,
Calcutta.

I had an interesting conversation with the Russian Vice-Consul here on the subject of Indian tea. As he is a man well versed in Russian trade and taste, I send you the purport of the conversation in order that you may circulate it among the tea growers connected with your Chamber.

The Russian Consul said he would like me to taste some Chinese tea, which he had bought in Petersburgh for 4 roubles a lb., which he said was considered good tea there. though by no means tea of the highest price obtainable. The speciality he said of this tea was that it had never crossed the sea. Russians, he said, always thought that the sea ruined the flavour of tea and consequently those that could afford to pay a good price, asked always for tea which had come from China by the land route. I tasted the tea and found that it was not nearly as good as some I had recently received from a friend in Calcutta. This opinion was equally shared by the Russian Consul, who was amazed at my telling him that the tea I gave him to drink was bought in Calcutta at 14 annas a lb. He at once remarked that if such flavoured tea could be sent to Petersburgh by the Seistan route, and not by sea, he was sure it would fetch a good price, and very soon oust Chinese tea in Moscow and Petersburgh. He said that the price of tea in Russia was almost entirely governed by, whether it had come by land or sea, quite independent of the obvious extra cost of land-borne tea. The Russian's desire for land-borne tea amounted to a prejudice. He at once agreed to send samples of my tea to Petersburgh, Moscow, and his Customs Officials, who always had expert tea tasters in their employ. I shall naturally inform you of their opinion. In the meanwhile I have thought that this information might be made use of independently of the Russian Vice-Consul's action by Indian tea growers.

* * *

Indian Tea Exports.

The General Committee of the Indian Tea Association Calcutta, have issued under date 17th instant, their Monthly Return of Sailings and Daily Customs Entries of Tea from

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nicholson's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf people unable to procure the Ear Drums, may have them free.

Address—No. 989 D, THE NICHOLSON INSTITUTE,
Longcott, Gunnersbury,
London

[w. 26-5-00—26-5-1901.]

alcutta, and also a Return of Exports of Ceylon Tea for four ears up to 17th December, 1900. It says :—

Exports of Indian Tea from Calcutta.

	1900. Lbs.	1899. Lbs.	1898 Lbs.
ailings to Great Britain in December	19,606,953	14,524,356	11,465,265
ailings to Great Britain from 1st April to 31st December .	140,411,259	131,206,687	120,175,238
ailings to Australia and New Zealand in December	1,290,735	2,284,310	907,428
ailings to Australia and New Zealand from 1st April to 31st December	8,960,548	7,722,587	5,244,487
ailings to America in December ..	267,483	1,232,779	441,962
ailings to America from 1st April to 31st December	3,499,565	5,713,251	2,778,394
ailings to other places in December. (See reverse)	1,657,855	796,038	1,088,542
ailings to other places from 1st April to 31st December ...	8,802,743	7,110,903	7,924,416
otal Sailings from 1st April to 31st December	161,674,115	151,753,428	136,122,535

				Lbs.
Daily Customs Entries for Export to Great Britain from 1st April to 31st December	...	...	1900 ...	144,747,257
Do.	do.	do.	... 1899 ...	136,289,417

Exports of Tea from Ceylon.

Total Exports from 1st January to 17th December,			1900 ...	139,270,495
Do.	do.	do.	1899 ...	120,903,486
Do.	do.	do.	1898 ...	111,447,708
Do.	do.	do.	1897 ...	108,730,015

Statement showing the Exports of Tea to Sundry Ports during the month of December, 1900.

FOREIGN PORTS.

	Lbs.	
Trieste	260	
Marseilles	426	
Bremerhaven	88,663	
Hamburg	66,906	
Naples	40	
Odessa	49,869	
Constantinople	48,197	
Berbera	1,300	
Cape Town	2,400	
Alexandria	20	
Suez	16,725	
Mombassa	600	
Aden	28,540	
Jeddah	46,376	
Hong-Kong	82,180*	
Bushire	34,778	
Bankok	120	
Penang	720	
Singapore	8,786	
Baghdad	1,960	
Beyrouth	960	
Bussora	22,912	
Jaffa	3,334	
Trebizonde	214,488	
		720,560 lbs.
Bombay	913,880	
Kurrachee	2,620	
Other Indian Ports	20,795	
		937,295 ,,
Total... ...		1,657,855 ,,

* It is understood that the bulk of this tea consists of transhipments for the United States and Canada.

* * *

At the request of the Indian Tea Association, Calcutta, copies of the following circular, dated 19th ultimo, and addressed to all Proprietors and Agents of tea estates, have been forwarded to the various District Planting Associations in Southern India :—

Position of the Tea Industry.

I am directed by the General Committee of the Indian Tea Association to draw your attention to the following telegram, which they have received from the Committee of the Association in London :—

"Movement initiated to curtail output 10 per cent. India and Ceylon. Would a proposal be entertained? Urge the matter forward all you can."

2. The Committee think all Proprietors and Agents will agree with them that, in view of the present position of the industry, action designed to curtail the output of tea, and consequently to enhance prices, is most desirable.

The Committee, consequently, are not at present prepared to submit to the Indian industry any particular scheme, the adoption of which would, in their opinion, bring about the desired end. They rather feel the subject to be of such great importance as to make it necessary for them, in the first instance, to consult Proprietors and Agents generally respecting it. In doing so they would draw attention to the annexed copy of a letter which has been lately addressed by the Chairman of the Ceylon Planters' Association to a Ceylon newspaper. Mr. Rosling has there put forward certain proposals, the adoption of one of which might, he thinks, reduce the output of tea by the required amount. Somewhat similar suggestions have reached the Committee from other sources; and upon these they would be glad to receive the opinions of all Proprietors and Agents. The suggestions are :—

3. I am therefore now to ask you to favour the General Committee by an early date with your opinion as to whether any one of the foregoing proposals, or any combination of them, is practicable. And, further, whether you consider any one of them to be such as is likely to meet with the support of a large majority of Tea growers. I am also to suggest that, should you have other proposals to make, you should communicate them to the General Committee, together with any remarks on the subject generally that you may think well to offer.

Copy of a letter, dated 29th December 1900, *from the Chairman, Ceylon Planters' Association, to the Editor of the* Times of Ceylon.

It is generally admitted that the present position of the Tea Planting Industry is, owing to over-production, very unsatisfactory; and unless some action is taken to curtail supplies, we must see the painful and prolonged process, "the survival of the fittest," gradually force some of the poorer properties out of cultivation.

This process must necessarily be a prolonged one, as there are many estates which can just pay their way, and which will continue to produce so long as there is no actual loss.

It has been suggested by certain gentlemen, amongst others, Mr. A. Thomson, of Messrs. Whittall & Co., that, in view of the enormous quantities of tea being produced, we should endeavour to form a combination by which the requirements of the various markets may be met without making any one of them the dumping ground for our surplus crops.

It is necessary that any steps taken by Ceylon should receive the full support of India, otherwise curtailment of shipments from here would merely allow of increased exports from Calcutta.

The three possible methods suggested for reducing our crops are—

(1) Finer plucking, which would tend to reduce the output whilst giving a better quality of tea.

(2) Making a certain percentage into green teas.

(3) Resting a certain percentage of the acreage in bearing.

The objection to No. 1 is that we should probably have too much fine tea produced, with a corresponding fall in its value, and

directly the better and poorer classes of tea approximated in value there would be a tendency to pluck coarse again.

The objections to No. 2 are (*a*) the green tea market is not as yet sufficiently developed to afford material relief; and (*b*) the difficulty of making both black and green teas in the same factory.

The advantages of No. 3 are that, if you do not pluck a field for a certain number of months, you rest your bushes, and you can hardly bring them into plucking again without pruning, thus doing away to a certain extent with a possible temptation to break out of the combination. The net result would be a reduced yield and improved bushes.

I propose that all estate proprietors or their agents in Ceylon and India be asked to rest 10 per cent. of their acreage in bearing for two years from the 1st April 1901 to 31st March 1903 This arrangement to be subject to *at least* 80 per cent. of the acreage in both countries agreeing to it in writing.

An arrangement such as this should ensure a reduction of from 15 to 20 million lbs., and I feel convinced that with this quantity taken off the market, the rise in price would more than compensate for the amount of leaf lost.

At the end of two years, the green tea market should be largely developed, and in the black tea market consumption may have once more overtaken production.

Yours, etc.,
EDWARD ROSLING.

NOTES

Coffee. Reuter states that Stocks in London amount to 14,891 tons. Fortnight's landings, 900 tons ; deliveries, 1,300 tons.

Cheap Coffee. Coffee begins to look very cheap, says the *American Grocer*, adding, "It is always safe to buy ahead of requirements when prices are abnormally low."

Cocoa in Ceylon. Mr. P. D. Young writes to the *Times of Ceylon* :—"Cocoa has done very well on this place (Woodthorpe, Katugastota): 125 acres gave me 336 cwts., and I hope to get 350 this year besides tea and cocoanuts."

Calcutta Tea Sales. On the 24th ultimo there was a small sale, only 10,000 packages being offered. There was brisk competition, prices all round showing a slight advance ; 5½ per cent. more tea was shipped to Great Britain ; 17¼ per cent. more to Australia ; while the shipments to America show a decrease of 9½ per cent. to date.

Artificial Manures poisoning Vegetables. Dr. F. W. Koeler writes to a Colombo paper :—"I beg to inform you that Cabbages and Turnips, manured with superphosphates, are surely poisonous ; and I estimate the quantity of cabbages or turnips which should empoison a man to be at least *one ton* daily." It seems fairly safe, after all !!

Retirements. A Ceylon paper announces that Mr. F. G. A. Lane, Proprietor of Blair Athol, and ex-Chairman of the P. A., is not returning to Ceylon, and that Mr. A. Melville White, another ex-Chairman, is also shortly leaving for good. Both these gentlemen were high up on the list for nomination as Planting Member of the Legislative Council.

London Tea Sales. On 24th ultimo, according to Messrs. Gow, Wilson & Stanton's report to Colombo, 26,000 packages Ceylon Tea were sold out of 28,000 offered. The average price realised was 7% which shows advance of ½d. Fine teas were firm, and, in some cases, dearer, and generally full rates were realised. Of Indian Teas 52,000 packages were offered, and 47,000 sold average price 7d.

The Over-production Question. The London correspondent of the *Times of Ceylon* cabled on the 24th ultimo :—The resolution passed at the meeting of Indian and Ceylon tea producers on Wednesday was expressed in general terms ; but the meeting favoured the reduction of output on the basis of acreage, and left Ceylon to say whether it wishes the intervention of Government or a voluntary scheme

Colombo Tea Sales. On the 23rd ultimo the market generally was firm, but very irregular common leaf teas being if anything somewhat firmer. Quality continues to improve, says the *Times of Ceylon*. After 1-30 p.m. the sale was postponed until 10-30 a.m. next day Messrs. Forbes & Walker's large lots only were dealt with The feeling in the room was gloomy, owing to the death of our beloved Sovereign, so keenly and individually felt.

Ceylon Tea in the United States. *Apropos* of the desire to push Ceylon and Indian tea in foreign markets, and especially in the United States, it may interest our readers to learn that Mr. R. V Webster lately made an extensive tour through the States When in Ceylon recently, he remarked, "unless there is some change in the methods of the present tea campaign in that country I would strongly recommend all Ceylon firms to leave that market alone."

Research Work in Ceylon. "At Hakgala, we have just learnt," a Nuwara Eliya correspondent writes to the *Ceylon Observer*, "that a laboratory is being built at the Gardens with a special view to Research Work being carried on *there*, as well as at Peradeniya, by Professors who come out to Ceylon for that purpose. Rooms are also to be put up adjoining the laboratory for the scientists to stay in. So far only the timber is being felled ready for the building but they hope to have the work in hand shortly."

Pepper in 1900. The price of pepper, says the *Chemist and Druggist*, has varied within narrow limits throughout the year, but the tendency has been upwards owing to the continual diminution of stocks throughout the world, caused by the shipments from the countries of production still falling short. Singapore black, which at the beginning of the year was worth $5\frac{3}{4}d.$, is now quoted $6\frac{5}{16}d.$ White pepper is only fractionally dearer Penang being $8\frac{9}{16}d.$ against $8\frac{3}{8}d.$ this time last year.

Seeing other Districts. Mr. Robert L. Proudlock, Curator of the Government Botanic Gardens Nilgiris, has been visiting Ceylon lately. Mr. John Cameron Superintendent of Mysore Government Gardens, lately proceeded to Calcutta *en route* to some of the Government Gardens in Bengal and the North. May both gentlemen return primed with fresh knowledge in regard to planting products and other matters. Both are fully competent to take advantage of opportunities such as their travels will certainly have afforded them.

Sericulture in Brazil. The Brazilian Government offer the following prizes for sericulture :—

One of 20 contos, one of 10, and three of 5 contos de reis each, o silk worm breeders resident in this State, who, within the pace of two successive years, shall present to the Secretary f Agriculture, and prove the production of the best and argest quantity of spun silk from the worm. One of the onditions is that no one is qualified to compete, who cannot prove to have invested an amount at least equal to the prize competed for, in plant and stock.

The Twentieth Century.

Thus the *American Agriculturist:* —Let your face be to the future. The old century is gasping its last. Wonderful as it has been, every thoughtful man and woman believes that the twentieth century will be still better and grander. Preparation for the present and for the future should now concern us. Let the dead century bury its dead—it is the living, the new century with which we now have to deal. It will offer better opportunities for every man, woman and child now living than was the case with our ancestors 100 years ago. Our duty is not to mourn "for the old days," but to adapt ourselves to the onward march of civilization and the steady advance of progress.

The Planters' Association of Ceylon.

The Annual General Meeting will be held at Kandy, on Saturday, the 16th instant. The following are the contents of the agenda paper :—(1) To receive the annual report; (2) to elect a Chairman, Secretary, and Committee for the ensuing year ; (3) to receive the report of the "Thirty Committee," (4) to appoint 24 members of the Planters' Association of Ceylon to serve on the "Thirty Committee" for 1901 ; (5) to appoint a Committee to manage the affairs of the Labour Federation of Ceylon for the year 1901 ; (6) to appoint a Cacao Committee of the Planters' Association of Ceylon ; (7) to receive abstract of accounts of the Planters' Benevolent Fund for the year 1900 ; (8) to consider the question of a reduction of railway rates.

Amsterdam Bark Sales.

At the auction of cinchona held at Amsterdam on the 10th ultimo, 7,275 bales and 212 cases were offered containing 30,935 kilos. quinine sulphate, or an average percentage for the manufacturing-bark of 5·13 per cent., against 5·29 per cent. for the December auctions, and an average of 5·26 per cent. for the ten Dutch auctions held in 1900. Of the above 7,487 packages, 6,876 packages sold at an average unit of 7·25c. per half-kilo., against 8c. per half-kilo., paid at the December auctions. The following were the approximate quantities of quinine sulphate purchased by the principal buyers :—English and American factories, who purchased the equivalent of 9,515 kilos. ; the Brunswick factory, 6,147 kilos. ; the Mannheim and Amsterdam factories, 5,101 kilos. ; the Frankfort-on-Main and Stuttgart factories, 4,999 kilos. ; and various buyers, 2,553 kilos. The prices paid for the manufacturing-bark ranged from 4¼c. to 89c. per half-kilo, and for druggists' bark from 10c. to 103c. per half-kilo.

Tea Rooms in London.

The London correspondent of a Colombo paper writes :—"It is quite the fashion now for ladies to preside over luncheon and tea rooms. I counted no less than six afternoon tea rooms in Bond-street last week, and all those elegant and charming establishments are kept by ladies—real ladies, gentlewomen. A few years ago the only place you could possibly get a cup of tea or coffee to refresh you after a tiring afternoon of picture galleries, shopping, or having your hair shampooed, was a confectioner's shop. Now Bond-street, bristles with spacious and artistically furnished tea-rooms, where you are waited on by graceful and gracious ladies, supplied with the most dainty and delicious fare, served upon the most delicate china, and where sweet stringed music is discoursed while you sip your chocolate, or tea, as the case may be, and nibble your Neapolitan sandwiches on tiny hot crisp scones. The particularly delightful tea-house in which I was regaled last week is called "The Old Oak House." I think this afternoon-tea business most suitable for educated women, all the lady waitresses so demure and soft-footed in their pretty grey gowns, with white sleeves and aprons, are well-bred and well educated young women, and I am told are also well-paid when they prove themselves intelligent and capable."

Indian Tea.

Capital remarks :—The Indian Tea Association have addressed two lengthy letters to Government on the distressful condition of the tea industry and the need it has for assistance. In the one, it is asked that efforts may be made to reduce the duty at home from sixpence to fourpence ; in the other, that a small export duty may be levied on tea here, as is done in Ceylon, the proceeds of which may be applied in pushing the sale of Indian tea in foreign countries. What has really brought the tea industry to its present position is "Over-production" spelt large. The Currency Legislation of 1893 and the increase in duty in 1899 brought matters more speedily to a climax ; but that climax was only a question of time. A reduction in the duty will, no doubt, help things temporarily, and the creation of new markets is most desirable, but if tea-growers will deliberately ignore the laws of supply and demand, they can only blame themselves for the consequence. Mr. Wilkins Micawber summed up the situation when he submitted that an income of £1 and in expenditure of 19s. 11½d. meant happiness, inversely it is the same with supply and demand. If the former is in excess of the latter, there is trouble for the producer. No Currency Laws or Import Duties will alter this ; and we see that the Association recognizes the fact.

Coffee in London.

The *Produce Markets' Review*, of 5th ultimo, says :—Although the deliveries, stocks, etc., of the principal European and American ports on the 1st instant will not be known for a few days, the London figures are available. It will be seen that the home consumption for the year shows a reduction compared with 1899 to the extent of 286 tons. Though, not a large amount, it is unsatisfactory that there should be a falling off at all, and especially so when it is remembered that many hundreds of tons were taken during the year by the War Office for the troops in South Africa, and, therefore, the falling off in the actual home consumption is increased by the same amount. On the other hand, it should be borne in mind that the deliveries in the last two months of 1899 were increased very considerably, owing to the exceptionally low prices ruling, and that during the last four months trade has been abnormally quiet, and it is reasonable to expect that the interior stocks are correspondingly lower, and that a decidedly improved demand may be looked for during the next month or two. So far this year only a very small trade has been done, but with the recommencement of auctions on Tuesday next an

improvement may be looked for. In the terminal market only small transactions have been recorded, and quotations are practically unchanged.

Disease among Cardamoms.

Mr. J. W. Mollison, Deputy Director of Agriculture, Poona, states in a report on Cardamoms in India that in most of the Kanara gardens a so-called disease has appeared in the cardamom crops and is restricting cultivation. The affected plants do not present any particular indications of disease, but simply do not thrive. The leaves in parts become yellow and wither. The effect is that the plants have no vigor of growth. It may be taken as certain that the cardamom, like any other cultivated plant, degenerates when grown for long periods under precisely the same conditions of soil and climate and without any change in methods of propagation or reproduction. The vigour of any cultivated plant may be renewed from time to time by change of soil, change of seed, by rotation of crops and by other regenerating influences. The Kanara cardamom crops have for a long period been grown without any changes in the system of manuring, propagation, and general cultivation, and Mr. Mollison is of opinion that the diseased conditions referred to have been induced by these causes. However, within recent years, borers and grubs have caused considerable damage to the cardamom crops, and the cultivators assert as a reason, that they have been prevented by forest conservation from using for leaf-mould the leaves and twigs of certain trees containing astringent properties and incapable of harbouring insect life. To make matters worse, snakes and rats are particularly fond of the fruit of the cardamom plant."

Coffee Poisoning.

The *American Grocer* says:—The subject of poisoning from an excessive use of coffee was discussed at the last gathering of the New York State Medical Association. "Coffee," said Dr. Feszynsky, "is a cardiac stimulant. It quickens the imagination and the memory, dispels all tendency to sleepiness, and enables the user to do work of a high quality and for a longer continuous period than is possible under other conditions. In moderation, it is good. In excess, it produces all the characteristic symptoms of alcohol poisoning—namely, tremor, rapid pulse, disturbed digestion, and the depression of neurasthenia. This condition is often mistaken for a case of alcoholic poisoning. It closely resembles that, as well as the condition of the morphia fiend. Great care is necessary to avoid overlooking it, because the universal use of coffee makes it unlikely to be considered as the source of these complicated nervous symptoms." In the discussion at the State Medical Association meeting which followed the reading of Dr. Feszynsky's paper, a physician, who has devoted several years to the investigation of coffee poisoning, told of an amusing case in his own practice. It seems that he was called to attend a prominent member of the Women's Christian Temperance Union, who was very ill and supposed to be at the point of death from nervous troubles. "I found her in very bad condition," said the Doctor. "And then I found in her room a coffee-pot which supplied her with some dozen cups a day. She was drinking coffee in place of rational food and drink, and was fairly poisoned." It was the general opinion of the physicians present that two cups of coffee a day were good—and more than that a source of danger.

LETTERS TO THE EDITOR.

COFFEE.

NEW YORK, *December 31st*, 1900.

Our last circular was issued July 6th, 1900, and as regards market probabilities, we refer our readers to that circular for the reason that conditions outlined at that time have proved to be entirely correct, with the exception that the current crops in Brazil will far exceed our expectations of that time. According to the receipts in Rio and Santos up to date, and also the estimates recently received from different Brazil houses, the probability exists of the current Rio and Santos crops turning out 1,000,000 bags larger, *i.e*, instead of 8¾ to 9 millions, as we last July promised, they will reach 9,750,000 to 10,000,000 bags.

As far as *supplies* are concerned there can be no doubt that in the year 1901 they will exceed the largest figures ever known. Three years ago, when we were in the *record* crop of 10,500,000 bags—in Rio and Santos—the visible supply for the world, January 1st, 1898, was 6,357,000 bags, and allowing for some decrease during the current month of December.

The visible supply for the world, January 1st, 1901, will be fully 7,500,000 bags.

With such a difference as this we compare the prices of options in those years:—

March, 1898, Spot month in Havre sold at Frcs. 33·½.

March, 1898, Spot month in Hamburg sold at 27·½ Pf.

March, 1898, Spot month in New York sold at 4·85,

while to-day the same option is selling at fully *Twenty Per Cent. Higher.*

During the lowest prices of 1899, from July 1st, when Coffee began to run down to the lowest prices on record the visible supply for the world July 1st, 1899, was 6,200,000 Bags, and in all probability the visible supply for the world July 1st, 1901, will be much larger than it was then—so on the basis of *Supplies*, values now are far above the level of the market of the past three years, and what is most significant, the prospects of the growing crops in Brazil, without contradiction, so far, from any quarter, are the best on record, promising figures as high as 11,000,000 bags and above.

As far as *Consumption* is concerned, the ideas we expressed in our July circular have turned out quite correct. Large transfers from the seaports to the interior do not mean consumption, and cannot be taken as a sufficient guide, and all ideas such as were put forward last year, to convince people that consumption had overtaken production, must be totally dismissed. *Production* continues to exceed consumption.

Now as regards the influence of the *rate of exchange* in Brazil, the course of the market since July has given the strongest evidence in support of the arguments we then advanced. Events have proven the correctness of our contention that supply and demand are the only controlling factors, and not the question as to the division of the price in Brazil between the paper currency value and the cost and freight or gold price at the seaports in Brazil. The world will only pay a price for a staple article in keeping with its requirements, and as Brazil has produced coffee season after season, such as from 1882 to 1886, at one-half of the currency figure now prevailing, there is no reason why Brazil cannot continue to do so in the future.

Necessity and experience are the best teachers. Free labour has been shown to be more advantageous to the cotton farmers of the Southern States here than slave labour, and the old Portuguese stock in Brazil is fully as capable and economical in running their plantations as any set of farmers in the world, and just as well able to meet the exigencies of labour as were the Southern farmers after abolition of slavery in the United States.

There is no doubt that the cost of production is constantly changing in all countries. What the real cost of production is, and what will check increase of production of Coffee, nobody has so far been able to determine in a satisfactory way, and as production is still increasing, not decreasing, all talk from Coffee-growing countries everywhere in reference to the hardships of present prices may be dismissed from the minds of Coffee people. It is apparent that the Coffee world at large continues very nervous, and at the slightest improvement, due to any cause, no matter how slight, Speculators are for ever climbing or clamouring for higher values under the misconception that minor causes can materially alter conditions.

We hear to-day from some of the best merchants in the trade in Europe expressions that are in line with our views, and they do not place any reliance in the present improvement, and any permanent rise under existing conditions is not at all probable.

The real cause for low prices, or lower prices is to be found in the fact of *over-production*. On the other hand, speculation for a long time past has been almost entirely in favour of higher prices, and the course of events has shown that no matter how great the aggregation of capital or influence to raise values, it has in the end proved futile to control the market legitimately.

As far as trade conditions in this country are concerned, it is probable that an advance may be made in the price of Roasted Coffee, which simply means an increase in the difference between the value of the Green Coffee and the price of the manufactured article. Such question is simply a regulation of matters entirely apart from legitimate market influences on Green Coffee and should not be considered as forming any part of the argument as to values in the light of present supplies.

W. H. Crossman & Bro.

GENERAL ARTICLES.

INDIAN TEA IN 1900.

Messrs. Stenning, Inskipp & Co.'s Indian & Ceylon Tea Market Review for 1900, dated London, January, 1901, says:—

Course of the Market.—The market opened in January at firm rates for leafy grades up to 7d. to 8d. per lb., pekoe souchongs selling at 6½d. with a strong enquiry, while fine and finest were in small demand; by the end of the month enquiry began to slacken and pekoe souchongs fell to 6d. per lb. During February prices remained fairly steady, and the demand for good and fine improved. The Budget statement was made on the 5th March and sales for that day were suspended in consequence of the heavy clearances in anticipation of an increase in the Duty. When business was resumed an easier tone prevailed for common grades, and withdrawals of such from sale were numerous, but good liquoring kinds were unchanged. During the remainder of the Season, 1899-1900, prices shewed but little alteration. The New Season's teas began to arrive in June: any parcels with flavour went well, but those of ordinary quality sold at easy rates, Sylhet and Cachar pekoe souchongs going at 5¼. and 5d. per lb. By July, all good teas, especially Assams, were bringing full rates, while common grades were steady. During August many of the arrivals were of very unattractive character and some low quotations were made; good qualities, on the other hand, maintained their position. In September large quantities of indifferent liquoring teas were offered and numerous parcels of pekoe souchongs went at 4¾d. per lb. October witnessed a further weakening in the value of common grades, pekoe souchongs selling as low as 4½d. per lb. By November, still lower quotations were marked for common and all poor-liquoring descriptions, owing to the heavy preponderance of such. The market closed in December with a better feeling for all good liquoring teas, but with a weak tone for common.

Quality.—Assam growth, as a whole, have not been up to their usual good standard, and some very moderate, and occasionally very low, prices have resulted; but parcels of sterling character have met good competition and realized satisfactory rates. Cachar and Sylhet: quality from the former district has been poor almost throughout the season and some very low quotations have been touched; from Sylhet also arrivals have in most cases left much to be desired, but a few gardens have fairly maintained their standard, and in these cases good prices have been reached. Dooars and Terai: The produce of these districts, with a few exceptions, has been most disappointing and has led to lower quotations than ever before recorded; the liquors have not only been devoid of flavour, but too thin to encourage their being freely taken by blenders who are usually very large buyers of Dooars growths.

Darjeelings.—Parcels having the full characteristic flavour have met ready buyers and at prices that will have been very encouraging to the producers. The proportion of such teas has unfortunately been small; flavour has been mostly wanting, and thus the market for some time past has been a very slow and unsatisfactory one, tea of poor quality having fallen much in price in common with that from other districts. Kangra Valley sorts have been in limited supply and of similar quality to those of recent years. Travancore is steadily increasing its out-put, but the bulk of the offerings this season has so far been of poorish character. Neilgherry growths are only occasionally offered, and call for no special comment.

The Season's Results to producers will, we fear, prove discouraging when accounts come to be made up; and the extremely low value to which common tea has fallen will be a source of anxiety to those who are compelled to depend mainly on quantity. The cheapness of tea generally is undoubtedly due to the rapid increase in production, especially in Ceylon. India will probably send to the United Kingdom 8,000,000 lbs. more than in the previous season, and Ceylon 11,000,000 lbs. more; and what renders the market out-look somewhat unpromising is the circumstance that in neither country has production yet reached its maximum. Speaking of India, considerable extensions made from two to four years ago will soon be coming into full bearing; in Ceylon also additions to the cultivated area have yet to render their quota, and no effort is being spared by careful cultivation to stimulate the productiveness of gardens To meet this increasing supply great exertions are being made to find new markets, and the annexed figures under this head are encouraging. Producers should endeavour to maintain and widen the taste for British-grown teas by giving due care to the important question of quality. It seems to us that a note of warning under this head is necessary, for the current season's crops from both India and Ceylon have been represented by an unusually large proportion of teas of a poor type, resulting, as already stated, in lower quotations than ever before known. Owing to the very abundant supply in the present day, mere quantity without quality is not likely to pay. The leaf should be plucked carefully and at the proper time, that is before it has become coarse, and every care bestowed on its manufacture, to ensure the best results both in strength and flavour.

Position and prospects.—Notwithstanding that the delivery of Indian tea for the year 1900 shews an increase of 4,223.000 lbs. over that of 1899, the new year commences with an increase in stock of 8,439,000 lbs., which is far too heavy. It is not surprising that stocks should have accumulated, seeing that the total Import from India and Ceylon together during the past twelve months has exceeded that of two years ago by 32,250,000 lbs. The raising of the duty from 4d. to 6d. per lb., morever, has not come to help

matters. It is difficult to gauge what effect this is having; it may possibly tend to depress the value of the lower classes, but is not, we think, telling appreciably on consumption. Altogether the position can hardly be regarded as encouraging, and no real improvement can be looked for until supply and demand are once again more on a level. Production has come along too fast in the last two years, resulting in excessive supplies, and this, together with poor quality, is the explanation of the low prices. In place therefore of aiming so much at large crops, Indian and Ceylon planters would be well advised to pay more regard to the quality of their teas. There can be no doubt that the very large quantity of inferior tea manufactured this season must in great measure be ascribed to coarse plucking in the too eager desire to obtain large out-turns. A continuance of this policy would tend to a further lowering of prices and, indeed, might lead to disaster to many gardens.

Packages.—It is of the utmost importance that the packages used should be such as will thoroughly protect the tea, and ensure its coming to market in perfect condition.

Other markets.—The past year has witnessed still further progress in the quantity of both Indian and Ceylon sent to markets other than those of the United Kingdom: the totals so diverted were

	1900.	1899.	1898.
	lbs.	lbs.	lbs.
From India, direct, April to 18th December ...	19,487,885	18,234,813	14,751,160
,, Ceylon, direct, January to 22nd November ...	31,932,262	18,895,690	17,503,033
Total ...	51,420,147	37,130,503	32,254,193
From London of Indian, January to December ...	10,272,264	7,723,875	7,846,500
From London of Ceylon, January to December	13,775,415	12,144,423	11,523,186
Total ...	75,467,826,	56,998,801	51,623,879

From Calcutta the shipments from 1st April to the 18th December were as follows:—

	1900.	1899.	1898.	1897.	1896.
	lbs.	lbs.	lbs.	lbs.	lbs.
Foreign Europe ...	1,534,896	1,196,101	1,034,895	617,586	362,108
America ...	3,522,571	5,046,491	2,694,947	1,724,418	1,531,287
Asia ...	5,676,726	4,730,479	5,980,618	2,675,767	3,793,032
Australia, &c. ...	8,753,886	7,261,742	5,040,700	5,243,785	4,434,203
Total ...	19,487,886	18,234,813	14,751,160	10,261,556	10,120,630

From London the exports were as follows:—

	1900.	1899.	1898.	1897.
	lbs.	lbs.	lbs.	lbs.
Foreign Europe ...	5,993,530	4,108,264	4,443,836	2,935,422
America ...	555,800	624,009	705,829	624,711
Canada, &c. ...	1,400,757	1,811,937	1,506,191	1,180,178
Other Countries ...	2,322,177	1,179,665	1,199,639	970,929
Total ...	10,272,264	7,723,875	7,855,495	5,711,240

	1896.	1895.	1894.
	lbs.	lbs.	lbs.
Foreign Europe ...	1,808,473	1,591,888	In this year the destinations were not distinguished.
America ...	902,619	908,743	
Canada, &c. ..	905,597	823,207	
Other Countries ...	782,951	649,693	
Total ...	4,399,640	3,973,531	3,499,490

Average Prices—Calcutta and London Markets.—From May to December.

	CALCUTTA. Pkgs.			LONDON. Pkgs.		
1900 ...	487,554	... 5/6	= 7d.	741,570	...	7½d.
1899 ...	449,530	... 6/0	= 7¾d.	733,920	...	8½d.
1898 ...	489,000	... 5/9	= 7½d.	692,000	...	8½d
1897 ...	485,000	... 6/8	= 8¾d.	676,000	...	9d.
1896 ...	535,000	... 7/5	= 8¼d.	636,000	...	9d.
1895 ...	529,000	... 7/11	= 8½d.	607,000	...	8¾d.
1894 ...	498,000	... 9/4	= 9½d.	532,000	...	10d.

Java.—Auctions during the year total, 61,762 packages against 54,329 in 1899, 45,614 in 1898 and 38,905 in 1897. The quality continues satisfactory, the liquors being fairly strong and the leaf well made. Blenders find these teas very useful, and they are also freely taken for export.

	Imports. lbs.	Deliveries. lbs.	Stocks. lbs.
1900	4,873,260	4,610,550	744,240
1899	4,115,230	4,169,200	481,530
1898	3,370,150	3,393,180	535,500
1897	3,497,340	3,347,890	597,730

China Tea.—The deliveries of Congou for 1900 shew a further falling off as compared with previous years, the figures being as follows:—1900, 15,841,236 lbs., against 16,099,000 lbs. in 1899, 18,035,000 lbs. in 1898, 21,500,000 lbs. in 1897, and 25,348,000 lbs. in 1896.

HOME CONSUMPTION OF INDIAN, CEYLON AND CHINA.

	Indian.	Ceylon.	China, all kinds.	Total.	Percentage of Indian.	Percentage of Ceylon.	Percentage of Indian and
1900 ..	134,433,000	92,155,000	17,063,000	243,650,000	55¼	37¾	93
1899 ..	132,757,000	82,081,000	20,603,000	235,441,000	56½	34¾	91
1898 ..	131,234,000	82,137,000	17,998,000	231,369,000	56¾	35½	92
1897 ..	121,860,000	84,670,000	18,015,000	224,545,000	54¼	37¾	92
1896 ..	120,346,000	77,209,000	23,056,000	220,611,000	54½	35	89
1895 ..	111,174,000	71,544,000	30,663,000	213,381,000	52	33½	85
1894 ..	113,926,000	69,057,000	24,548,000	207,531,000	55	33¼	88
1893 ..	106,136,000	62,721,000	34,105,000	202,962,000	52¼	31	83
1892 ..	107,557,000	63,044,000	32,332,000	202,933,000	53	31	84
1891 ..	97,855,000	51,393,000	50,817,000	200,065,000	49	25¾	74
1890 ..	100,221,000	36,221,000	57,319,000	193,761,000	51¾	18¾	70
1889 ..	98,955,000	30,166,000	64,014,000	193,135,000	51¼	15½	66
1888 ..	87,210,000	18,551,000	78,574,000	184,337,300	47¼	10	57
1887 ..	83,112,000	9,942,000	87,553,000	180,607,000	46	5¼	51
1886 ..	68,421,000	6,244,000	100,000,000	174,665,000	39¼	3¼	42

NUMBER OF PACKAGES FROM THE VARIOUS DISTRICTS SOLD ON GARDEN ACCOUNT.

	Assam.	Cachar.	Sylhet.	Darjeeling & Terai.	Dooars.	Kangra Valley Kumaon, &c.
1900 ...	590,338	156,270	223,169	107,821	181,757	9,337
1899 ...	500,238	141,151	216,851	80,941	147,987	10,518
1898 ...	561,595	131,370	149,186	92,197	150,725	9,730
1897 ...	517,110	120,544	186,126	78,721	123,324	5,761
1896 ...	469,527	109,922	168,655	68,971	138,721	4,901
1895 ...	486,821	101,271	142,625	66,142	104,534	4,934
1894 ...	390,219	95,771	147,373	61,100	96,007	5,453

	Travancore.	Neilgherry.	Chota Nagpore.	Chittagong.	Total.
1900 ...	45,676	6,940	1,278	4,854	1,327,42
1899 ...	35,006	8,513	1,877	3,864	1,146,94
1898 ...	39,041	6,852	1,941	2,892	1,145,52
1897 ...	34,333	8,336	1,913	5,554	1,081,72
1896 ...	31,860	5,538	1,849	3,704	1,003,64
1895 ...	29,709	5,583	1,323	4,533	947,47
1894 ...	28,657	5,310	1,360	6,539	837,78

THE "PIONEER" ON THE TEA CRISIS.

The Indian Tea Association is certainly doing its duty thoroughly in the matter of seeking to raise the industry over whose interests it watches from the slough of despond into which it has fallen. Within the last two months it has issued several important letters and of these, three may be noticed as commanding most attention. On December 5th the Association addressed the Bengal Government on the subject of a small export tax upon tea, the proceeds to be devoted to the work of pushing the sale of the Indian article in foreign markets. The example of Ceylon was quoted, where such a tax has been levied since 1892, the amount collected being about 2½ lakhs. The aid of Government is invoked on the score that although the majority of tea proprietors are in favour of devoting a large sum annually on the lines laid down in Ceylon, unanimity in the matter of subscriptions cannot be secured. As 12 pies go to a anna, which is now equal in value to a penny, a tax of half-a-pie per pound would be something so small that it could not affect profits seriously. Even a tax of a quarter-of-a-pie would yield 2¼ lakhs. Though the principle of the Government undertaking to act as sub

cription-collector, on behalf of a particular industry, from its own members is a novelty, that need not neccessarily be a bar to its adoption if the advantages of the course are clear. The machinery for collecting the tax is at hand in the existing Customs House and no difficulty would be experienced in dealing with the exports of tea from whatever port they might be sent. In Ceylon no charge is made for collection, the money being handed over to a Joint Committee of the Local Chamber of Commerce and the Planters' Association; but the Government retain the right of seeing that the funds are not distributed otherwise than in a manner likely to be beneficial to the industry.

The second letter to which reference may be made was addressed by the Tea Association to the Government of India in the Revenue Department on January 9th. It is an earnest appeal to the supreme authorities in this country to address the Home Government with a view to the cancelling of the recent enhancement of duties upon tea imported into England. The tax is now 7d. per lb., and the request is made that the duty may be reduced to its former level of 4d. . . . . We can sympathise with planters and proprietors of estates, but there is one weak point in the argument of the Association. In their letter it is said: "Production during the past five years has increased by as much as thirty per cent; and this has been mainly due to large extensions of the cultivated area which were planned and undertaken when the rate of exchange with Europe was at a low level and in the expectation that it would so remain." Now, no one in his sober senses could have expected that the Government of India would be content to go on financing the Empire with the rupee only just above one shilling in value and liable to fall indefinitely lower; they were compelled to take action in self-defence and in the interests of the general tax-payer. Had tea planters gone more cautiously to work, they would not have had to complain of over-production and low prices. The third letter of the Association is one addressed to all planters and agents of tea estates, and it contains simple suggestions which, if adopted, may curtail the output, put a better grade leaf upon the market, and thus cause prices to rise again. It remains to be seen whether the opinions of the majority will be in favour of temporarily abandoning 10 per cent. of the area under cultivation, or of having a close season for picking, or of finer plucking. One or all of these suggestions may be adopted, and there is another to use cheap teas for distribution in India so as to encourage their use among the population generally. Looking at the question from a broad economical point of view, we should say that these proposals ought to be adopted *en bloc*.

PRODUCE AND PLANTING.

Cheap Tea, the Duty, and Over-Production.—The "Daily Express" of Monday published the following cable:—"Colombo, Sunday.—With a view to reducing the excessive production of tea, Mr. H. R. Rosling, chairman of the Ceylon Planters' Association, suggests that all Ceylon and Indian tea planters shall leave one-tenth of their tea unplucked for two years." The "Express" has since interviewed the leading lights of the Mazawattee Tea Company, and makes the following comment thereon:—"Cheap tea," said a Mazawattee director to an "Express" representative, "is on all fours with arsenical beer. If Sir Michael Hicks-Beach puts twopence more duty on tea he will poison half the working-classes of the country." Mr John Lane Densham, chairman of the Mazawattee Company, took a serious view of the situation. He had just come from the presence of two tea-planters, who are leaving for Ceylon within a week, and said, with reference to the cable message from Colombo, "That statement goes right to the root of the matter. One of these tea-planters intends adopting this very course. The bad effect the rise in the tea duty has had upon the tea trade is due chiefly to the total disorganisation which has come about through the changes of the canisters that the grocers sell. Excepting with regard to good teas, from 1s. 10d. upwards, the public have been slow to rise to the occasion. For instance, people who had been drinking before the rise in the duty common tea at 1s. 4d. per lb. have continued to drink it at 1s. 4d. and not gone up to 1s. 6d. Those who were drinking 1s. 6d. tea continued to drink 1s. 6d. tea, instead of going up to 1s. 8d. But as this rise in the tea duty falls much more heavily on common tea than it does on good and fine tea, there is every reason to hope the better canisters of the grocers will not suffer. The percentage of the duty of 6d. on 1s. 4d. tea is very heavy, whereas the precentage of 6d. on 2s. tea is not felt so much. In other words, it is not the working man but the payer of income-tax who is bearing the cost of the war As a matter of fact, the rise in the duty has been felt by the tea growers more than any other branch of the trade, prices of common tea in the wholesale market having now dropped to a point that is unremunerative. I can see no hope for tea-growers unless they seriously consider the curtailment of the output of tea; and this can very easily be done if one and all agree, as mentioned in your message from Colombo, to pluck finer and send better tea to this market." Mr. Densham showed four samples of the cheapest tea that is largely consumed in Great Britain. It is the practice of the firm to obtain specimens of all imported teas. Coarser stuff could hardly be imagined passing as tea. The samples suggested a chopped-up crow's nest, leaves and sticks being in about equal proportion. Then he placed alongside these "sweepings of the tea garden" a quantity of the pure leaf, plucked from the topmost young blooms of the bush. Taking some in his palm, he fondled the curly, fragrant leaves with more than business enthusiasm, and said: "That is tea; the sort of tea all respectable growers want human beings to drink. Last January the Mazawattee Company anticipated the Budget by taking out of bond so large a quantity of tea that they earned the distinction of paying into the Treasury duty to the amount of £85,862 8s. 8d.—the largest cheque ever paid for the duty. The original cheque is framed as an office souvenir This year they are hopeful the Chancellor of the Exchequer will leave tea alone, if only to arrest the increased sale of cheap tea, for the sake of the public health."

The Duty Question.—The chairman of the Mazawattee Tea Co., has since written to "Express" to say that on March 10 last year—*i.e.*, five days after the additional impost to the tea duty—his company so clearly foresaw the disartrous effects that the rise in the duty would have upon the tea growing industry, and upon grocers throughout the country, that they sent a letter on the subject to every grocer and tea dealer in the United Kingdom to the number of 160,000, to impress upon grocers the importance of further educating the public into drinking high-class tea as opposed to common tea, the argument, of course, being that as common tea is charged with Customs' duty at the same rate as fine tea, it follows that, apart from the bad effects of common tea, which are too well known, the use of low grade teas is distinctly expensive and wasteful to the British matron Here is a copy of the circular letter to which Mr. Densham refers: "49 and 51, Eastcheap, London, E.C., March 10, 1900. Dear Sir,—In the excitement which has been caused in the tea trade, both wholesale and retail, during the past few days, consequent upon the action of the Chancellor of the Exchequer in increasing the duty on tea by twopence per pound, a certain section of the trade may have lost sight of the intention of the Chancellor of the Exchequer with regard to this extra impost. He, in so many words, expressed his wish that this increase should be borne by the consumer only, and we wish to urgently impress upon you that the only manner in which this wish can be carried out is by every grocer using his influence to induce his customers to drink precisely the same quality tea as heretofore, and to pay the twopence per pound advance. This action on the part of the trade generally would be immensely to the benefit both of the grocer and of the tea-drinking public, as we are sure that no good can accrue to anyone by stimulating the consumption of inferior teas.

We are, Dear Sir,
Yours faithfully,
THE MAZAWATTEE TEA CO., LD.,
(Signed) J. LANE DENSHAM,
Managing Director.

"Ditto" to Mr. Densham.—A correspondent of the *Express*, signing himself "Theine," gives his view of the situation as follows:—"Mr. Densham strikes a keynote that will reverberate throughout the whole of the Tea Land, and will meet with the approbation of all interested in the production of tea. It is somewhat difficult to understand the apathy of the tea producer and his associates, and what is still worse, is the want of unanimity amongst the community. Let the associations that represent the industry combine and use every influence in their power to improve matters. As over-production is responsible for the present slump, let the first step, by all means, be to carry out the excellent suggestion of abandoning temporarily 10 per cent. of their producing area, which would, of course, increase the selling-price and recompense the producer

for the reduced out-turns. We are constantly having our attention drawn to the production of such an inferior class of so-called tea which should be properly styled 'muck.' Could not the aforesaid associations, for the benefit of all concerned, combine their influence to prevent such rubbish being landed on our shores and put into consumption? London seems to be the dumping ground for all teas refused by other ports as unfit for consumption. Why is this? All such so-called teas should be destroyed or denatured. It surely would not be difficult for such a proceeding to receive the sanction of authority. I do not at all anticipate such an injustice will be perpetrated as to enhance the present duty on tea. The present tax of 100 per cent. on the market value is a monstrous shame, as tea is no longer a luxury, but a popular necessary beverage of the people. But no time should be lost in making a representation to the Chancellor of the Exchequer that tea is at present ruinously over-taxed, and at the very earliest opportunity the extra 2d. per lb. should be remitted. It only requires a little combination and business acumen to put the tea industry on its legs again. The short-sighted public should lay to heart Mr. Densham's remark that 'the use of low-grade teas is distinctly expensive and wasteful.'"

Last Week's Tea Sales.—"The public sales of Indian tea were resumed on Wednesday," says the *Produce Markets Review*, "when the moderate quantity of 25,138 packages was offered and prices generally show little change. Common teas continue to form a very considerable portion of the offerings and, excepting those from a few gardens where the quality shows improvement, and for which better prices were obtained, values on the whole were less firm. The quantity sold at 7d. and under has increased, and from present appearances there is not likely to be any diminution in these grades, which will probably remain at the low prices now ruling. The more desirable medium descriptions met with a good demand, and prices were well maintained, and unless a larger proportion of the future supply is forthcoming, it is quite probable a stronger market will prevail later on. The finer teas, in consequence of the comparatively limited quantity brought forward, were well competed for and fetched better prices. The over-production, particularly of the common kinds, has had the effect of establishing the lowest record prices, and satisfactory as the increase in the exports is, it will be necessary to considerably develop this outlet to absorb the surplus stock. The coarser plucking may have been due to climatic causes, but if, on the other hand, those interested in the production were influenced by the higher prices ruling last season to sacrifice quality for quantity, the result will prove the reverse of satisfactory. The market for Ceylon teas opened on Tuesday last, when a fair quantity was brought forward, and met with a quiet demand at about the rates current before the holidays. Common grades, however, barely maintained recent values, and occasionally sold in favour of buyers. In the medium kinds, Broken Pekoes were slightly irregular, while in whole leaf descriptions the tone was much as before."—*H. and C. Mail.*

TEA TRADE PROSPECTS IN THE U. S.

After a period of depression, dating since last August, the tea trade has lately developed symptoms of improvement.

In reviewing the market since the opening of the season, last May and June, it will be recalled that a large business was transacted during June and July. The political complications in China, coupled with advices received from Japan that the crop of that country would show a shortage, induced free buying by the consuming trade. The extent of this buying is shown by the withdrawals from bond during the three Summer months, which in June amounted to 8,790,681 pounds, in July to 14,644,945 pounds, and in August to 9,373,256 pounds, a total of 32,808,882.

As a result of these large withdrawals the distributing trade found itself carrying heavy stocks, and during August a decided slump was experienced in the demand, from which there has yet been no improvement. A more favourable turn to the political outlook in China was also an important factor in checking the demand.

As the fall season advanced the consuming trade gradually worked off its surplus holdings; and, although prices had reacted to a lower basis than those ruling at the close of the Summer, there was little disposition to purchase supplies in advance of immediate requirements. The reason for the continued apathy shown by buyers was found principally in the agitation for the reduction of the war revenue taxes. This, many of the trade believed, would result in the 10 cents per pound duty on tea being repealed. With such a possibility hanging over the market a policy of extreme conservatism was quite generally shown by buyers, who, in withdrawing teas from bond, limited their takings to only such supplies as they needed to meet their most positive requirements. The information received from well informed sources and published in these columns were at no time of a character to indicate that a change in the import duty on tea would be made; and now that it is practically certain that the duty will remain the trade finds itself practically bare of surplus stocks. Importers' holdings, exclusive of Congous, are understood to be only moderate, and the general impression seems to be that after the holiday season is past an improvement in business can be reasonably expected and that a recovery will probably follow from the present low basis of values.

As showing the course of values the past six months the following prices paid at auction on the dates mentioned are of interest. Those paid on June 6 represent the market before the rise started, those of July 25 when top values were reached and those of December 12 and 19 present ruling quotations:

	In Bond.		
	June 6.	July 25.	Dec. 12 & 19
Moyune—	Cents.	Cents.	Cents.
Hyson	7¼a 7½	9½a10	7 a 8½
Young Hyson	8 a22½	13½a...	9½a23½
Imperial	11 a17	11½a17½	9 a17
Pingsuey—			
Imperial	9¼a13	12 a13½	10½a14
Gunpowder	8 a20½	10¾a11	8½a18
Congou	10½a12½	13 a15½	7¾a16½
India and Ceylon	11¾a17	11¼a17	9½a19
Formosa	11½a18½	13 a23½	11¼a20

Importers of tea have experienced a sad lesson the past six months. The active trade demand experienced early in the Summer enabled them to market their holdings of old crop teas at good values. To replace their spot holdings, however, they entered the Eastern markets as heavy buyers; they too being stimulated by the threatening political outlook in China. The result was that the shipments of tea from Chinese ports during July-August were unusually heavy, and when they reached their destination in September, October, and November they found dull, listless markets, with the basis of values ruling generally unsatisfactory for sellers.

The following figures show the supply of the China and Japan teas that has come into sight to December 15 and the probable total supply for the season of 1900-1901, with comparisons:

	Green.	Japan.	Formosa.	Amoy.
	Lbs.	Lbs.	Lbs.	Lbs.
Total afloat to Dec. 15, 1900.	1,457,170	373,428	2,289,989	...
Receipts to Dec. 15, 1900	9,647,457	33,073,702	10,859,988	...
Total ship'ts advised by mail.	11,104,627	33,447,130	13,149,977	...
Leaving to be shipped	3,895,373	5,052,870	850,023	...
Est. supply, seasons 1900-01.	15,000,000	38,500,000	14,000,000	...
Supply, seasons 1899 and 1900.	15,614,392	40,803,686	14,024,378	31,707
Do. do. 1898 and 1899.	13,600,180	39,913,295	15,823,938	65,758
Do. do. 1897 and 1898.	14,852,893	43,630,732	15,961,299	231,799
Afloat, Dec. 15, 1899 ...	1,679,921	310,414	573,422	...
Receipts to Dec. 15, 1899 ...	8,066,766	35,480,835	8,003,528	387
Total ship'ts advised by mail to Dec. 15, 1899 ...	9,746,687	35,791,249	8,576,950	387

	Foochow.	Congou.	Total.
	Lbs.	Lbs.	Lbs.
Total afloat to Dec. 15, 1900..	469,941	657,552	5,248,080
Receipts to Dec. 15, 1900	1,965,693	16,903,845	72,450,685
Total ship'ts advised by mail.	2,435,634	17,561,397	77,698,765
Leaving to be shipped ...	1,064,366	938,603	11,801,235
Est. supply, seasons 1900-01.	3,500,000	18,500,000	89,500,000
Supply, seasons 1899 and 1900.	4,040,371	11,392,643	85,907,177
Do. do. 1898 and 1899.	5,554,337	8,050,359	82,907,867
Do. do. 1897 and 1898.	3,605,473	9,429,584	87,711,780
Afloat, Dec. 15, 1899 ..	307,931	2,030,708	4,902,396
Receipts to Dec. 15, 1899 ...	150,200	7,997,068	59,698,784
Total ship'ts advised by mail to Dec. 15, 1899 ...	458,131	10,027,776	64,601,180

These statistics indicate that the estimated supply for the season is about 3,500,000 pounds in excess of last year. The amount of tea that has come into sight to December 15, however, exceeds that of last season to the same date by 13,097,585 lbs., the result of the unusually heavy shipments from the East early in the season. Statistically, therefore, the outlook can be considered an encourag-

ng one. It is generally conceded that the supplies in the hands of ne consuming trade are small. According to the last figures of the ea Association the stock of tea in the United States warehouses n October 31, 1900, was 47,183,653 pounds. and the stock of tea in ew York bonded warehouses on November 30, 1900, was 31,507,021 ounds. The supply of tea estimated to come into sight for the emainder of the season is 11,801,235 pounds against 21,305,997 ounds, thus showing that there is no excessive supplies to be aken care of.

As to the individual crops, greens show a slight shortage, which s exclusively in country greens; Pingsueys if anything being somehat larger. Japans are expected to fall short of last year's supply y about 2,500,000 pounds. Formosas show no decided change. oochows are about 500,000 pounds short. The increase, therefore, s wholly in Congous, the supply of which estimated to show an inrease of about 7,100,000 pounds over last season and practically ouble the supplies of the seasons of 1898-99 and 1897-98.—*Journal f Commerce, N. Y.*

COCOA AND CHOCOLATE.

Mr. James M. Bugbee, of Messrs. Walter Baker & Co. Limited), Boston, writes in the *International Confectioner* :—

The extraordinary increase in the consumption of cocoa and hocolate in the United States, Great Britain, and Germany during he last decade is due largely to the constantly increasing demands f the confectionery trade. The use of chocolate by manufacturing onfectioners in this country was begun in a tentative way about orty years ago. It had probably been used, to some, extent in rance before that date. The demand for it grew slowly at first; ut as the knowledge of its highly nutritious and wholesome proerties became known the consumption increased very rapidly, and t is now used more largely in the preparation of confections than ny other article, except sugar. About half of all the crude cocoa rought into this country goes to the manufacturing confectioners n the form of chocolate liquor, plain or sweet, for covering sugar nd sweetmeats in various forms.

The development of the confectionery business has probably been greater during the last ten years than in any preceding decade n its history; and the returns from this year's census are awaited vith much interest. In 1850 the whole number of establishments vas 383; in 1890 the number was 2,921. The value of the products n 1850 was only $3,040,671; in 1890 it had risen to $55,997,101. It vould not be surprising to find that the value in 1900 had reached nearly a hundred millions.

In 1860, about the time chocolate was first called for by manufacturing confectioners, the importations of crude cocoa for home consumption amounted to 1,181,054 pounds. Twenty-five years later 1885) the importations amounted to 8,426,787 pounds—an increase of 614 per cent. The increase of population during that period was ess than 60 per cent.; the consumption of tea increased 153 per cent., and coffee 196 per cent.

The imports of crude cocoa for home consumption during the year ending June 30, 1900, amounted to 38,619,187 pounds—about 13,000,000 pounds more than the average for the preceding ten years.

The importations of crude cocoa into Great Britain, Germany, and France during the last year have fallen below the importations nto this country. During the first eight months of this year the mportations into Great Britain amounted to 26,544,000 pounds; nto Germany, 27,395,200 pounds; into France, 22,288,000 pounds; nd into the United States, 34,199,484 pounds. France has not made ny gain apparently in the last few years. Great Britain and Germany have made large gains, but this country has made still arger. This, taken in connection with other industries in which he older countries are losing their lead, is highly significant.

As a consequence of this rapid increase in the consumption of the various products from crude cocoa, the price has advanced about 33 per cent. within the last four years, and the advance is likely to hold for some time, as new trees cannot be brought into full bearing under eight or ten years.

Harold Hamel Smith, of London, who has an intimate and peculiar knowledge of the cocoa trade, says the consumption is tending to exceed the supply; and he recommends the enterprising young men—American and English—who will probably soon be discharged from military service in the Philippines and South Africa, to go into the cocoa planting business, which he represents to be an ideal investment for men willing to live on their estates and oversee the work themselves. On the plantations in the island of Trinidad, at the end of ten years after the trees had been set out, they yield an average of one and one-half pounds of dried beans, which, with scientific cultivation, can be increased to from two to three pounds. With 300 trees to the acre, the yield would be about four and one-half hundredweight. This would give a handsome profit.

On the plantations in Surinam the average yield of dried beans to a tree is about 5 pounds.

The American Consul at Guayaquil, in a recent report on "Cacao Culture in Ecuador," says the profits of a plantation depend chiefly on the quality of the land, management, and nearness to market. Taking as a fair average, one pound per tree, which is a certain minimum, a hacienda of 100,000 trees will produce 1,000 quintals, worth at the present market price $22,500; the expenses (maximum) would be about $7,000; and the nett results per year would be $15,000 or more—a profit of from 40 to 50 per cent. per annum on the capital invested, which will continue for an indefinite period, cacao trees lasting for several generations.

Commenting on the present condition of the market, as viewed from the London standpoint, Mr. Smith says, in a recent letter, that this year has undoubtedly been a very trying one with makers in more ways than one, as not only has the raw cocoa been high, but sugar, arrowroot, the paper for wrappers, and tinfoil have advanced in price; and the confectioners and retailers of eating-chocolate complain that, being unable to put up the retail price, their profits are much reduced.

EARLY COFFEE IN CEYLON.

The *Times of Ceylon* gives extracts from papers by the late John Capper, being the opening chapters of a contemplated volume of reminiscences of an historical character, concerning the first half of the century, written about 1890. From these we take the following extracts:—

THE GOVERNOR'S PLANTING PERSISTENCE.

Shortly after the Governor had planted coffee on the Peradeniya land and erected buildings upon it, the home authorities raised objections to the proceeding, and the property was disposed of by orders, and eventually converted into a sugar estate. But Sir Edward Barnes, resolving not to abandon his original plan of coffee-growing, purchased in the name of one of his Aides-de-Camp, a long stretch of alluvial land, then under paddy cultivation, bordering the Mahavili Ganga and facing the Botanical Garden. This he had planted with coffee, which, under his personal supervision, was brought into a high state of productiveness, and was known as the Gangaroowa estate The coffee has long since disappeared from it, though a few of the original bushes still remain, and it is now a most successful cacao plantation.

A HEADMAN BROUGHT TO BOOK.

One of the impediments in the way of this pioneer of coffee-planting was the absence of roads: there was only a bullock track or bridle path from Peradeniya to Gampola, a distance of eight miles. This being represented to the Governor, with characteristic promptitude he declared that the first planter who opened an estate in the island was entitled to have a road to the capital made at the public expense. A tender for its construction was called for and eventually taken by the person directly interested in its completion, Mr. Bird. Nor was this the only assistance rendered by Sir Edward Barnes to the new enterprise. Some months after the completion of the road, a few of the principal rice-growers of the locality, jealous of the intrusion of a European into their village, and apprehensive of what might eventually be the result of the innovation, induced the neighbouring goiyas or cultivators, to run their ploughs through the newly-made road, which had the effect of rendering it useless for cart traffic. On his next visit to Kandy, Mr. Bird represented the matter to the Governor, who declared that his grievance should be at once attended to. Sending for the Gampola Korala or Headman in Government charge of the district, Sir Edward Barnes informed him of his intention to visit Mr. Bird's plantation at an early hour on the following morning, intimating at the same time that the Korala should be present on the occasion. The headman, knowing well what had taken place, rushed home in a state of great excitement and alarm, and collecting a force of four or five hundred villagers, kept them at work

by moonlight repairing the damage to the road throughout the entire night, so that on the arrival of the Governor in the village at an early hour on the following morning, he found the road in good order and the entire Gampola population awaiting him.

ILL-PREPARED FOR SPORT.

It has been said, with perfect truth, that in the pioneering days of coffee-planting and road-making Ceylon was a sportsman's paradise, as well it might be, for the vast forest regions of the interior down to the verge of civilisation swarmed with wild beasts who were then masters of the situation. The chief of these were the elephants, who by force of numbers, weight, and audacity might well claim to be monarchs of the forest. The ill-armed natives of Kandyan villages, bad sportsmen at all times and chiefly accustomed to take "pot shots" at the mildest and most diminutive game, were never able to face a charge by an elephant, whose massive form and shrill trumpeting filled the Kandyan with abject terror. Village cultivators were frequently heavy sufferers by the nocturnal maraudings of these wandering beasts in search of garden produce. Yet they rarely attempted any reprisals beyond the firing of a village fowling-piece. Mr. Bird being the possessor of a tolerably good battery for small game had inspired the villagers in his vicinity with a deep respect for his prowess as a sportsman, though since his arrival at Gampola he had never bagged anything larger than hog and deer.

THE EARLY SUCCESS OF COFFEE.

That some of the early selections of locality for coffee-planting were unfortunate, must not be regarded as indicating any want of judgment on the part of investors. So little was then known of the requirements of the plant, or of the conditions requisite for its successful cultivation, that we should rather feel surprised that so many of the early ventures were successful. The vast expanse of virgin forest land extending from Matale on the north to the Ouvah principality on the east, and the lower ranges of Saffragan on the south-west, presented a magnificent field for the operations of British investors, but nothing was known of the capabilities of the various soils.

VIRGIN LANDS.

Save where the Kandyan hunter had tracked the elk or the panther, or where the wild Veddahs had made their miserable homes in rocky caves or hollow trees, the solitude of that vast area, extending to the great wilds of the north, had not been broken by the sound of the human voice since the early ages when invading hordes of Hindu warriors swept over the country, deposing the native sovereign and installing rulers of their own race in the palaces of the now buried cities. The axe of the planter had not yet awoke echoes in the great wilderness of the central province, where before many years the thorny bramble was replaced by the rose, and the trumpet of the elephant yielded to the voice of women and the laughter of little children.

FRENCH DUTIES ON COLONIAL PRODUCE.

A correspondent writes to the *Times*:—

During the last few months the Paris correspondent of the *Times* has made several references to the increased duties which the French Legislature has imposed upon colonial produce, including coffee, chocolate, tea, and spices. These new duties have been sharply criticised by the British Chambers of Commerce, but they have scarcely received in this country the attention which they deserve as an important illustration of the commercial policy of our neighbours. The enhanced taxation, although its enforcement is postponed, is intended to come into effect in a few months, so that the present time is opportune for a recital of the facts. No indictment can be so eloquent as a bare history of these extraordinary imposts.

Until February last a uniform duty was, under a law of 1892, levied in France on colonial products, irrespective of their origin. The duty on coffee was 156f. per 100 kilos, estimated to be equivalent to 121 per cent. of the value of the coffee itself. Brazil, in the course of commercial negotiations, is said to have demanded a reduction of this heavy tax, but France refused to comply; and when Brazil threatened reprisals in the shape of discriminating duties on French goods, France retaliated by increasing the duties on coffee and on colonial produce generally. By a law passed on February 24 last a minimum tariff, fixed at the old rates of duty was applied to colonial produce from countries enjoying most favoured-nation treatment, while a general or maximum tariff at roughly, double the old rates was applied to imports of such produce from countries having no commercial agreement with France. Brazil, be it observed, is almost exclusively concerned with coffee, so that the enhanced duties on the remaining commodities fell mainly on other countries. India, and many British colonies, produce one or more of the products subjected to the new taxes, and as, in the absence of a commercial arrangement, they do not enjoy most-favoured-nation treatment in France, their products are liable to the new maximum tariff.

The story up to this point is sufficiently curious, for we see that nations having no quarrel with France are condemned to fiscal penalties merely as an incident in a contest with Brazil. But the sequel is still more striking. Brazil, by making a courageous stand, forced her adversary to grant concessions. By a law of July 17, 1900, Brazil, secured most-favoured-nation treatment, and her coffee, which was menaced with a duty of 300f. per 100 kilos, was admitted at 136f per 100 kilos, or 20f. less than the old rate. Under a decree of August 29 last many other countries, including British colonies, possessions, and protectorates, received the benefit of this reduced rate until the end of last year, the French Government, if it thinks fit, being empowered to apply the minimum tariff for any period not exceed- ing two years from the promulgation of the law of February 24, 1900. A further extension until June 30, 1901, has been granted by a decree of December 22, 1900, to British colonies, possessions, and protectorates, and to other countries duly enumerated. Whether the French Government will again extend indulgence remains to be seen; but, in any case, it is important to note that the full limit of time allowed by law will be reached on February 24, 1902. After that date the general tariff must come into operation. In about six months, as at present arranged, or in about thirteen months at the utmost, Brazil, which defied France, will be in a position of vantage, as compared with India and other British possessions, which have given no cause of offence at all.

The severity of the new duties and the extent of the enhancement can be best appreciated by reference to the following table:—

Per 100 kilos. (=nearly 2 cwt.)

		General Tariff.	Minimum Tariff.
		Francs.	Francs.
Coffee	Beans	300	136
	Roasted or ground ...	400	156
Chocolate	Over 55 per cent. of cocoa	300	150
	Less than ditto ...	200	102¼
Tea ...	.. ..	400	208

Coffee, therefore, will under the higher tariff be charged duty at a rate equivalent to more than 13d. per lb., or nearly nine times the rate levied by the British Customs authorities.

The hardships which this drastic legislation will entail on British possessions were forcibly depicted in the monthly circular issued by the British Chamber of Commerce in Paris. They were also dwelt upon at the fourth Congress of Chambers of Commerce of the Empire, held in June last, and at the meeting of the Association of Chambers of Commerce of the United Kingdom held in Paris in September. The Congress and the Association passed resolutions urging Her Majesty's Government, in conjunction with the Governments of the colonies and of India, to take immediate steps to obtain most-favoured-nation treatment for our possessions from those countries which have granted most-favoured-nation treatment to the United Kingdom, and against which the colonies are not discriminating in the application of their Customs tariffs. The justice of this demand cannot be questioned.

It is stated, and probably with reason, that the new duties are intended to serve as a lever for securing special concessions from the countries affected. But let us consider how far such a policy can succeed—for example, in British India, which sends to France large quantities of coffee and pepper, besides tea, cinnamon, and other colonial produce. Indian coffee planters have already complained loudly of the new duties. Their industry, in recent years, has suffered severely from disease and from unfavourable seasons,

d it is perpetually endangered by the keen competition of Brazil, ıose vast out-turn of coffee has sent down prices to a low level. ıe exports of Indian coffee to France in the last five years have en as follows :—

1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.
cwt.	cwt.	cwt.	cwt.	cwt.
101,769	71,871	76,856	83,543	98,853

The enhanced French duties, it is asserted, will entirely exclude dian coffee from France, and this crowning disability will severely jure the industry. Indian tea, also, which has been sent to ance in increasing quantities, will probably be driven out; and e same is true of pepper, of which France has taken large supplies. France, indeed, threatens to deal a serious blow at India, which just recovering from the severest famine of the nineteenth century. et goods of French origin have received the same treatment as ose of English origin from the Government of India, and the ench settlements in India have always been treated with the reatest consideration.

But, even if India should desire to make concessions to France, ould it be possible for her to do so? The existing Indian tariff not protective or differential. The Customs duties, being imosed purely for revenue purposes on a liberal basis, are levied unirmly on goods from the United Kingdom and all foreign countries, ith the sole exception that countervailing duties are placed on ounty-fed sugars. France, however, has never sent much sugar to ndia; and the abolition of bounties, which now seems imminent, ill once more put all countries in the same position in Indian ports.

The chief imports from France into India in the four latest fiscal ears have been as follows: Spirits (chiefly brandy), wines, silk anufactures, apparel, clocks and watches, cotton goods.

Now, the tariff on silk manufactures, apparel, and clocks and atches, is only 5 per cent. *ad valorem*, while on cotton goods, hich France sends in rapidly increasing quantities, only 3½ per ent. is charged. On wines and spirits, of course, higher rates of uty are levied; for India, like other countries, imposes on coholic liquors, whether produced at home or imported, tolerably igh duties But rates such as 1s. 4d. per gallon on still wines and s. 4d. per gallon on sparkling wines cannot be considered excesve. French brandy is taxed on the same scale as British whisky. an France expect that India will give her a preference over the nited Kingdom and over various countries with which India has ommercial treaties? And can she expect that a fiscal manœuvre hich places India at a commercial disadvantage will be as fruitful s a policy of justice and reciprocity? France does not say do *ut es;* but rather, I will endeavour to destroy a branch of your trade. nless you give me preferential rights which will prejudice all ther countries, including England herself. Let it also be borne n mind that France can reap no direct gain from the enhanced uties. They are so high that Indian coffee will be excluded; ence no revenue will accrue. French consumers, very heavily axed already, will not pay 7d. a lb. more for Indian than for Brazilan coffee. Brazil, then, will alone profit, for those Frenchmen ho formerly drank Indian coffee will, in future, be compelled to rink inferior Brazilian coffee.

The action of France, in short, is illogical, inequitable, and ngenerous. It is worthy of M. Méline, but not of the present Ministry. In commercial England this policy must engender uspicion and resentment. The growing sense of Imperial unity nakes the centre and each part of the Empire more alive to the njuries which any other part suffers; and the strength and reality f this Imperial sentiment have been decisively proved in the recent lections which have returned Her Majesty's Ministers to power.

In welcoming to Paris the delegates of the Association of Chamers of Commerce of the United Kingdom last Autumn, M. Millerand spoke of the strong ties which bind together England and France; nd he declared that French merchants, manufacturers, and agriculturists are convinced of the necessity of maintaining and strengthening the friendly relations between the two countries. His exclusive policy with regard to British colonial produce is ardly in accord with these fair words. If M. Millerand and his colleagues are genuinely anxious to reciprocate the friendly fee ings which England bears towards France, they cannot do better than adopt the suggestion of the British Chambers of Commerce by definitively granting most-favoured-nation treatment for all commodities to those of our possessions which have no discriminating tariffs. Such a concession would be acceptable to this country as it would be honourable to France.

IMPORTANT IMPROVEMENTS IN TEA LEAF WITHERING.

The results recently obtained in Ceylon from the artificial withering of tea leaf are of so much importance to the whole tea industry that they deserve some special reference in our columns. Messrs. Davidson & Co., Limited, of Belfast, whose "Sirocco" Tea Mechinery for every other process in the manufacture of the leaf is so widely known and highly appreciated, claim the credit of having solved the difficult subject of tea leaf withering. The experiments made by them in this connection extend over a period of fourteen years, during which, and more particularly within the last four years, we believe, that they expended well on to £10,000 in apparatus, plus cost of conducting large scale trials in different factories in India and Ceylon before attaining the present satisfactory results.

These experiments were carried out by Mr. F. G. MaGuire, under Mr. S. C. Davidson's guidance and directions, and the resulting outcome is that now, at a small outlay to the tea garden proprietor, thorough control of the wither is, it is claimed, so perfectly obtainable that the quality of the tea produced is equal to that from leaf withered naturally under the most favourable circumstances of temperature and weather; and the time required for producing the wither is greatly reduced, so that the output capacity of the existing withering space is thereby increased to such an extent that in many instances large extensions to withering houses have been obviated.

A cold wither, it is stated, can now be obtained of such satisfactory quality that if a small quantity of the leaf be pressed between the hands it will stick together, showing that the leaf has attained that desirable soft and clammy condition which is so conducive towards the production of best results during subsequent manufacture.

A large number of factories in Ceylon, ranging from sea level to over 5,000 ft elevation, have, we understand, been equipped with the necessary apparatus during the past season, and in actual practice, perfect withers have been obtained in twelve to fifteen hours, from leaf plucked on wet days during the rainy season, and which on arrival at the factory was saturated with rain water.

The opinions expressed by the proprietors and managers of the tea factories in which the new system (the principal item in which is the special adaptation of the new Sirocco fans in existing withering lofts) refer, we understand, in the highest terms to the results obtained.

Mr. F. G. MaGuire is now in this country, and will, we are informed, shortly visit London in the interest of Messrs. Davidson and Co., so that their numerous clients representative of the important tea industry will be enabled to gather further particulars from him as to this new system of withering. The data and details of numerous trials which have been reported on various estates, where the entire crop of leaf is now being withered on this system, can, we learn, also be inspected.—*H. & C. Mail*

THE MELBOURNE TEA MARKET IN 1900.

AN EXPERT ON THE YEAR'S TRADING.

The *Melbourne Age*, of 3rd January, says :—

As usual, from January to June, 1900, there was put little to note of exceptional interest. Indian and Ceylon teas arrived in rather increased quantities, and good medium teas were obtainable at low prices, benefiting the public at the expense of the importers, as prices were unremunerative. In July, however, the political troubles in China and the armed intervention of the Powers opened up the possibility of the China tea export being interfered with, and accordingly the opening sales of new season's China teas were well attended, and buyers were keen operators.

Time, however, proved that the tea districts are undisturbed by the political position and the export, partly due, no doubt, to the keen demand for early shipments, from China this season is not only larger than last year, but in excess of normal requirements, and in consequence prices at this moment are about the lowest on record. Common Congous are a drug in the market, at inside 4d. per lb., whilst good low medium Panyong is slow sale at 4¾d. to 5d. per lb., whilst good low medium Panyong is slow sale at 4¾d. to 5d. per lb. in bond, fine Panyong not fetching more than 5½d. to 6d.,

these prices being, undoubtedly, well below the cost of production. Ceylon and Indian teas have shared in the good and bad fortune of Chinas. The early arrivals doing well, induced larger supplies, which have arrived to a glutted market, and prices are almost, though not quite, the lowest on record.

The general statistical position has also had a great effect and has helped to bring about the present state of affairs, as will be seen at a glance from the following short summary of the position to-day :—

1. Last year's large Indian crop is being again exceeded, and no less than 182,000,000 lbs. of tea is expected to be produced by the Indian tea gardens this year, or, say, 7,500,000 lbs. more than last year.

2. Last year's large Ceylon crop is being again exceeded, and over 140,000,000 lbs. of tea is expected to be produced by the Ceylon tea gardens this year, say, 10,000,000 lbs. to 15,000,000 lbs. ahead of last year.

3. An increased duty in England, the main market for Indian and Ceylon teas, has disorganised trade there and checked consumption, especially on lower grades.

4. Poor crops and a larger proportion than usual of common and undesirable teas.

5. The difficulty of finding new markets for the yearly increased supplies has caused over-supply in all possible markets.

The result of all these factors is tea is now selling everywhere well bellow the cost of production, and it has become a question of the survival of the fittest, and, no doubt, some of the older and less fertile gardens will be forced out of cultivation, or fresh outlets will have to be found. The latest quotations are, in bond, per lb. :—4½d. for common Indian and Ceylon, 5d. to 6½d. for fair to medium Pekoe Souchongs, 7d. to 8½d. for good liquoring Pekoe Souchongs and Pekoe, up to 1/ for fine to finest.

Stocks in Victoria are excessive, consisting on the 19th December, 1900, of 3,022,751 lbs. China, against last year 1,613,807 lbs.; 657,446 lbs. Ceylon, against last year 433,181 lbs.; 1,450,510 lbs. Indian, against last year 888,446 lbs.; or over 2,000,000 lbs. excess. Such figures fully account for unremunerative prices to importers. Still, the public get the benefit, or should do so, in exceptionally good blends, and, no doubt, sooner or later, supply and demand will be better adjusted.

TEA GRADES IN THE UNITED STATES.

The Board of Managers of the Coffee Exchange have approved the report of the Committee fixing the differences in value between grades of tea in accordance with the rules and regulations previously adopted for listing tea on the Exchange. The differences follow:

Green Tea—
- 1—Pingsuey Gunpowder, plus 3½c.
- 2—Pingsuey Imperial or pea leaf, plus 1c.
- 3—Country Young Hyson, plus 1c.
- 4—Pingsuey Gunpowder, minus ½c.
- 5—Country Young Hyson, minus 3½c.
- 6—Pingsuey Gunpowder, minus 4c.
- 7—Pingsuey Imperial or pea leaf, minus 4c.
- 8—County Hyson, minus 6c.

Black Tea—
- 1—Formosa Oolong, plus 1½c.
- 2—Formosa Oolong, even,
- 3—India or Ceylon, minus 1c.
- 4—Foochow Oolong, minus 1½c.
- 5—Congou, minus 1½c.
- 6—Formosa Oolong, minus 2c.
- 7—Foochow Oolong, minus 3½c.
- 8—India or Ceylon, minus 4½c.
- 9—Congou, minus 5½c.

Japan Tea—
- 1—Pan fired, plus 4c.
- 2—Basket fired, plus 3c.
- 3—Pan fired, plus 2c.
- 4—Pan fired, even.
- 5—Basket fired, even.
- 6—Pan fired, minus 1½c.
- 7—Basket fired, minus 1½c.
- 8—Sun dried, minus 1½c.

The Board also authorized the purchase of trading samples, and it is expected that everything will be in readiness to begin active trading in tea on the Exchange soon after the first of the year.

The classes and grades deliverable on contract are :

Japan Tea—
- 1—Pan fired.
- 2—Basket fired.
- 3—Pan fired.
- 4—Pan fired.
- 5—Basket fired.
- 6—Pan fired.
- 7—Basket fired.
- 8—Sun dried.

Green Tea—
- 1—Pingsuey first Gunpowder.
- 2—Country second Gunpowder.
- 3—Country first Young Hyson.
- 4—Pingsuey off second Gunpowder.
- 5—Pingsuey second Imperial.
- 6—Country Hyson.
- 7—Pingsuey fourth Gunpowder.
- 8—Country fourth Young Hyson.

Black Tea—
- 1—Superior to fair Formosa.
- 2—Foochow Oolong.
- 3—India or Ceylon.
- 4—Congou.
- 5—Good to superior Formosa.
- 6—India or Ceylon.
- 7—Congou.
- 8—Foochow Oolong.
- 9—Fair cargo Formosa.

THE INDIAN TEA INDUSTRY.

Mr. J. B. Leslie Rogers writes to the *Pioneer* :—

It is not *cacoethes scribendi*, but the sense of public duty which all planters owe the tea industry, that once more induces me to take up my pen and enter the lists against those who refuse to wheel into line with the progressive tendencies of the new century. In this direction I feel I have an able coadjutor in your well informed correspondent, "Camellia," whose trenchant article in your issue of the 5th instant, has done much in clearing the way towards sorely needed reforms. That his pen may never dry till victory is achieved is the fervent wish of all who are on the side of continual improvement and practical commonsense. What we sadly want at the present juncture is plain speaking, and plenty of it, but the pity is that there are so few in the planting community who are able to have the courage of their opinions, or must it be reluctantly admitted, have any opinions at all. The reason for this is not far to seek. The industry has hitherto been carried on in a mechanical automatic way by methods based on conditions that prevailed a quarter of a century or more ago. All the conditions have irrevocably changed, but a fossilised brainless system remains as a drag on all attempts at improvements. Managers are chosen not so much for the fitness, but for their subserviency to antiquated rules and customs. To think independently is to lose their appointments, while to slavishly adhere to orders often issued by the ignorant and incompetent, is still a sure road to tolerance and permanency. When men are thus reduced to passive thoughtless automata, can it be wondered that there is no initiative left, and that there are comparatively so few capable of rational and logical opinions on subjects appertaining to their profession. Planters themselves are much to blame for the unenviable position in which they now find themselves. They have allowed their minds to sleep the sleep of inert torpidity, while their industry has steadily drifted into the hands of the self-interested trader, and often the unscrupulous company-promoting exploiter. Now that the awakening has come, and it has been a rude and pitiless one, many will go to the wall, without a thought from those they too faithfully served in their days of blindness,—while those who happen to be left for the time being, can only hope to avert prospective destruction by prompt and unselfish combinations, and a vigorous assertion of their independence in thought and action as trained professional men. In this matter of combination, it is

satisfactory to find that a suggestion I made in a former article, has been energetically acted on by the planters of the Luskerpore Valley in Assam, where a society has just been formed for the interchange of professional opinions on scientific subjects bearing on the advancement of the tea industry generally. It is the first organised attempt towards that unity of purpose which alone can bring about salvation to the community, and all honour is due to the men of Luskerpore for forming the pioneer society in this laudable direction. It is to be hoped other tea districts will now follow the praiseworthy example here set before them. The more unity, enlightenment and breadth of view there is, the better will be the prospects of a successful issue to the present deplorable state of affairs.

With reference to a previous proposal of mine regarding the exploitation of the local native market, it is a matter for congratulation to see that the Indian Tea Association has at last moved in this direction, and that arrangements have been made with a Calcutta firm for the distribution of cheap teas through the indigenous *buniah*. But with all due deference to those who have come forward in this public manner, I cannot help thinking that the Association has laid down for its guidance a rather defective line of policy, firstly, by limiting the period of experiment to only one year, or rather, one winter,—as it is only during the cold weather months any appreciable sales can be hoped for; and, secondly, in confining the sphere of their operations merely to Bengal. To give the scheme a fair trial, it must be energetically carried on for two or three seasons at least. Time must be allowed for the acquisition of a new taste, and familiarity with a new commodity, before the demand can be expected to become a natural and lasting one. One year's trial cannot possibly ensure this. Further, I cannot help feeling it is an error not to have also invited the active co-operation of the planters themselves in such a scheme, more especially those in the north-west of India, who have already some little experience in this trade. Again, Bengal is not the most feasible place in which to start such experiments, as in that province there are practically no tea-drinkers at present. A taste will have to be cultivated first, and this is a comparatively slow process, and time is what we have most to contend against at this juncture. The above are regrettable oversights, which should be remedied at the earliest opportunity. In the opinion of those who have studied the subject, the places where such an experiment should first be initiated, are the North-West Provinces, Rajputana, Kashmir, the Punjab, British Baluchistan, and along the North-West Frontier; all of which have already a fairly large tea drinking population, who would gladly welcome the introduction of cheap teas among them. This leads to another thought. Here are natural markets in what might be called the very vicinity of the plantations of Kangra, Dehra Dun, and Kumaon, and yet no combined or sustained efforts have been made to absorb them by these favourably situated tea districts, while far away and go-ahead Ceylon is now actually arranging to flood Baluchistan and the Lower Punjab with its production, and thus capture these local markets from under our very noses. Verily, it is a case of *quem deus vult perdere prius dementat*, with us Indian planters. When we are mad enough to neglect such golden opportunities of salvation at our very doors, we richly deserve to suffer and be destroyed. All this comes about from absence of combination, ignorant and inept direction, and what last your correspondent aptly designates as "cheap and empty-headed management."

The causes that have led up to the present crisis in tea, can be mainly traced to three prominent factors. These are in the order mentioned,—the culpable apathy and negligence of shareholders and proprietors to their own interests, the intolerable demands of transit companies, agents, and dock and warehouse men—and lastly, antiquated and incompetent management. Under these three baneful influences no industry in the world could possibly flourish in these changing and progressive times. The whole remedy lies entirely in the hands of the shareholders and proprietors. They have only to rouse themselves to the exigencies of the situation, and insist on rational reforms, and the regeneration of the industry must naturally follow. Let them combine and demand reasonable reductions of the charges now made on their dividends. Let them weed out unqualified and out-of-date managers and directors. And when really sound and competent men have been secured for their highly responsible duties, tell them what is wanted in unmistakable terms, and let them have a free hand to use their acumen, and professional knowledge and experience. I have often been asked to explain the advantages of plantation management through distant agents. I will not answer this question as the little boy did, when asked what the advantage was of getting one's time from Madras? He promptly replied that there was no advantage in getting *anything* from Madras. A reply couched in the same spirit would betoken prejudice, and be unfair to agents generally who, as a body, have undoubtedly done yeomen's service to the tea industry in its early struggling days; and to a certain extent, agencies are and always will be useful factors. But a growing complaint against such bodies is that their methods of management have become hidebound and unpractical, and are at the same time not in touch with the advancing spirit of the age; and further, that they have usurped a great deal too much power and authority that should rightly be exercised only by owners, shareholders and managers, and this excessive power, it is also argued, has been often grossly abused to the detriment of the industry generally. Both systems—that is, management through agents and management by Boards and managers are desirable according to circumstances. But the mistake that has hitherto to be made, lies in the fact, that there has been far too much of the former method, and a great deal too little of the latter, hence the present universal lamentations on the fall of tea. Given an able manager and a well-chosen Board of Directors, and there is really no valid reason why so many valuable tea estates should be run exclusively by Calcutta or London agents. On the contrary, it could easily be shown that there are many tangible advantages in the direct system of control by shareholders through a Board *plus* manager. The wonder is the idea has not caught on more extensively before this. The procedure is no new one, as many gardens can be pointed out which worked on this latter system with the very best results to all concerned. But before any such change can be adopted in the present agent-appropriated estates, it would be well for shareholders and proprietors to realise that it is necessary that they should unreservedly make up their minds to take a more personal and sustained interest in their properties, and above all, that they must have none but the best men as their managers. If these two essential conditions are not to be fulfilled, it would be wiser to sell out at once and let the much-muddled industry drift to its inevitable conclusions, ruin and effacement in the near future. The whole tea industry is now-a-days in a condition of unstable equilibrium, tending, as I said before, towards self-destruction; and whether it survives and flourishes or becomes moribund and ruined, depends entirely on the course adopted at the present time by those who have any stake in it. Any patchwork stop-gap arrangements will not only be futile, but absolutely fatal. The changes that are necessary must be drastic, and of the root-and-branch order. The old régime, after a trial of many decades, has proved to be hopelessly defective and behind the times; and, therefore, to effect a regeneration, new blood must be introduced, and newer and more up-to-date methods inaugurated. The necessities of the movement require that the first step in this direction should be a demand on the part of all shareholders and owners for a thorough and searching inspection and report on their properties by independent exports. It goes without saying that it would be a useless waste of time to expect a wholly unbiased and unprejudiced report of this comprehensive kind from any one cradled and nurtured in the old existing system: vested interests, and age-encrusted ideas and customs would all militate against the report of any such individual being of much practical value. But there are a fair number of competent men of independent and progressive views in India, who might easily be engaged for this purpose, whose opinions and suggestions would be of the greatest utility in enlightening the interested as to what changes are needed. The new season will be commencing shortly, and therefore no time should be lost in calling for these reports. Any suggestions they embodied regarding the executive management, could be adopted immediately, while outside questions, affecting agencies, transit companies, dock and warehouse imposts, customs duties, etc., could be dealt with more leisurely at the hands of a strong representative Tea Association, composed of a combination of all classes intimately connected with tea. This Association, it is strongly urged, should be formed not merely of Calcutta agents, but also of proprietors, shareholders and representatives, professional planters; and there should be a selected paid secretary to publish and carry out the views of the said Association.

Thorough enlightenment of shareholders and proprietors, by means of exhaustive and unvarnished reports from independent experts, together with the formation on the lines suggested of a represen-

tative Tea Association in Calcutta, with affiliated branches in every tea district in India, are, I maintain, the soundest and perhaps now the only means of resuscitating tea and placing it on a safe commercial and progressive basis for the future. Failing a general reform movement, I cannot see any other destiny, but the rapid deterioration of this popular and economic industry in this country, and the transfer of the bulk of our tea trade in our more energetic rivals of Ceylon, and perhaps also to much-abused China, a region which will undoubtedly attract a good deal of European capital and enterprise in the very near future. It is an industrial axiom that trade, once transferred, seldom or never returns to the country of its inception; and this serious consequence should ever be borne in mind when dealing with the present dangerous crisis in tea.

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION (LONDON).

The following is an abstract of the proceedings of a meeting of the committee held on 1st January, 1901, when the following members were present:—Mr. D. Cruickshank (in the chair) and Messrs. A. Bryans, J. S. Hulbert, C. C. McLeod, J. N. Stuart, A. G. Stanton, and C. W. Wallace.

1. The minutes of the last meeting, held on 27th November, were read and confirmed. Correspondence with Calcutta, copies of which had been circulated, was laid on the table.

2. It was noted that the subscriptions to the Indian Tea Fund to 13th December amounted to Rs. 78,000.

3. The question of restricting the production of undesirable common tea was discussed, and it was proposed by Mr. Wallace and seconded by Mr. Stuart, that Messrs. Bryans, McLeod and Hulbert be appointed a sub-committee to consider the question of the adoption of a fine system of plucking, with a view to obtaining next season a smaller crop of tea of better quality and the steps to be taken for this purpose, and also to communicate with the Ceylon Association on the subject.

4. *Tea Samples by Post.*—It was resolved that a letter be addressed to the Postmaster-General to suggest that when a new convention is being entered into a change should be made so as to allow of hermetically-sealed samples of tea being sent through the post, and that, in the meantime, the other parties to the convention might be approached by him with a view to obtaining their consent, if possible, to the desired concession being granted at once.

5. *Ullaged Packages.*—A letter from Her Majesty's Customs having been read, it was resolved that further application should be made, asking that the filling up of slack-packed packages may be permitted in the case of London bulked teas.

6. *Tea and "Gunny Bags."*—A letter from Messrs. George Williamson & Co. on this subject was read, and it was resolved that a representation should be made to the Conference Liners on the subject of the damage done by placing gunny bags and tea in the same hold, and urging the discontinuance of the practice on account of the injury done to the tea thereby. Application in the first instance was to be made to the Brokers' Association for a letter expressing their opinion as to the damage done to teas by being placed in the neighbourhood of gunny bags.

7. *Sale of Tea in India.*—Consideration of this question was deferred for the present to admit of correspondence received by late mail being circulated.

8. *Green Tea.*—It was resolved to ask Calcutta what is being done in this matter, and to suggest that arrangements should be made in good time so as to obtain a full supply of green tea next season.

9. *Enhanced Duty on Tea.*—It was resolved that Messrs. J. S. Hulbert and J. Alston be appointed a sub-committee to formulate and carry out a scheme for agitating the question of a reduction of the duty on tea and that a sum of money be placed at their disposal to meet expenses.

10. *Proposed Imperial Fiscal Federation for the Protection of British Interests.*—A letter from the United Planters' Association of Southern India having been read, it was resolved to circulate the same for consideration.—Ernest Tye, *Secretary*.

WHO SAMUEL BYRNES IS.

The writer is glad to take the hand of Mr. Samuel Byrnes and give it a hearty squeeze. That we are parted for the moment by ten thousand miles of seawater doesn't count. May you live right along and prosper, Mr. Byrnes.

In this grumbling old world, more full of aches and pains than an American water-melon is of black seeds, it is jolly to hear a man sing out, "*I am first-class every way; and as for my health it couldn't be better.*"

This is great, especially when we understand what went before. For several years Mr. Byrnes was in bad form. Dyspepsia it was, and a very nasty variety of that abominable complaint. He got but little sleep—so he writes—and was in pain most of the time. He called in the doctors, one after another, and asked them what he was to do.

They agreed on the main point, and they were right. Indigestion, liver disorder, and the nerve troubles which are thrown in as make weights—the doctors said these things once got rid of, our friend would be all right.

And they did their best to bring it to pass—these worthy men. They gave him drugs—the same, no doubt, that have been so often and so vainly given.

"After the doctors gave me up," says Mr. Byrnes, "I tried everything I could think of, or others recommended to me. At first I felt sure I would come upon something helpful, but I never did, until somebody told me about Mother Seigel's Syrup. Even after reading what was printed in books and papers, as to the merits of this preparation, I still shook my head.

"'Not likely to be any better than the rest,' I said; 'the chances are all against it.' For, you see, my heart was, as you may say, down in my shoes, and I was not in a mood to take hope from any testimony that could be produced.

"All the same, I began taking the Syrup; I don't know why. The good effect was almost immediate. I stopped wasting up my food, and commenced to feel stronger and better. Without troubling you with the story of how I got on step by step, I will merely say that the medicine seemed to build me up, and put me together bit by bit, until I was sound and well as any man wants to be.

"I have lived here sixty-one years, and many people in this neighbourhood know what I have said to be true, and were as much astonished at my recovery as I was myself. I am now seventy-one years of age, and hale and hearty. For this wonderful blessing I thank God and Mother Seigel's Syrup.

"As the reader looks at my signature and says, 'What is Samuel Byrnes?' I present him my compliments, and reply that if we ever meet I shall be glad to tell him, by word of mouth, much more than I have written, and to-day all day long for the remedy that made me the man I am." Samuel Byrnes, Lemon Grove, Penrith, N.S.W., September 1st, 1899.

MARKET REPORT.

COFFEE.

Messrs. H. J. Howe & Co's Weekly Coffee Report, dated London, E. C., 12th January, 1901, says:—

Public sales were resumed last Tuesday; at present, however, the market shows no signs of improvement, the demand being very dull.

[illegible] bags new crop East India were catalogued, but met little or no competition, only a few lots selling at less than valuations.

New crop, Costa Rica, attracted little attention and low prices only were realised, while other kinds had to be bought in.

Futures advanced 1/6 during the first part of the week on smaller receipts, but the market has eased off again, and closes at about last week's rates.

EAST INDIA SOLD IN PUBLIC SALE SINCE 4TH JANUARY, 1901.

January.	Mark.	District.	Sold.	Sold.	Sold.	Sold.	P.
Feb	Ketergherry F.C.	Neilgherry	7	not sold	22	not sold	8
"	Ketergherry B.C.	"	7	"	21	"	7
"	Pattapollam	"	1	"	17	"	3
"	Benmore	"	1	"	16	"	5

TEA.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated January 11th, 1901, says :—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
00-1901	983,167	767,763	32,630
99-1900	1,057,627	734,939	34,382

,662 *pkgs.* INDIAN
,201 „ CEYLON
,102 „ JAVA
} Total 81,971 packages were offered in public auction this week.

Although it is difficult to say whether duty payments in 1900 tually represent home consumption, it is satisfactory that figures ow an increase of some 7 million pounds over those of last year, dia contributing about 4 millions and Ceylon 7 millions, while e quantity of China Tea upon which duty was paid fell 3½ million ounds.

The most satisfactory feature is the large increase in the re-port of British grown Tea, lbs. 24,047,679 being sent abroad gainst lbs. 19,868,295 in 1899.

According to the duty payments, the home consumption per head population was 6·10 lbs. in 1900, against 5 98 lbs. in 1899 and 85 lbs. in 1898.

The supply from India and Ceylon is greatly in excess of the resent demand, and prices have in consequence fallen to such an nprecedentedly low figure that many estates must be doing very adly. It would be much to the advantage of the industry if roprietors would come to some understanding, in order to remedy condition of affairs which is rapidly becoming extremely serious, nd can only be effectually alleviated by reducing the output of ne whole crop.

INDIAN.—Useful liquoring kinds continue to attract the chief ttention and sell at steady rates; common descriptions of both hole and broken leaf have again fallen in value, there being a rther drop this week of about ¼d. per lb.

Week's average of Tea sold on Garden Account 1901, 45,621 pkgs., v. 7·00d. 1900, 46,340 pkgs., av. 8·34d.

Total Tea sold on Garden Account 1st June 1900 to date, 803,391 pkgs., av. 7·55d. 1900, 808,198 pkgs., av. 8·46d.

CEYLON.—The market again fell away for low grade Teas, both whole leaf and broken kinds registering a further drop amounting to ¼d., and in some instances even ½d per lb. On the other hand medium and good Teas continue to sell steadily with good competition.

Average for week 6·56d., against 7·96d in 1900.

Ceylon Tea sold on Garden Account 1st January to date, 43,852 pkgs., av. 6·77d. 1900, 47,752 pkgs., av. 7·86d.

JAVA.—The conditions referred to above were reflected in the Java market, and as a consequence several Teas with poor liquor were withdrawn from sale.

CINCHONA.

The N.V. Ned. Veem cinchona-bark department at Amsterdam report the shipment from Java to Europe during December, 1900, at 1,100,000 Amst. lbs., against 626,000 in 1899, 1,018,000 in 1898, 731,000 in 1897, and 890,000 in 1896. The total shipments from January to December have been (Amst. lbs.):—

1900	...	10,780,000	1896	...	10,079,000
1899	...	11,409,800	1895	...	8,827,700
1898	...	11,150,000	1894	...	8,917,700
1897	...	8,437,000	1893	...	7,342,000

The shipments from December 4, 1900, to January 7, 1901, amounted to 1,279,000 Amst. lbs.; and the total from January 1, 1900, to January 7, 1901, was 10,827,408 Amst. lbs. The exports from Ceylon from January 1 to December 17 have been:—

	1900.	1899.	1898.	1897.
Lbs. ...	499,039	592,492	872,836	64,600

QUININE.

The feature of this market is that "shilling quinine" is again an actual fact, that figure having been paid for one or two small parcels held by weak holders in second hands. Prices this week, however, have been more or less nominal, and operators are awaiting the result of the bark-sales at Amsterdam to-day. For March delivery 1s 0⅜d has been paid.

(AVERAGE FOR ALL INDIA 7·00d., JANUARY 11TH).

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.
Neilgherry ...														
New Hope ...	125 p	5¼	24½c	8¾	...	...	33½c	7	68	4 4¼	...	...	...	...
Travancore ...	177	4·94												
Invercauld ...	39	4¾	10	5¼	15	4½	7	5	7	4		...	...	...
Glenshurst ...	138 p	5	58	5 6	26	4½	15 b	5½	13	4	26½c	4¼	...	...
Wynaad ...														
Kanambyle & Cher.	109	5	...	...	47	4½4¾	62	5 5¼	...	...	...	...	...	...

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Number One and Number Two, by Frances M. Peard.
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PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

VOL. VI.] MADRAS, SATURDAY, FEBRUARY 9, 1901. [No. 6.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 15th instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Coorg.

POLLI BETTA, 30*th January*.—*Weather*—Has been keeping fine and chill accompanied afternoons by high East wind. *Crops*—have turned out much above estimates and are about the handsomest that have been got for the past 6 years. Stripping is now going on nearly everywhere and pruning is following it up, but it will be some time in March before work is completed. *Labour*—is sufficient ; but general health remains unsatisfactory.

Coorg.

POLLI BETTA, 5*th Feb.*, 1901.—*Weather*—Bright, clear and cold till this morning when it was cloudy. East wind very strong. *Crop*—Stripping going on, followed up by pruning. Crops have turned out much above expectations. *Health*—fair.

Munzerabad.

February 5*th*, 1901.—*Crop*—Most of the estates have the end of a very satisfactory crop in view now. *Weather*—heavy east winds. *Health*—good. *Labour*—abundant. *Interesting*—the Census enumerators are now very busy numbering all the houses ; a notice was sent round asking to have all the dogs tied up, the average Brahman enumerator being of a nervous disposition.

COFFEE IN QUEENSLAND.

IN our "Coffee in Distant Lands" section we give lengthy extracts from the report of the Instructor in Coffee Culture to the Government of Queensland on Coffee Culture in that Colony. Indian coffee planters may, we think, regard with equanimity any progress that Queensland may make in the cultivation of coffee. We are certainly of opinion that, properly pushed, Indian coffees might have found a better market in Australasia than they have yet done. The chief aim of the Queenslander's however, is to grow coffee for consumption in their own Colony, and there are no present indications that they are likely to supply more, at most, than their own and other Australasian markets. According to Mr. NEWPORT, there is in Queensland a zone of country, having a somewhat heavy rainfall, eminently suitable for the cultivation of coffee. It possesses, however, a climate that will necessitate artificial methods of drying by means of kilns or drying machinery, except in a few places. The gardens are mostly small, and as labour is dear this facilitates proper supervision and care. "The oldest inhabitant" in the way of coffee-plants still thrives, but Mr. NEWPORT'S remark on this point have a quiet humour that invites us to quote them verbatim. "The first coffee tree ever imported has been pointed out to me, and it is healthy and flourishing, but, as this has occurred in several different localities, its exact age is somewhat vague." The chief varieties to be found in Queensland are *Arabica* and *Liberica*, and Mr. NEWPORT'S remarks about the former will be read with special interest. They show that in Queensland as well as in India a diversity of seeds has been tried, also that Hybridisation is not being neglected.

Like Indian coffee-planters in earlier day growers in Queensland appear to be working their way onwards from almost complete ignorance of the requirements of the plant towards what may be termed a scientific system of cultivation. Mr. NEWPORT comments on the generally unsatisfactory condition of the gardens, but some of his remarks are less precise than we could have wished them to be. For instance, of some gardens he says that they show promise of a 5 to 6 cwt. crop for trees not more than two-and-a-half years old, but he omits to state how many trees are planted to the acre. Again, while local readers may fully comprehend his remarks as to the area specially adapted to coffee culture, the reader in

India can form no idea of the acreage probably referred to. As matters stand, there appear to be some 200 growers aggregating 700 acres or more. Some 100 acres more appear to have been allowed to lapse during the last year. The largest holding appears to be about 80 acres, the smallest must be small indeed. There is very little coffee in cultivation of more than five or six years of age; the majority is either in its second year or bearing its maiden crop. There is an inclination manifested to open further, and the reduction alluded to is likely soon to be made up. According to Mr. NEWPORT, the area under coffee in the colony at present is capable of yielding easily, with ordinary cultivation and no manuring, on a average of 10 cwt. to the acre, "a crop worth some £20,000 and possibly giving a crop worth at the same valuation £25,000 to £30,000 annually." In quality, the coffee is thought to be improving. Practically all of it is bought up and manufactured in the colony, prices remaining fairly steady at from £56 in the parchment to £112 per ton, clean, according to sample. Certainly, encouraging prices.

As to the future Mr. NEWPORT appears to be sanguine. He notes improvement in quality, alludes to sales at from 1s. 6d. to 1s. 9d. per lb. in tins, but he deprecates too much decentralisation in regard to manufacture, fearing that the placing on the market of a large number of brands would depreciate prices. In support of his assertion that prospects are good, he states that high-grade quality is obtainable and that, in spite of labour competition in other countries the colony's natural advantages can compete with them. He even states that from the grower's point of view, coffee has become the most paying of products, giving a return of 10 cwt., and possibly a 15 to 20 cwt. crop, which even at 6d. per lb. in the parchment would mean £28 gross, or a net return of £15—20 at least per acre. It should be especially noted, however, that at present coffee in Queensland is mostly regarded as a bye-product. It may be that it will yet "pay" as a staple. Mr. NEWPORT thinks it will. At any rate, his figures will make some of our readers regret that the large acreage in India out of which they can make little or no profit cannot be at once exchanged for even a smaller acreage under coffee in Queensland, where, unless Mr. NEWPORT errs greatly, land is to be had that will prove responsive to care and knowledge, and yield coffee enough and of a sufficient quality to make good profits a certainty. We shall await with interest his future reports, commenting on the development of the Coffee industry in Queensland. It is good to know that there is at least one country where profits are derivable from the cultivation of high-grade coffee.

THE TEA CRISIS.

In the course of a letter to the *Ceylon Observer*, Mr. R. V. Webster makes certain remarks that should be pondered by planters of tea. He says:—"Protect 'Ceylon Tea,' the two words that have been established at very considerable cost in some three-fourths of the countries of the world, and estate proprietors need have no fear from 'over-production.'" In the past twelve years Mr. Webster has not only circled the globe twelve times, but have, with the exception of China, Japan, and South America, visited the principal cities in every country in the world, during which time "Ceylon Tea" has been his first thought, and having discussed with the principal importers the merits of Ceylon, India, China, Japan, Formosa, Java, and Natal teas, and the future pro pects of the estates in California, and the Caucasus, he fee justified in coming forward with a scheme that he is confide will remove all fear from 'over-production.' The propose scheme is as follows:—

First.—The Ceylon Government should issue a guarantee stam All exporters of tea from Ceylon should have the option of affixi the said stamp to packet teas above certain standards. It migl be found advisable to extend this privilege to packers of Ceylo tea in countries other than Ceylon, but then the said stamp shou be under Government control, and affixed only to teas packed Bond, and that had passed the standard established by the Ceylo Government.

Secondly.—Standards should be established for bulk as well packet teas, both for leaf-teas and tea-dust. No teas below the standards should be allowed to leave the island bearing the nam "Ceylon," either on the packets or on the cases

Thirdly.—The Planters' Association should advise Governmer what woods are suitable for tea chests; no tea should leave th island bearing the name "Ceylon" except packed in cases made these woods.

Fourthly.—Firms should receive assistance in advertising Pur Ceylon Tea, but not blends. In some countries it may be necessar for the Committee of Thirty to contribute a third; but that shoul only be for a time, later it should be reduced to a fourth, then fifth, and so on, from time to time, as firms come forward prepare to work on a smaller percentage from the Committee of Thirty.

In explanatory remarks Mr. Webster states that his reaso for bringing forward the suggestion of Guarantee stamps more apparent each day as he visits cities in different parts the world, and sees packets labelled "Ceylon Tea," "Pur Ceylon Tea," "Ceylon Tea packed on the Estate," etc., th contents of which are often a blend of Ceylon and Indian Ceylon, Indian and China; Ceylon and China; and Ceylo and Java. Without a Government stamp there would be n use in establishing standards, as unscrupulous firms would con tinue to purchase cheap teas from China, Java, India an Formosa, and blend them with their Ceylons so as to brin down the cost. Ceylon would then foster a demand fo cheap teas which its neighbours can produce in unlimite quantities so long as there is a ready market. He furthe explains that there are many estates in Ceylon that mak their chests from certain native woods that are full of germ that eat through the packages often before they reach th importer. And as to advertising Mr. Webster's remarks:— "If I am not much mistaken our Commissioner in Americ continues to subsidise his chosen few with a third of th amount they spend, while there are many firms who woul be glad to come forward and advertise 'Pure Ceylon Tea were they to receive some assistance, a fifth, sixth, or eve tenth; but so long as they have to stand aside and see thei competitors receiving a third of their advertising refunded it is hardly to be expected they will take up the advertisin of Ceylon tea. In February, 1900, a certain firm applied t the Commissioner in America to know what assistance h would give towards advertising Pure Ceylon Tea in th States? Too late; all funds appropriated,—the result bein the said firm cancelled all advertising contracts in the State of America for Pure Ceylon Tea." Mr. Webster remarks, i conclusion, that were the Committee of Thirty to give a allowance in tea to the importers of Ceylon tea (percentag to be worked out from funds at disposal and approximat amount of Ceylon tea imported into the States of America the allowance to be supplied by the firms from whom the te was imported, it would be an inducement for firms to plac orders for Ceylon tea.

BOARD OF TRADE RETURNS.

DECEMBER, 1900.

The figures for 1900 are now complete and the following show Imports, Consumption and Exports of certain commodities during the twelve months ending 31st December in the last and two previous years.

Coffee.—The reduction in Imports accompanied by an increase in Home Consumption is encouraging, but coffee crops have been heavy and stocks have become heavier in the United Kingdom as well as in other markets.

—		1898.	1899.	1900.
Import	cwts.	922,252	974,991	764.823
Home Consumption	,,	250,818	268,371	283,880
Export	,,	558,910	686,632	462,728
Stock	,,	307,000	318,000	329,000

Cocoa (Raw).—Larger figures all round except in respect to export :

—		1898.	1899.	1900.
Imported ...	lbs.	43,833,993	43,473,241	53,153,228
Home Consumption	,,	32,087,084	34,013,812	37,829,326
Export	,,	9,666,345	11,075,685	9,199,104
Stock	,,	16,514,000	13,343,000	17,546,000

Cocoa (Prepared).—An increase in every branch as compared with 1899. Stocks continue light.

—		1898.	1899.	1900.
Imported ...	lbs.	8,127,191	5,262,394	7,868,592
Home Consumption	,,	6,492,634	5,525,749	6,890,684
Export	,,	721,083	731,525	923,895
Stock	,,	1,249,000	268,000	328,000

Tea.—The growth of Imports has been rapid, and though Home Consumption and Exports have both improved stocks get larger and larger. An advance of 9,000,000 lbs. upon the stocks held at the end of 1899 gives some way to explain present depression in prices.

—		1898	1899.	1900.
Import	lbs.	271,593,683	288,922,251	303,867,140
Home Consumption	,,	235,414,104	242,560,813	249,792,086
Export	,,	36,334,902	32,234,205	43,157,197
Stock	,,	99,476,000	113,086,000	122,613,000

TO THE DEAF.

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London.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

The Paris Exhibition.

The Indian Tea Association (London) has issued the following report, dated London, December 29th, 1900, on the work done at the Paris Exhibition, 1900 :—

I am directed by the Committee to hand you a copy of Mr. Langdale's Report on the work done in Paris since the opening of the Exhibition.

It was mentioned in the Report of the General Committee for the year 1899-1900, presented at the Annual Meeting held on the 26th July last, that advantage had been taken of the Exhibition to call the attention of visitors to the merits of Indian Tea and to promote its sale throughout France. With these objects a Tea Room was opened in the Indian Imperial Court, where Tea was sold in cup throughout the whole period of the Exhibition. The service gave great satisfaction to the numerous visitors who daily resorted to the Court in the afternoon, and the superior quality of the Tea supplied was frequently commented on. Numerous small samples of Tea, put up in neat lacquered tin boxes, with copies of a booklet in three languages, descriptive of Indian Tea and containing directions for making it, were given away gratis to people from all countries visiting the Exhibition, and were greatly appreciated. Tea in packets was also sold in the Tea Room and at a stall adjoining in the Imperial Court, and considerable quantities were disposed of in this way. In order further to attract the attention of visitors a display was made of samples illustrating the many different varieties and growths of Indian Tea which are still so little known to the greater portion of the inhabitants of Europe. An excellent collection of well-made Teas, chiefly of the higher grades of Pekoe and Broken Pekoe classes, from well-known Estates in the districts of Assam, Cachar, and Sylhet, the Dooars, Kangra, and Travancore, were got together, the latter by the help of our friends in Southern India. Photographs illustrating the different processes of manufacture and affording views of the districts in which Tea is cultivated, notably of Darjeeling, with the snowy range of the Himalayas, were supplied and attracted much attention. Handsome show cases were provided to allow of the easy inspection of the samples, which were placed in large glass globes so as to be readily seen.

The arrangements at the Exhibition were intrusted to Mr. Edward F. Langdale, who was assisted by Mr. J. Kerrett Rogers, a gentleman who has been long a resident in Paris, and connected with the Tea trade in that city. In the Tea Room a well-dressed staff of girls, who could speak French, attended on visitors, and to give a more marked Oriental character to the Court an Afghan, named Gholab Shah, was employed to distribute samples of Tea.

Several important receptions were given during the Exhibition at the Indian Court, among which may be mentioned that of the English and Foreign Grocers and that of the Associated Chambers of Commerce, when Indian Tea was served to the visitors, and also on the occasion of the visit of the President of the Republic, to which Mr. Langdale refers in his Report.

The arrangements made in 1899 by your Committee contemplated a somewhat larger space than was actually allotted by the Royal Commissioners, and the want of additional room

for visitors was at times felt to be a drawback. Your Committee, however, are satisfied that the work done has been productive of good, and, with the view of maintaining the ground that has been gained, arrangements have been made for carrying on the work at No. 48, Rue Faubourg St. Honoré, where Tea will continue to be sold in the cup and in packets. The depôt at No. 3, Rue d'Alger, which has been used as a centre for the sale and distribution of Indian tea throughout France, will also be maintained, the work at both places being under the joint supervision of Messrs. Langdale and Rogers.

Mr. Langdale estimates that there is room for 80 guests at a time in the new premises at No. 48, Rue Faubourg St. Honoré.

The charge made for Tea in packets was and will continue to be 3f. 50c. per French pound, a price which the French themselves consider to be remarkably cheap, including as it does the heavy duty levied in France.

The following Press notice gives as fair an account as could be wished of the work done in Paris :—

"Nothing of this kind has ever been done before in Paris, or has succeeded so well. The attempt to sell Tea to the public at previous Exhibitions has usually ended in disappointment. The object of the Association to popularise Tea is evidently being attained, the Tea has become popular, and a nucleus has now been formed for a business, which should be continued after the Exhibition is at an end."

Yours faithfully,

Ernest Tye,

Secretary.

Annexed is a list of the Awards made by the Jurors to the Association and to various Exhibitors.

INDIAN TEA ASSOCIATION (LONDON).

Paris Exhibition.

The following is an extract taken from the Official list of awards :—

Great Britain.—Juror: W. T. Wilson (Messrs. Gow, Wilson, & Stanton).

Grand Prix.

Collectivité des Planteurs du thé Indien (Indian Tea Association, London and Calcutta).

Medailles d'Or (Gold Medals).

The Amalgamated Tea Estates Company, Limited.
The Consolidated Tea and Lands Company, Limited.
The Imperial Tea Company, Limited.

Medailles d'Argent (Silver Medals).

The Anglo-American Direct Trading Company, Limited.
The British Darjeeling Tea Company, Limited.
The Jokai Assam Tea Company, Limited.
The Gielle Tea Company, Limited.
The Hope Tea Company. Limited.
The Moabund Tea Company, Limited.
The Century Tea Company, Limited, Exposition Universelle. (3, Rue d'Alger, Paris; Mr. Langdale.)

Medailles de Bronze (Bronze Medals).

The Bengal United Tea Company, Limited.
The Borbaree Tea Estate, Assam.
The Cachar and Dooars Tea Company, Limited.
The Chalouni Tea Company, Limited.
The Darjeeling Consolidated Tea Company, Limited.
The Doodputlee Tea Company, Limited.
The Greenwood Tea Company, Limited.
The Majuli Tea Company, Limited.
The Okayti Estate, Darjeeling.
The Poobong Tea Estate, Darjeeling.

Mentions Honorables.

The Attaree Khat Tea Company, Limited.
The East India Tea Company, Limited.
The Ethelwold Tea Estate.
The Jaipur Tea Company, Limited.
The Assam and Dooars Tea Company, Limited.
The Turzum Tea Estate.
The Jaipur Tea Company, Limited.
United Planters' Association, Central Travancore.
United Planters' Association, Nilgiri Hills.
The Tukvar Tea Company, Limited
The Western Cachar Tea Company, Limited.
The Jhanzie Tea Association, Limited.
The Soom Tea Company, Limited.
The Teesta Valley Tea Company, Limited.
The Thora Jan Tea Company, Limited.
The Woodbine Tea Company, Limited.
The Nagaisuree Tea Company, Limited.

[Inclosure].

48, Rue Faubourg St. Honoré,
Paris, *November 29th,* 1900

I am in great hopes that this my final Report of work done at the Exhibition will satisfactorily show the Committee that the prospects of Indian Tea in France are brighter now even than they were when I wrote on the subject in September last, and that the Association will feel how justified they were in deciding to continue a business which has commenced so well.

As the sale of Tea in the cup was chiefly intended to serve as a means to popularise Indian Tea in France, the Association will be pleased to note what progress was made in the sale of packet Tea.

At their stall in the Exhibition which was opened on 13th June, the sales increased, *pari passu*, in a manner which I think the Committee will consider highly satisfactory. A tabular statement will be given at end of this Report. It will show that to date over 8,000 lbs. Tea have been sold.

The liking for Indian Tea had undeniably increased during the run of the Exhibition, but the increase of sales for the last few days is partly to be accounted for by the fact that purchasers had formed the idea that when the Exhibition closed the price of Tea would be raised.

This opinion was held by the trade, but that such will not be the case is now fast becoming evident to all, and our hopes therefore, are that we shall not lose much ground by reason of the Exhibition now being closed.

That the low price can and will be maintained is, of course, in consequence of the support we have received, and are to continue to receive, from the Association, and which I venture to say is of far better form than that of subsidising grocers, with whom, however, we shall have to reckon later on when Indian Tea is more generally enquired for in France.

Up to the present we have not been able to do very much with the trade itself, for the reason that our price does not permit us to give a discount anything approaching the customary one in France—*viz.:* 25 per cent.—but our hopes are that the present trade price may be modified if we can buy our Tea through more direct channels than we do now.

Infusion.—Owing, as I have already said, to their somewhat unexpected secluded situation, the "Indian Tea Courts" were not easily found by many chance visitors, or by those who came especially to visit them, but once they were found they became the resort of the best society, members of which have been known to say that the Indian Tea Courts were the most *chic* of any in the Exhibition.

Although in such "rushes" of business as occurred in the Tea Courts it was utterly impossible to give entire satisfaction to everyone, the complaints were very few indeed, and then of rather a hypercritical kind. On the other hand, I am happy and content to mention that unstinted and warm praise was given by habitués of the Courts, notably the Princess Malakoff (who, for nine days, took her seat regularly at four o'clock), the Duchess of Mecklenburgh, Baron and Baroness Alphonse Rothschild, and the French Commissary General.

The Baron and Baroness were pleased to say that the Grand Prix should have been awarded the Association for the manner in which the Tea was served as well as for the goodness of the Tea itself.

The prettey boxes of samples were much appreciated by all visitors, and happily by the French in particular. About 30,000 sample boxes were given away during the Exhibition, and the balance of our stock will be distributed in connection with the work to be continued at the Faubourg St. Honoré and 3, Rue d'Alger.

Coffee.—There is a demand for good Indian coffee, and I feel sure a business will be done in it. The quality of that served in the Indian Tea Courts was pronounced by connoisseurs to be very good indeed, and no objection has been raised to the price charged—3 francs a pound (French) roasted—but the great difficulty to contend with has been how to get the roasting process done. We could not do it in large quantities ourselves because of the Tea in store, and we have been unable yet to find anyone whom we can trust not to exchange our coffee for other of an inferior quality.

At the Exhibition the sale of our coffee was comparatively small, because, as in the case of tea, not only were the Courts not easily discoverable, but the various Sections around were closed to the public usually at 7 o'clock every evening, and no inducement was offered by the authorities to anyone to come in that direction. Our "After Dinner Coffee" suffered accordingly. The price in London of the coffee (mark Hosully) was 88s. per cwt. and the French duty is 75 cents per lb., so that for roasted Coffee 3 francs per lb. retail is moderate.

The Coffee itself compared most favourably with any other sold in the Exhibition, so, at least, was the general opinion expressed. At the Exhibition there was no difficulty in roasting the requisite 4 lbs. a day, nor will there be any at No. 48, Rue Faubourg St. Honoré.

I have already, in a letter to the Secretary of the Association, mentioned that a gentleman interested in the Army Commissariat Department has tasted the Coffee, and expressed himself so pleased with it that he took away with him small samples of it to submit to higher quarters.

Any Coffee, however, supplied to the Commissariat would necessarily have to be priced low—say 2 francs a French pound delivered. Tenders for the contract would have, of course, to be made in the usual course. The United Planters' Association may feel inclined to take up this matter and arange to deliver Coffee *viâ* Havre—the cheaper route. I will obtain all particulars possible.

Reckoning that about 4 lbs. of Coffee were used a day for 50 cups *café noir* and *café au lait*, 10,500 cups, or 7½ cwt., was the result. This seems small spread over the whole period the Exhibition was open, but the demand depended chiefly upon early customers, there being little inducement, as I have attempted to explain, offered to anyone to visit "India and the Colonies" after dinner merely for the sake of having Coffee in the India Tea Courts, though these were rarely closed before half-past nine.

For the reason already given in letters to the Secretary, the sale of Coffee in berry was not so easy as I first hoped it would be, as, in consequence of a protest made by many grocers in Paris against the sale of packet Tea at the Exhibition, the authorities took steps to have the stalls, both of Ceylon and India, closed. They, however, were not closed, but we deemed it prudent not to give publicity to the fact that we also sold Coffee.

To revert to Tea.—By a calculation of mine that on an average no one person ordered less than 75 centimes' worth of Tea in the cup, the 69,500 francs receipts represent 96,400 pots of Tea (two cups in each), but that number is considerably under-estimated because so many people often ordered pots of Tea for a smaller number than their party consisted of, and also extra cups for the rest.

Tea for two and cups for three, four, and five was an order frequently executed. As also hot water in addition was served, sufficient for other two cups, the quantity of Tea drunk by each person was, of course, much increased. I have not taken that into my calculations, but only the number of pots of Tea served. Putting it, however, at a reasonably low figure, I believe that not less than fifty to sixty people were every day served with extra cups without having to pay anything, except a penny, for the accommodation. At this rate, in the 210 days of the Exhibition, 10,000 cups of Tea can be added to the 96,400 pots accounted for.

The French do not always take their Tea as the English do, but they persevere in their attempt and evidently wish to like the beverage.

Some more often than not dip their bread and butter and even cake into the cup of Tea they are drinking, and some novices seemed to consider the Tea was a kind of grog to be mixed with the hot water, which they poured into the cup first. Others poured the Tea into the sugar basin, half the contents of which they had previously eaten, and then into the hot water jug, and from that into the cup. Or, for another change, they would partially empty the milk jug and then pour Tea into that. Our American visitors liked a glass of iced water to drink either with their Tea or after it. I do not mention these little peculiarities for the purposes of ridicule, but rather to show that Tea drinking in France is yet very much in its infancy.

The expert was, of course, sometimes present in the Tea Courts, judging from the procedure of some of the visitors, who, to the great wonderment of the foreign waitresses, would turn the leaves out into the saucer or a plate examine them closely, and then put them back into the teapot, and, having added more water, drink another cup of tea.

I am aware that I am now about to tread upon delicate ground, but as comparisons, sometimes unfortunately of an invidious nature, have been drawn between India and Ceylon, I venture to do so, as I cannot help thinking a totally wrong impression may have been given to some garden proprietors and planters in India who did not visit Paris this year, that their interests were not always in the best keeping.

The circumstances under which the interests of India and Ceylon (not necessarily conflicting, but rather in friendly rivalry) were worked were very different. The Ceylon Commissioner, Mr. Renton, came over prepared to spend money lavishly in the interests of Ceylon tea. He did so, more particularly in the matter of advertisement—whether wisely or

not, it does not become me to say—but I do know that the Press were, so to speak, "nobbled" to the extent that, in their judgment, India was of secondary importance. I venture, however, to say that India with a less expenditure has, in comparison, done as well as Ceylon. An extensive free list, and money paid for notices in the newspapers, of course, will always draw—for a time—as also do subsidies of another kind, and neither method adopted by Ceylon has injured India, but, on the contrary, has helped it. At this Exhibition, Ceylon had in their tea pavilion more than three times the accommodation India had in theirs—700 chairs against 200—and they worked under the direct auspices of the Ceylon Government. Between all the officials of the Ceylon section, notably in that part relating to tea, and myself there has always existed the greatest friendliness, even to the extent of borrowing supplies of each other, and I do not impute to them any wish not to share some of their glory with India. Both have done good in France in the interests of Tea.

Still, I cannot help thinking there were occasions when errors made by the Press might have been corrected by our friends, and wrong impressions thus prevented. To give only one instance: When the President of the Republic visited India and Ceylon he was received in the former, at the entrance to which stood the Indian Tea Court girls dressed in costume, from one of whom the President accepted in a most gracious manner one of the pretty little sample boxes of tea. So also did his retinue and many members of the Press, who at the same time made their notes concerning the Court. I was, as the Indian Tea Association's representative, personally introduced to many of the Press, notably the *Siécle*, which paper is particularly Anglophile. The President spent some time in the Indian Section, and then passed rapidly through Ceylon to Japan, so rapidly that there was no opportunity for the Ceylon Government delegate to present him, as he had intended to do, with a beautifully illustrated official catalogue of the Ceylon Court. The next day the Press gave all the honours to Ceylon, and the *Siécle*, to my particular surprise, reported, amongst other details, that the President visited the *Ceylon* Court, and that a charmingly-costumed girl belonging to the Tea Court there had presented him with a pretty little box containing a specimen of the island's tea! The other papers gave similar accounts, and in other ways misrepresented what had occurred. The representatives of two papers offered to give me small notices at the rate of about three or four hundred francs. I was unable to accept the offers, and their reports next day made no allusion at all to India!

Ceylon did not offer any explanation of the mistake I have mentioned, and which perhaps would not have been an unnatural one for the public to make, for at that period there was nothing except the exhibits to indicate which was the India Section.

The Exhibit of Tea in the Commercial Court attracted much attention, more particularly so as the Tea sales stall was close to two of the show cases. The light, however, was not good, and although, with the object of showing up the Tea better, I did not fill the globes more than three-quarters full, the Exhibit at certain hours of the day was not so effective as could be desired. I may mention that the Exhibit of very fine tip from some of the gardens, apart from all other merit, was most useful, in that many of the purchasers of our packets became disabused of the idea that Tea with tip in it was not good, but contained some foreign matter.

I do not know if it is within my province to allude to th "judging," for, of course, the reputation of the gentlema appointed by British Commissioners for Juror is undisputed but I may, I hope without presumption, ask to be permitte to say that no one could have taken more pains than M Wilson did to have the Tea properly judged and the award fairly given.

All the samples, more than 400, which were in the sho cases were carefully examined in the leaf by all the Juro of Class 59, who, however, not being experts in Tea, ofte deferred their opinion to Mr. Wilson and that of Mr. Derod the latter the only French expert on the Jury, and I woul particularly mention how hard Mr. Wilson fought to hav awards given to individual gardens independently of th Grand Prix which was to be awarded to the Indian Te Association for the collective Exhibit, and how, too, he wo his point in spite of very great opposition offered seemingl only on technical grounds.

The Gold Medal for Coffee was, by a clerical error, first o all awarded to Ceylon, but was ultimately given to the Unite Planters' Association of Southern India, after repeated an strenuous representations on my part.

SUMMARY OF QUANTITY OF TEA IN PACKETS SOLD AT THE EXHIBITION AND AT DEPÔT, 3, RUE D'ALGER, PARIS.

		Kilos.	Frs.
From 17th to 30th April.	At Depôt	13·125	90·4
For May	,, ...	114·890	737·6
,, June	At Exhibition and Depôt.	388·010	2704·6
,, July	,, ,, ...	483·600	3354·1
,, August	,, ,, ...	492·375	3208·6
,, September	,, ,, ...	673·750	4642·8
,, October	,, ,, ...	1021·575	7117·2
,, November (approximately)	,, ,, ...	1000·000	6600·0
		4187·325	28455·4

(Equals 8,364 English lbs.)

EDWD. F. LANGDALE.

* * *

The Indian Tea Association (London) and the Ceylo Association in London have jointly issued the following cir cular, dated London, 18th January, 1901:—

Restriction in Output of Tea.

The Select Joint Committee of the Indian Tea Associatio and the Ceylon Association in London, appointed to conside the proposal for a reduction of output of British-grown Te has carefully considered the subject from the standpoi of both of the producing countries, and begs to report a follows:—

1*st*.—That they are of opinion that no scheme has bee propounded that is sufficiently comprehensive and would ac as efficiently and be so likely to effect the required results a that of a diminution of output by a restriction of the pluckin area of mature Tea.

2*nd*.—That this can only be brought into operation by joint agreement between producers in both countries.

3*rd*.—That as it would be impossible from the widespre nature of the proprietorship and control of Tea Estates obtain the adherence of all producers within a reasonab time, they, therefore, suggest that if a reduction in the acrea to be plucked equivalent to a minimum output of 10,000,0 lbs. of Tea from India and 8,000,000 lbs. from Ceylon can

ssured by the adherence of producers to the scheme, then he object in view would, in all probability, be attained.

4*th*.—That with regard to the compulsory scheme proposed in Mr. H. K. Rutherford's letter, of 4th instant, with pecial reference to Ceylon, the Joint Committee desire to say hat if there is adequate support from Indian producers to he general scheme, it might be found the best and simplest lan in Ceylon, where there are a very large number of ndividual proprietors, that an unanimous representation hould be made to the Ceylon Government to pass a compulsory ordinance.

5*th*.—Annexed is a proposed form to enable proprietors o signify their adherence to the scheme, but prior to their eing requested to do so it has been decided to hold a joint Meeting of the Members of the two Associations to consider his Report.

A. Bryans.
C. C. McLeod.
J. S. Hulbert.
For Indian Tea Association.

H. K. Rutherford.
R. A. Cameron.
Alex. Thomson.
For Ceylon Association.

Annexure.

I / WE hereby undertake for one year from 31st March, 1901, to reduce the plucking area of mature tea on the / on Co.'s Estates / or Estate by 10 per cent., provided producers in India / Ceylon agree to reduce their output by not less a quantity than 10,000,000 lbs. for India and 8,000,000 lbs. for Ceylon during the twelve months ending 31st March, 1892.

Name of Company or Estate.	Mature Acres of Tea.	10 per cent. of Area.	Estimated yield of 10 per cent.

(Signed)_____

* * * *

COFFEE IN DISTANT LANDS.

XXIII.

Queensland.—Many of our readers will be interested in the following extracts from the report of the Instructor in Coffee culture to the Government of Queensland.

I have made tours into the surrounding coffee districts, giving advice and demonstration to those who applied for it. . . . In detail the places visited, and where coffee is grown, include Cooktown, Daintree, Port Douglas, Cairns, Atherton, Myola, Oaklands, Mantaka, Kuranda, Mulgrave, Lower Russel, Clump Point, Mackay, Mount Jukes, Hampden, Rockhampton, Byfield, Yeppoon, Maryborough, Pialba, Bundaberg, Blackall, Coolum, and Buderim. Space would not admit of even short notes regarding each individual district and place where coffee is being more or less cultivated. In general, however, I found from Cooktown southward to near Townsville a zone of country having a somewhat heavy rainfall—eminently suitable for the cultivation of coffee, but possessing a climate that will necessitate artificial methods of drying by means of kilns or drying machinery. At Cooktown and Townsville, and as far south as Rockhampton, the climate is such that there is every probability of growers being able to dispense with kilns and to dry in the open air, which, when possible, is always the more satisfactory method. South of this, again. the absorptive power of the sun is less strong, but, the atmospheric moisture not being great, it is probable that open-air curing may be possible. There is at present scarcely sufficient fully-grown coffee in these parts to thoroughly test this. The majority of gardens are small, though I found several of fair size, the largest being Messrs. Cutten Bros.' estate at Clump Point, of 80 acres ; Messrs. De Moleyns Bros., of the Lower Russel, running them very closely with 75 acres. There is very little coffee in cultivation of more than five or six years of age, the majority being either now in its second year or bearing its maiden crop this season. Some few acres in each of the three districts of Cairns, Mackay, and Buderim may be called old coffee, but their exact age is in nearly every case, doubtful. The first coffee-tree ever imported has been pointed out to me, and it is healthy and flourishing ; but, as this has occurred in several different localities, its exact age is somewhat vague.

The varieties of coffee to be found are *Coffee Arabica* and *Coffee Liberica*. The former is the principal species, and is the usual coffee of commerce, and the most valuable, growing and cropping readily. It is comparatively easily cured, and, though delicate as a seedling, is hardy enough once it has reached maturity. The latter is the larger and harder shrub, but is more difficult to pulp and cure, and is only worth about one-third the price of *Coffee Arabica*.

Of *Coffee Arabica* several varieties are noticed :—*C. Arab.* var. *Mocha*, a small stunted-looking and small-leaved tree, slow-growing bearing freely, but having a very small bean ; *C. Arab.* var. *Maragogipe*, almost the opposite of the former, being a loosely-knit tree, with large leaves and berries, but somewhat delicate, and a sparse bearer ; *C. Arab.* var. *Nalknad*, which would seem to be identical with the varieties known as "Ceylon" and "Java"—a strong, heavily-bearing tree ; *C. Arab.* var. *Coorg* a variety having very few points of difference from the previous variety, and being also a hardy tree and good bearer ; *C. Arab.* var. *Chick*, I have come across in one place only, and this is essentially the worst variety of *Coffee Arabica*, recognisable readily by its primary branches pointing invariably upwards.

Of these, several hybrids are to be seen especially between the *Nalknad* and *Coorg* or *Ceylon*. These prove somewhat delicate but good-bearing trees. *Chick-Nalknad* or *Chick-Ceylon* hybrids are extant, and in every case seem to have been raised from seed obtained from the estate on which some healthy specimens of "Chick" are still to be found. Several young plants are to be seen that look uncommonly like *Maragogipe-Ceylon* hybrids, but which are not yet old enough to identify as such. Such hybrids would probably prove valuable trees, if the bearing capabilities of the *Ceylon* can be combined with the size and quality of the *Maragogipe*. *Arabica-Liberica* hybrids I have not seen in this colony as yet, though experiments are being conducted at the State Nursery, Kamerunga, with a view of obtaining this valuable hybrid.

On the whole, the condition of the estates as I found them

was not encouraging—in some cases the weeds were over the coffee. Where the coffee had been kept clean, the growth and bearing were remarkable. For amount of crop the Buderim mountain is noticeable, the quality being also specially good here. On the Daintree River one or two estates that had been kept assiduously free from extraneous growth showed remarkable development, trees of thirteen and fifteen months being topped at 4 feet, having a good spread of secondary growth, and spiking heavily, showing promise of a 5 to 6 cwt. crop that would ripen when the trees were not more than two-and-a-half years old. For all-round good qualities some of the properties in the vicinity of Cairns, especially on the range about Kuranda are pre-eminent.

To summarise the area especially adapted to coffee culture may be said to extend from Rockhampton northward to to Cooktown, and the principal centres to be at, or in the vicinity of, Mackay, Geraldton, Cairns, and Port Douglas. The places that I have yet been unable to visit are Bowen, Cardwell, Geraldton, Johnstone River, the Bloomfield, St. Lawrence, and Percy Island. . . . Figures regarding the extent of the industry, . . . are still necessarily approximate rather than exact, statistics later on.

There would appear to be some 200 growers, aggregating 700 acres or more. I have not included in this the areas that have been allowed to lapse during the past year, and which amount to over 100 acres alone. The industry is now on a much firmer and better footing than last year. I found in some instances that areas had been opened by growers (perhaps in an excess of enthusiasm) without experience, knowledge of coffee culture, or consideration of the natural conditions governing the growth of coffee-tree, which they were in consequence subsequently utterly unable to cultivate or properly attend to. In such cases I have advised the concentration of attention upon some lesser part of the estate, and the selected portion. The result of such work on the part of the grower has been to reduce the extent of the industry, but to put their estates on an infinitely better footing, financially and otherwise. The increase of area under cultivation is steady, though not rapid, for the same reason. Under my advice, those intending to open up are clearing perhaps 4 or 5 acres to begin with, in the place of 20 or 30, but with the obvious result that what is opened is well cultivated, satisfactory, and in a condition to pay the cost of subsequent openings in due course, instead of large and unsatisfactory estates, which, being difficult to keep clean from the commencement, are ever after a source of extra expense in weeding alone.

The number of applications for seed and advice *re* opening up is increasing, and the areas reduced will, it is to be expected, be more than made up during the coming year by these new clearings. The value of the industry cannot be gauged by the mere acreage, coffee being considerably more valuable than most farm staples. The area under coffee in the colony at present is capable of giving easily—with ordinary cultivation and no manuring—an average of 10 cwt. to the acre, a crop worth some £20,000, and possibly giving a crop worth at the same valuation £25,000 to £30,000 annually.

The improved methods of work started last year are showing good results, the samples of coffee at the various shows improving vastly, both in size, shape, and colour, and showing better and more satisfactory returns both to the grower and buyer. At present, practically all the Queensland grown coffee is bought up and manufactured in the colony, the prices remaining fairly steady at from £56 in the parchment to £1 per ton clean according to sample. Last season some buye complained of the quality of coffees received, owing to t loss they sustained in both weight and bulk on manufactur This I found to be due, to a great extent, to the insufficie drying of the crop before hulling. In hulling insufficient dried coffee the quality of the manufactured article is serious impaired, and loss in weight of from 30 to 35 per cen sustained. It is not always easy for growers to dry thorough in bulk, but it was possible to very greatly improve, in th matter alone, on last year's work, and this has been ver generally done. Growers see the advantage of drying th roughly, and having buyers ask again for consignments, an buyers appreciate the absence of heavy losses in weight an possible loss by mould, etc , on storing an advantage that satisfactory to both parties, and one that has resulted in a apparently newly-discovered improvement in the quality colonial coffees generally. The improvement is very notice able in the manufactured articles now being put on the loca retail market.

Coffee is being put on the local market in tins, well go up, and of very good quality, at from 1s. 6d. to 1s. 9d. pe lb., and the local sales of such would tend to show an increas and increasing consumption of the commodity. Local manu facturers are finding, as was to be expected, that they hav to purchase from smaller growers to supply the demand—a healthy state of affairs that will, it is to be hoped, continue enabling small estate owners to dispose at once and for cas of the raw article. Seeing the apparently large price obtained for coffee per lb. manufactured compared with the price i the raw, there seems to be an inclination among some of th growers to attempt the manufacture individually, which is t be deprecated. The putting on the market of an unlimited number of brands would result, in course of time, in lowering of prices, adulteration, and reduction of quality The grower will find it pay better to sell in the parchmen than to spend the time in manufacturing small quantities and *vice versâ* the manufacturer will find that the work en tailed and time occupied in manufacturing will not admit o the proper working of an estate of cultivation of the coffe also.

The prospects of the industry are decidedly good. Tha the sample, when properly treated, is of high-grade quality has been amply demonstrated this season, and, in spite o labour competition in other countries, it has also been de monstrated that the colony's natural advantages can compet with them, by the fact of a high-grade coffee being put o the retail market at the same or a lower figure, with a fai margin of profit to both grower and manufacturer. The re moval of intercolonial tariffs will also open up the Austra lasian markets to this staple of Queensland, and in the hom markets the prices are slowly but surely rising.

From the grower's point of view it is one of the most pay ing of products, giving a return of 10 cwt. and, possibly, 15 to 20 cwt. crop, which, at even 6d. per lb. in the parch ment, or £56 per ton, would mean £28 gross, or a net retur of from £15 to £20, at least per acre. In the present state o the industry it seems to be inadvisable to open up large area for various reasons, and smaller gardens are more readil managed. Most of the growers have, at present, also smal areas, and, in consequence, coffee is looked upon, to some extent as a by-product. It will, undoubtedly, prove a very valuabl by-product for any farmer, though with due attention t

ltivation it will be found, as it is already in several in-ances, a profitable crop to grow as a sole staple, the returns ving a good living And as the colony becomes more pulated, large areas will be possible where, at present, labour fficulties practically prohibit the opening up of, say, a 0-acre estate.

Want of experience and carelessness in opening up coffee ardens can account for considerable loss and disappointment the colony ; ignorance and inexperience of coffee culture, many instances, only showing in the second and third year. he necessity for ordinary attention at the area planted up in rder to ensure satisfactory results cannot be too strongly welt on.

The initial three years or so of waiting before any return an be obtained has, unfortunately, been the cause of the eglect of even the fundamental laws of agriculture, occasion-lly, with the result that the field has either taken four or five ears to come into bearing, or that the trees have been so etarded and hampered in their growth that when the strain f the maiden crop was felt they were found to have no tamina to carry it.

Coffee is perhaps one of the most responsive of any fruit-ree to cultivation, and it is certainly one of the most pro-itable, but at the same time, not being indigenous, is very usceptible to neglect, and easily damaged and stunted by veed growth, etc.

NOTES

Ceylon Green Teas. Payments made up to 31st ultimo under the Ceylon Green Teas Grant, 1900-1901, scheme totalled Rs. 36,760·43.

Colombo Tea Sale. At the public sale of tea at Colombo, on the 30th ultimo, about 11,566 packages = 942,011 lbs. were offered, of which about 7,920 packages = 640,763 lbs. were sold.

The Indian Economic Products Department. The Government of India has sanctioned the appointment of Mr. Isaac H. Burkill, M.A., F.L.S., to a post in the Economic Products Department, under Dr. George Watt.

Vanillin—The Estimation of. Burse estimates the amount of Vanillin in vanilla by triturating the vanilla with washed sand, and then exhausting with ether. This is then shaken in a solution of sodium bisulphite. The vanillin is then extracted with dilute sulphuric acid, from which it is taken up by ether and evaporated.

Mexican Vanilla. According to Zemcke, six different varieties of vanilla are found in Mexico, known locally as *Vanilla mansa*, *cimarrona*, *mestiza*, *pompona*, *puerco*, and *mono*. Of these the only ones cultivated are *mansa* and *pompona*. These appear from a careful examination to be identical with *Vanilla planifolia* and *V. rotundifolia* respectively.

London Tea Market. In their weekly cable, dated 1st instant, to Colombo, Messrs. Gow, Wilson & Stanton stated that buyers were operating very cautiously. The average of Ceylon Tea for the week was 6⅜d., a drop of ⅛d. per lb. Of 40,000 packages offered 37,000 were sold. Out of 60,000 packages Indians offered 52,000 were sold. Average 7⅛d. or a drop of ⅞d. !

A Phosphate Combination. A movement is on foot in Florida to amalgamate the phosphate-producers of that State, and at least twelve important concerns out of fifteen engaged in the business are likely to be combined. The industry has reached a high stage of development in Florida, the figures showing that in 1899 776,000 tons of phosphate was shipped from that State.

Calcutta Tea Shipments. The following figures of Tea exports, taken from the Calcutta Customs daily entries, are issued by the Indian Tea Association :—Quantity of tea entered for export to the United Kingdom for the second half of January, 1901, 5,099,379 lbs. ; quantity entered during the corresponding period of last year 4,626,960 lbs. Total from 1st April, 1900 to 31st January, 1901, 156,064,213 lbs. against 145,571,117 lbs. in the preceding year.

Ramie. During his visit to the Peradeniya Gardens, Ceylon, Mr. Bluntschli, the Sumatra ramie-planter, was shown a species that was new to him, *viz.*, *Bœhmeria pulchra*. This seems to contain as good a fibre as any of the family, and is easily grown. *B. nivea* Mr. Bluntschli considers the best, and he confirms local experience (in the Gardens) by condemning the variety *tenacissima*, which is often said to be the best variety for high elevations.

Coffee in England. A Mincing-lane Broker, writing to the *Daily Mail* recently, delivered himself thus :—The root of the evil lies in the fact that in England people will drink "plantation" coffee. In France they drink sun-dried coffee. On East Indian and Ceylon plantations the coffee-berry, directly it is picked, is freed from all saccharine matter by a process of fermentation. But with sun-dried coffee this sweet substance is absorbed by the bean. This is the true reason why English coffee is so bitter.

Irrigated Tobacco. An American tobacco-grower is trying the effects of irrigation on his tobacco land. He expects to insure a future yield of upward of a ton to the acre annually and that without excessive manuring. Timely water will take the place of much of the manures now required. The irrigation of tobacco, however, is a new thing, in the experiment stage, and the results upon the leaf and cure are yet to be learned. Irrigation of tobacco is also likely to add new problems to the successful growing of the cigar leaf crop.

Cattle-ticks. The Queensland Chief Inspector of Stock reports that he finds Christian's dip the most trustworthy for the treatment of cattle for ticks. The formula is arsenic, 10 lbs. ; soap, 5 lbs. ; soda-ash, 28 lbs. ; Stockholm tar, 7½ gals. ; water, 400 gals. Cattle dipped twice at an interval of ten days between the dippings were found to be completely freed from ticks. The inspector mentions that dipping-tanks are as a rule too short. Cattle ought to remain in the bath from 40 to 50 seconds, and the tank should be from 36 to 80 feet long.

Fiji Products. Sugar appears to be the chief product. Coffee grows well, so does Vanilla, which has realised good prices in the open market. Tobacco, ramie fibre, cocoa, cinchona, tea, and India rubber are all to be found in Fiji. Tea does exceedingly well, and has a delicious flavour, says Mr. Finucane. There were, when I went to the Colony, two flourishing estates with a perfect soil and altitude for the growth of this beverage : at present the local consumption of the product is entirely drawn from the group, and it is also exported to New Zealand and Australia.

Gutta-Cultivation in Java. The subject of gutta-percha cultivation in Java has been brought before the States General. The Minister for the Colonies explained that the Government intend to start gutta-percha plantations in Java only. There the soil and climate favour the undertaking, and labour is cheaper than in Sumatra and Borneo. A beginning will be made with planting on a large scale the *palaquium* variety, which has been found to thrive very well. Within the next five or ten years, it is intended to plant large areas with three kinds of this variety. The Director of the Government Botanical Gardens at Buitenzorg will be charged with the supervision work at the outset.

Japan Teas in America. A. U. S. contemporary writes :— The demand for Japan tea which was noticeable last week from the country has continued to the present time, and we now hear that the inquiry is being passed on to the jobbing houses. This indicates that stocks in second hands are extremely light and that goods will be urgently needed after Christmas. There are some houses in the city who have not as yet bought any new Japan tea, fearing to buy at the high prices and managing to get along on old goods. These will be cleared out within a few weeks, and then will ensue a scramble for new crop teas. Where the desired commodity will come from is a puzzle, for jobbing houses have very few goods on hand, and the Japan market is closed. Many anticipate a post-holiday squeeze. Wholesalers are asking 17 to 20c. for new Japans.

Hemp as a Money Crop. This from the *American Agriculturist* may interest some of our readers:— "The Department of Agriculture at Washington has conducted the past season, under the supervision of the division of botany, experiments in hemp cultivation on its trial grounds at Washington and in several localities in the Carolinas. No official statements have been published relative to these experiments, but it is understood there is the possibility of widely extending this industry. In Ky, a considerable area of hemp has been grown annually for many years. This hemp differs quite distinctly from the product of the Philippines, which comes from a tree resembling the banana in its chara cteristics ; Ky hemp is in the nature of a plant and the experiments conducted by the Department of Agriculture show in some instances a growth of 10 to 12 ft. The imports for the fiscal year 1900 of all coarse fibers for manufacturing bagging, rope, twine, etc., amount to $24,000,000."

The Brazil Coffee Market. Messrs. C. J. Leach & Co., in their weekly report on the coffee market, state that receipts at the Brazilian ports continue to diminish, and with the exception of last year the comparison with previous seasons is becoming much more favourable. But even compared with last season it is worthy of note that to da when we have entered the last half of the crop year, the to in the two ports of Rio and Santos only exceeds that of l year by 334,000 bags, and that crop did not quite reach ni million bags. Messrs. G. Duuring and Zoon's month figures show a decrease of 1,200 tons in European stoc against an increase of 6,850 tons in December, 1899. T world's visible supply decreased 14,100 tons in Decemb against a decrease of 10,710 tons in December, 1899. Mess Leach give the deliveries for twelve months in Europe a United States, also the arrivals in both countries, and it satisfactory to notice that the deliveries exceed the arrivals both cases, which is quite an exception.

Development in Bolivia. The wealth of the rubber resourc of Bolivia has been demonstrate fully, but they remain close to the world in large part becau (1) of the sparse population and (2) lack of capital in th republic, but still more so because (3) of the lack of conv nient means of transportation. The only means of transport tion supplied by nature is the outlet through the riv Madeira into the Amazon, and this is rendered almost in passable by numerous cataracts. From a Bolivian sour comes news of a French undertaking to build a railway co necting the headwaters of the river Acre with those of th Madre de Dios, the advantage of which will be that the whol navigable river system of Bolivia can then be connected to th Acre, which discharges into the Purus, and that into th Amazon—thus giving Bolivia access to the Atlantic seaboar without reference to the Madeira. The Acre district no exports about 2,000 tons of rubber yearly. It is estimate that the opening of the region which the proposed railwa would make possible would soon increase this amount t 20,000 tons yearly.

The American Tea Duty. Mr. Mackenzie has sent to th Thirty Committee a newspaper cutting confirmatory of the view that there is little, if any prospect of a change in the duty on tea during this session o Congress. The following extract from a letter written b one of the leading members of the "Committee on Ways an Means," dated Washington, December 10, but is of particula interest : "We were asked when our Committee first assem bled to decide the question whether we would make an reduction in the tariff on tea. The Committee who had ful information on this subject at various times during the pas ten years, and especially since the tax was imposed, unani mously decided that they would not make any reduction i the tariff on tea or any other tariff duty. The parties wh asked to have this matter decided were engaged in the te trade, and said they desired this decision made and published in order to do away with uncertainty, etc., as the uncertainty was damaging the business. Now, of course, the questio could not be opened. I will say for myself if the questio was an open one to-day, I should be very much opposed t any reduction in the tariff on tea. It is what the tea trad has been clamoring for, for years, and now before they hav had sufficient opportunity to judge of results, and while many of them wish to have it continued, others ask us to remove it For one, I prefer to let the experiment be tried. I writ you thus explicitly because I think it is due to the tea trad to know that there is no chance for any reduction of thi duty during this session of Congress even to take effect a year hence."

LETTERS TO THE EDITOR.

PLANTER.—Declined, with thanks.

THE POSITION OF THE TEA INDUSTRY.

DEAR SIR,—I have duly circulated your No. 6, of 19th anuary, 1901, on the Rutherford Rosling Scheme among the ommittee of this Association, and will pass it on to such Pro-ietors and Agents as are not members of the Association due course. In the meantime, I may say in reply to uggestions, *A*, *B*, *C*, and *D*, contained in abovementioned rcular, that my Committee are of opinion, that—

(*a*) Is not merely impracticable, but, for reasons unneces-ary to detail, most inadvisable.

(*b*) Is impossible in these Southern Districts, as tea anufacture is in progress throughout the year. But were otherwise, the same objections apply to this suggestion as *a*.

(*c*) Good average plucking has always been the rule in is District. Nor do my Committee think, that generally ne plucking would be of much assistance to Teas grown at edium altitudes. At the same time, my Committee de-recate the system now in vogue on many concerns, where uality is entirely disregarded, and where the sole object aimed t by a Manager is to place his produce, f.o.b., at a fraction heaper than his neighbour.

(*d*) This last my Committee is prepared to consider, but ould like more definite information before coming to a ecision. Moreover more than one member would insist on he system being universal before consenting thereto.

In conclusion, I may mention, that the feeling in this District is, that there are two remedies for the present crisis, nd towards the attainment of these no effort should be spared. hey are—

(1) A compulsory Cess.

(2) A reduction in the British Import Duty on Tea.

I cannot help saying, that we consider the Indian Tea Association has displayed a singular apathy in regard to hese objects, more particularly as regards the first.

From so large and scattered a community as the Indian Tea Planters it is hopeless to expect unanimity on any subject whatever, and should a large majority prove in favour of a compulsory cess, no effort should be spared to attain the mposition thereof. Ceylon was not unanimous on this ques-ion, but Sir A. Havelock looked at it from a statesmanlike oint of view, and granted the petition of the majority. By doing so, he probably saved the chief industry of the island.

Considering the enormous amount of British capital sunk in the tea industry, also the constantly expressed desire of the Government of India to promote and foster Indian industries, we are of opinion, that we have a right to Government support, and that a refusal at first should not discourage the I. T. A. in endeavouring to attain its ends.

2. Not merely the reduction of the Import Duty on Tea, but an equality in taxation of the principal foodstuffs, provid-ed taxation is necessary, should be pressed. Tea, coffee, cocoa, and sugar may be said to be the four taxable necessi-ties in the form of food in Great Britain. Not one of these can now be looked on luxuries, and, therefore, that one in particular should be selected and taxed cent. per cent. over its market value is to place a bounty on the others, which is manifestly most unjust. Were tea, coffee, and cocoa placed on an equal footing and taxed at, say, 2d. to 3d. per lb., and were 1d. per lb. placed on sugar, there would be an enormous increase of revenue, whilst no hardship would be inflicted on the consumer. As I pointed out in a recent letter to "Indian Gardening and Planting," a working man in Great Britain with a family of five probably consumes ½ lb. tea and 1½ lbs. sugar a week. Were tea paying a duty of 3d. per lb. and sugar 1d. per lb., the incidence of taxation would fall on him at precisely the same rate as it at present does. The confectionery trades would not suffer in any way, for the additional cost of sugar to those trades would, from the nature of the trades, be almost a negligeable quantity, and moreover the trades are patronized by those who can afford to bear the burden. But even the poorest in buying, say, 4 ozs. of sweets for a child would not object to the additional ¼d. in the cost. Were the Indian Tea Association, backed by that of Ceylon and aided by the great Tea Dealers and distributors, to start an agitation in Great Britain and place the matter fairly before the public, we are strongly of opinion, that we should ultimately see the relief we ask, as also a very strong stimulus given to the consumption of tea.

GRANVILLE L. ACWORTH,
Chairman and Ag. Hon. Secy., C. T. P. A.
CENTRAL TRAVANCORE PLANTERS' ASSOCIATION,
Peermaad, 1*st February*, 1901.

RESTRICTING THE OUTPUT OF TEA.

SIR,—I see from the telegrams that a meeting of share-holders in London agreed to the necessity of reducing the output of tea. A very praiseworthy resolution, but how is it to be carried out? Such proposals as have been made with this end in view seem, from a practical planter's standpoint, impossible or at the least non-effective.

Mr. Rosling's proposal virtually amounts to one-tenth of the acreage being left unplucked for two years. Even suppos-ing the owners agreed to this there are several reasons that make it impracticable. The first of these lies in a question. Would output really be materially reduced by the scheme as it stands? On almost all Tea Estates of a larger acreage there are patches which may well total up to 10% and which, from one reason or another, do not yield well, sometimes hardly at all. Is there not a danger of planters choosing those patches, and who is to prevent them?

The second reason is the almost insuperable difficulty of checking such acreage, especially if, as from above seems likely, it would be in little blocks here and there. I do not mean by either of the above that planters are not, as a rule, nay as more than a rule, honourable men, but to get every-body to come into a scheme of this sort you must have definite and easily ascertainable lines to go upon and stick to. My last reason against the scheme—there are probably others—is that the unplucked patches would, as they grew up, be diffi-cult to get into and to keep clean.

Another proposal is, I believe, that bushes should be left unplucked for one month in the year.

Here again a question is the answer: "What month?" Perhaps Northern India would suggest a Winter month when no plucking is done in any case, perhaps Ceylon and Southern India would "per contra" suggest a heavy monsoon month when yields are small. Here is matter for controversy and for endless delay. Besides, what about the estates that still

pay well at present prices ; would owners agree to sacrifice a whole month possibly from varying reasons their best month?

Then there is the third proposal to pluck fine. But the low country will cry to the up country "you pluck fine in any case, if we come down to a bud and two leaves what will you do?" And the up country will say to the low country "sorry but we can't reduce to half our yield for what would primarily benefit you."

Having said thus much against the various schemes propounded, I would suggest that, merely from the planter's point of view, there is a possibility of carrying out a modification of Mr. Rosling's proposal. It would do away with the objections I have raised to this at all events. Almost all Tea Estates are well lined, the worst sufficiently well to answer the purpose of my proposal. When not lined at all approximate lines could be run through clearings with very little trouble. You will already have guessed at the modification I propose, but for the sake of those who are not good at acrostics here it is "That every tenth line in every Estate be left unplucked for two years from, say, the 1st of April next.

Now provided this were agreed to it could easily be checked, it would after a very short time be patent from even a very considerable distance and through good tea and bad it would run alike. The various Planters' Associations could easily make themselves responsible for seeing that it is carried out and it would probably benefit all the tea in acting as a break-wind and a fence against the spread of some diseases. It would affect the output equally whether of high-grown or low-grown tea and perhaps best of all it would break the hideous monotony of a tea district. It would remind the faded planter of his own English hedgerows and, seriously speaking, I believe that in a great number of instances the benefits derived from it would be so conspicuous, that even after the two years were over numerous Estates would stick to their tea fences.

But—will the owners or say over 90 % of them agree to issue the order? It will mean actual salvation to many, higher prices to the rest if they do. But, again, will they? Let the big companies had the way and agree amongst themselves ; let them, through their brokers or agents, get the adherence of private owners. Let it all be conditional on 90 % joining. But when the 90 % have joined let the orders go forth from London and the whole thing can be finally arranged in a month's time. It means no heavy work for superintendents, it just means marking out the lines, it can be done in a few days.

It is its simplicity that recommends it beyond everything and, I believe, if owners were really in earnest in their resolution passed they may agree to it. As to the remaining 10 % outsiders one would have to try and enthuse or worry them into joining.

Personally, I am a private owner of high-grown tea but, conditional to the 90 % joining, I would agree to join and so would most other private owners, I believe, and even more certainly those at a lower elevation.

But I would not join in Mr Rosling's unmodified scheme, even if 99 % joined, for I could not believe in or be bothered by it.

I am not certain that some insuperable obstacle will not occur to others, I only state that, if output is to be decreased, this is the simplest and most effective way of doing it, just because the idea is a most simple one. As such, I submit it for what it is worth.

But if carried, Java or 90% of Java, must be got to agre as well. I have little doubt it could be induced to do so wi lingly and will, therefore, not refer to any possible pressure.

In another letter I purpose going into the questions reduction of import duty and of the foreign tea fund.

"HERMIT."

SIR,—In my last letter I dealt with what seemed to me th only possible and practical way of reducing production of t in India, Ceylon. I see that in your leading article of Jan ary 26th you declare yourself opposed to any reduction the output. Generally speaking your economic principle as there enunciated, are correct. Whether they apply to a emergency situation might be successfully combated. In temporary crisis a temporary tonic has often to be applied the markets of other commodities in the shape of a limitatio of output (I need only instance cotton mills and silver mine why not to that of tea? However, without going further in the correctness or error of your views, as applied to the pr sent crisis, the fact remains that possibly a good many those interested in tea may share them, and thus make th limitation of output impossible, however desirable it ma appear to others.

As I understand your position and that taken up by thos who would oppose a reduction of output, it is this : "Do n adjust supply to demand, but create or extend demand b supply." Let us now see whether the two opinions migh not be brought into line, or sufficiently so to make the acceptable to both parties and thus ensure united action.

For "output" let us substitute the words "export Great Britain." If the exports of tea to "Great Britain could be reduced and stocks there diminished, the necessar fillip would be given to the home market and this agai would react on the Colombo and Calcutta markets.

"But how," you will ask, "can this possibly be done unles production is reduced ; what is to become of the tea which not to go into the home market and for which as far as w know there is no other market?"

Let us suppose that it is possible, that it is agreed to an that the following would be the procedure.

Each manager of an estate would be instructed to mar every tenth chest in some special manner as he packed an to consign it to a Committee established for that purpose Colombo and Calcutta. He would furnish returns of thes chests and of his general outturn to the local Planters' Asso ciation, and it would be easy enough for the latter to see tha he was carrying out the agreement and not sending more his good tea to the market and more of his inferior tea the Committee. B. O. P. and Flowery Pekoe might b excluded from the arrangement.

The Committee would classify the tea, adjusting it to th possibilities of various markets. It would then ship the tea not to Great Britain, not to Australia or New Zealand, bu only to such countries in which efforts are now being mad to capture the markets for British grown tea, especiall America and Russia. Here the tea would be handed over t the Agencies of the American and foreign tea funds. Th latter would be charged some price considerably below marke rates so as to enable them to absolutely and hopelessly un dersell China. Japan teas (the question of green teas woul here have to be dealt with) in fact to flood them out. How ever low the price may be put at, the funds obtained fro

ch sales would form a considerable item, which would be pended in advertisements of an extensive nature and lance, if any, handed back to producers *pro-ratâ* at the d of every year. India might well be included in the untries thus to be campaigned, but special care would ve to be exercised to prevent the subrented dealers from selling for export, instead of consumption in the country. or should any but lower grade teas be thus distributed in ndia, so as to prevent competition with the established local ade in better teas.

The agreement to carry out this scheme would originally be or 2 years from, if possible, May of this year, thus ensuring wo full seasons.

The reasons against this scheme, as opposed to that of eaving a portion of the tea unplucked, are that the estates would lose not their leaf merely, but their manufactured tea nd that the hedges of tea eulogised in my last letter would ot come into existence. On the other hand I believe that, even in the present scheme, the apparent loss would be more han covered by a corresponding rise in prices for the balance of the tea. But beyond this the improvement might be look-ed forward to as a more lasting one, as new markets would have been thoroughly opened out. It may be contended that these markets, having been conquered on fictitiously low values, they would be lost again, as the agreement came to an end, but tho' this would be the case with some articles of commerce, it would not, or only to a limited extent be the case with tea. For the popular taste would have been educated up—or is it down—to British-grown teas and would demand to be satisfied, even at slightly enhanced rates. Nor is there any absolute reason why the agreement should not be renewed after the two years are over, if producers find it paying them as they are likely to do, in fact some such provision should be made in the agreement, so as to prevent the possibility of discounting futures and "bearing" on heavy present stocks. At the same time, tho' for the two years certainly no export duty would be required if the scheme came into action, it would give us time to persuade Government as to it's necessity in the future.

But in this as in any other scheme a largely preponderating majority of those representing the total acreage under tea in Ceylon and India would be necessary to carry it through. This, I fear, will not be arrived at in any scheme until a considerable number of planters and shareholders have been badly hit and the lucky-go-happy spirit of both has been severely disciplined by adversity. But until such events have forced combination much can be done in supporting the effects of the Indian Tea Association addressed to the Government of India as set forth in their admirably worded petition. Nothing can be added to this. It deserves and demands the support of the Indian Government and is supported already by the resolutions lately passed by the Ceylon Planters' Association. And in this direction at least unanimous action can and should be arrived at, every nerve strained and no cynical replies from the Chancellor of the Exchequer accepted.

But the movement set on foot in this country and Ceylon, however considerable, is doomed to failure standing by itself; may even supported by the Indian and Ceylon Governments it would be so doomed. For let us not fool ourselves with the notion that "Out of Great Britain" industries will be considered if they are British. That consideration is reserved for non-British Interests. We need not go beyond the ruined West Indies and Mauritius to realise this. But if the point of leverage for agitation were changed, matters might be different and success might attend the efforts now started.

And here let me begin by calling attention to a point which has not been sufficiently realised in the discussions on the subject, but which has a considerable bearing upon it and is likely, if properly worked, to give us the right "point d'appui." It is this: there are very few tea-estates now held by resident private owners. Most estates are owned in England and chiefly by big or smaller Companies, whose shareholders live in England. It is very evident that action taken "*en masse*" by these owners and shareholders who live and spend their money in England would have a very different effect from that of the members of Planters Associations, the mere "working bees" out here. It is at home then that such action should now be taken in the shape of a protest and every agent's, every owner's, every shareholder's name should be attached to it. Such protest should fully quote the appeal of the Indian Tea Association to the Indian Government and the speeches and resolutions of the Ceylon Planters' Association. It should again bring forward the arguments adduced by Sir Henry King. It should add to these by pointing out that, even in the immediate future, the amount to be realised from the extra tea duty would be to some (and that not an inconsiderable) extent reduced by the lesser income tax paid on tea shares and by private tea estate owners resident in England and that beyond this revenue and trade must be adversely affected by their reduced incomes. It should argue that therefore it is possibly doubtful whether the actual as against the apparent gain to the treasury is so considerable a one, as to warrant the certain future loss.

In fact agitation must take the place of protest and it must be loud and emphatic, so that the English people generally and its representatives in Parliament more particularly may realise the fact that a Great British Industry with millions of English Pounds invested and thousands of Englishmen dependent upon it for an income or a living, is being jeopardised by an import duty which is from 100 to 200 % *ad valorem*.

It may well be asked "is this what Free Trade leads to, are these the means that have to be assorted to to raise a little war tax in a rich country such as England?"

Supposing India and Ceylon belonged to France or Russia, nay, supposing they were self-governing Colonies, is there any doubt that they would claim and successfully claim a reduction in this British Import duty? But because here it is a case of her own sons raising the cry and since they are unable to enforce their claim or retaliate, they are left to cry in the wilderness of official "insouciance." There has been considerable commotion at the idea of France raising the import duty on coffee and tea but is not a reply self-evident! "You do it to your own children, why should we not do it to aliens?" So far we have been content with an appeal "*ad misericordiam*" but that must cease, our watchwords must be "let there be light, let there be justice!" Shareholders and owners must bring a glaring light to bear upon the subject and claim justice, not beg for mercy. The reply to this will, of course, be the hackneyed one: "But the revenue must be raised." It is not for us to show the way to raise it, that is the business of the gentlemen whom the country has entrusted with its Government.

But it is our business to show how not to raise it by an exorbitant, unjust, and impolitic Class-tax on British produce!

"HERMIT."

GENERAL ARTICLES.

THE FLORIDA VELVET BEAN.

Mr. D. W. May writes in the *American Agriculturist*:—

The velvet bean is supposed to be a native of India and was introduced into the U. S. as an ornamental plant, about 30 years ago. It is of rank growth and has been found useful in covering arbors, fences, and unsightly objects. It bears clusters of purple flowers and pods covered with a velvety down, whence the name. The pods contain from three to four beans of a mottled brown and white colour. In the U. S. this bean will mature seed only in Fla and the southern portion of the Gulf States. In this region it is considered equal to or superior to cowpeas.

In the south the velvet bean is planted in drills 4 feet apart and 2 feet apart in the row. From two to four beans are planted in each hill. Farther north, thicker planting may be followed. In the early growth of the plant it should be cultivated. In orchards it makes an excellent manure and mulch, but should not be allowed to climb the trees.

The velvet bean thrives best on light sandy soils. Being a nitrogen gatherer, it should be supplied with a liberal amount of potash and phosphoric acid. At the Ala sta velvet beans grown on poor soil fertilized at the rate of 240 lbs of acid phosphate and 48 lbs. of muriate of potash per acre yielded at the rate of 19,040 lbs. of green material per acre. The weight of the hay after five days, curing was 8,200 lbs.

At the same sta velvet beans were planted, Apr. 20, in rows 31/2 feet apart at the rate of 110 lbs. per acre, and were harvested Oct. 12, when they were too mature to make good hay. Analysis showed, that the crop contained 1887 lbs, and the roots and stubble 125 lbs. nitrogen per acre. The cured vines contained 229 per cent. of nitrogen and the air-dried roots 1 per cent. At the N. D. exper sta, where the plants grew 18 in. high and were in bloom when the first frost came, they contained 2·57 per cent. of nitrogen in the air-dry substance.

Experiments were made at the Ala exper sta to determine by the succeeding crop, the value of velvet beans as a green manure. The increase of a crop of sorghum after velvet beans over that of a crop from a plat on which no leguminous crop had been grown was 3,272 lbs. per acre. Sorghum, on a similar plat after cowpeas, gave an increase of 3,216 lbs. The average yield of oats after velvet beans was 33·6 bu per acre, in comparison with 31·6 bu after cowpeas, and 8·4 bu after crab grass and weeds and German millet. In plowing under a crop of velvet beans, it is advisable to use a rolling coulter on the plow, on account of the tangled mass of vines. As with other legumes, however, it is considered more economical to feed the vines and turn under the stubble. It was found further that the yield of velvet bean hay was about the same as the yield of cowpea hay. In Fla, where two or three cuttings are made in one season, the yield varies from two to four tons of hay per acre and the yield of seed from 20 to 28 bu per acre. The plant is recommended for green manuring in orange groves and for feeding to horses and cattle.

RULES FOR VALUING MANURES.

In *Manures and Manuring*, Mr. A. H. Pearson, Chemist to the Department of Agriculture, Victoria, writes :—

The essential constituents of manures are the nitrogen, the phosphoric acid, and the potash. The Artificial Manures Act of 1897 requires that vendors shall furnish with artificial manures, sold in any quantity above half a hundredweight, an invoice certificate showing the per cent. of nitrogen, phosphoric acid, or patash contained in the manure. The Act does not oblige the vendor to confine his certificate to a statement of these three ingredients; but it is advisable that he should do so, for anything else can only be regarded as so much padding, which tends to confuse the purchaser. All manures that have any value as plant-feeders contain one or more of these three important plant-foods nitrogen, phosphoric acid, and potash. It is these plant-foods that give value to the manures if the manures contain more of these plant-foods, they are more valuable; if they contain less, they are less valuable. Anything else that they contain, besides these plant-foods, is of little or no value and, has generally to be regarded as so much dead weight decreasing the value of the manures to the extent that they raise the cost of carriage.

The following is a sample of an advisable form of statement on an invoice certificate :—

Nitrogen (as sulphate of ammonia)	...	...	5 per cent.
Phosphoric acid—water soluble	...	...	4½ „
Do. citrate „	...	...	2 „
Do. insoluble ...	...	...	1 „
Total phosphoric acid		...	7½ per cent.
Potash (as potash chloride)		...	6 „

Such a statement contains all that is essential and nothing that is unessential; there is nothing in it to confuse the purchaser, and from it the purchaser can, if he knows the money value of 1 per cent. of each ingredient, readily and quickly find out the real value of 1 ton of the material.

For finding out the value per ton, the certificate is treated just the same as in invoice, except that, instead of dealing with pounds of materials at certain prices, one has to deal with percentages at certain values. Thus, if 1 per cent. of nitrogen in a ton of manure were worth 12s., 5 per cent. would be worth 60s. The value of 1 per cent. of an ingredient in a ton of manure is called the unit value. These unit values change according to changes in the manure market, but they remain fairly constant during one season.

INDIAN COFFEE.

The *London Commercial Record*, of the 11th ultimo, remarks :—

The curiosity and impatience with which those dealers in our coffee trade, who take a particular interest in fine colory East Indian descriptions, have been awaiting the first arrival of the new crop have at last been satisfied, for the first shipment of this season's Neilgherry has passed the hammer this week. Unfortunately the parcel in question was not a very desirable one, being of dullish colour and of middle size only, the disappointment, therefore, was great, as something better and something more tempting had been expected. Shippers, probably in their desire to obtain orders for their Indian friends' estates, had led us to believe that this year's crop would, in point of quality, show a great improvement over last season's yield, and, as this first arrival fell considerably short of the general anticipation, the disappointment found expression in slow bidding and low prices. No doubt the dull tone ruling in the terminal market was also responsible for the absence of competition, but we are inclined to believe that a desirable parcel would have met with a good demand, particularly being the first arrival, and would probably have realised more than 54s. 6d. for B size. Besides it would have tended to stimulate renewed interest in a coffee which for months past has suffered from a total absence of demand. There will be, we are afraid, no alternative left to East Indian planters, but to forward their coffee in consignment to London, trusting to stray orders on the part of Continental and Home trade dealers and consumers to realize reasonable prices. Looking at the position of the market now, we are almost inclined to believe that the sooner such ventures are undertaken the better for the planter. There is absolutely nothing at the moment which would justify the assumption that prices are depressed by a passing bear movement only, and that an early recovery would seem probable. Everything points to lower prices; Brazilian supplies keep on pouring in at an alarming rate, and holders of coffee having lost heart and being tired of hoping against hope for an improvement, are reducing their prices in the endeavour to reach a basis at which buyers will purchase at last. The value of East Indian will decline in sympathy with Brazilian and other important coffee descriptions, unless something unforeseen happens to save the position of coffee. It is a pity that our note of warning, sounded some time ago, has struck upon deaf ears only; heavy losses and much hardship would have been avoided.

RUBBER: ITS SOURCE AND USES.

Before the Pharmaceutical Society of Cape Colony at Cape Town, n December 13, Mr. G. T. Branch, formerly of the Metropolitan ollege of Pharmacy, London, read a paper on the above subject hich proved to be both interesting and instructive, and dealt ith the botanical sources of rubber in various parts of the world. e stated that many of the trees yield a rubber which, on drying, of too resinous or brittle a nature to be used by itself, and much it is used as an adulterant of the higher-grade product. Pará ubber, the most prominent kind, is most probably procured from he following plants:—*Hevea brasiliensis, H. guianensis, H. spruna, H. discolor, H. pauciflora, H. rigidifolia, H. lutea, H. membracea, H. nitida, H. benthamiana,* and *H. janeirensis.* The trees re some 50 feet in height Along the tributaries of the river mazon and in the vicinity of Pará are considered the best districts r *Hevea* species, where, notwithstanding the destructive method collecting, an area of 1,000,000 squares miles remains well opulated with trees. When a tree is twelve years of age it is conidered an adult, and a hundred of these have been known to roduce 1 ton of rubber. The rubber latex is found in the inner yer of the bark, close to the cambium, and is most abundant in he older tissues, spreading to the leaves and flowers. No good is erved by cutting into the wood; for not only is the tree stunted, nce its vitality is found in the xylem, but parasitic and fungoid rowths may ensure. The sp. gr. of the latex varies from 0·971 to ·017. It is generally alkaline to litmus with a faint but distinctly mmoniacal odour, but in a few cases is acid. Microscopically the tex shows a large number of caoutchouc granules in a milky edium, which, on careful agitation, will aggregate together. A umber of chemicals are in use to aid coagulation—alum in Brazil, lt on the Ivory Coast, dilute sulphuric acid in Maranbam, lemonice in Madagascar, and various vegetable infusions in Peru. The ifferent latices contain many various albumins and proteids of hich little is at present known. Mr. Branch described how rubber collected, and speaking of the various South African species remarked that little could be said about them commercially, although hey present most interesting features from a scientific point of iew. Of the West African rubber-producing trees generally, the ecturer had not much to say owing to the lack of time, but he asually mentioned that in Ceylon returns from 15 to 20 per cent. ould be obtained on the original outlay, after ten years, reckoning he price of rubber at 2*s.* per lb.

Questions were asked as to whether anyone could suggest a emedy for keeping rubber goods in a climate like that of South frica, and if perished articles were of any use for re-manufacturing -the first being the more important one as far as the African hemist is concerned. No answer of a satisfactory nature was forthoming.

INSECTS INJURIOUS TO FRUITS.

Prof. J. B. Smith, of New Jersey, writes in the *American Agriculturist*:—

Among the evidences of insect injuries is the turning brown and lying of the tops of peach trees. In some cases rot is blamable for his, but the injury usually results from a small green caterpillar, he larva of the peach twig borer. This insect, while a common ne in some sections of the country, is not very well known in N. J. t winters in the crotch of the tree or the limbs, as a caterpillar. ts presence is known by small balls of gum in winter, which exude rom little holes in the skin through which the larvae have bored, eeking winter quarters. This pest can be controlled by spraying vith paris green about the time the foliage starts in the spring. t seldom does any harm after July 1.

Nursery peach stock is frequently injured by a species of thrips. The damage occurs when the little trees are about 1 ft. high. The ip is attacked, the heart of the plant scraped off and the juices ucked out. The tree is stunted in many cases and is never worth nything. The pest begins his work as soon as the buds start. Seedlings seem to withstand the attack better than budded trees. The pest is the worst during hot weather. About the only way to ave the trees is to stimulate early growth by irrigation, and forcing by the use of quick acting fertilizers.

The San Jose pear borer seems to be gradually disappearing and, if properly looked after, there seems to be no cause for alarm. Scurfy scales are abundant and apple trees seem to be the most seriously affected. The apple plant louse can be effectually controlled by spraying with a weak insecticide just as the buds begin to open.

The effects of insecticides on foliage have been studied quite carefully. One rather peculiar fact is that young and tender foliage will stand stronger insecticides than older leaves. Paris green tends to choke the leaf or to close the breathing pores. Crude petroleum should never be used, for the paraffin that it contains fills up the pores. It has been frequently observed in orchards that no bad effects follow the application of paris green for some days and even weeks. Then suddenly the leaves appeared burned. This is explained by the fact that soon after application, the paris green becomes dry. While in this condition no injury occurs, but when moisture appears through humidity or rain, the soluble arsenic dissolves and the leaves are burned. As an insecticide paris green is by no means perfect. It is not uniform and is very costly. The green arsenod recently put on the market seems to be much more satisfactory. Soapsuds and weak kerosene emulsion are the very best applications for all kinds of plant lice.

On some varieties of pears the San Jose scale, which appeared very abundant in Spring, did not Show any increase by Autumn. This proves that under certain conditions the San Jose scale can be easily controlled or there are conditions under which it does not thrive. The best known as the Paris scale seemed to be abundant and is about as bad as the San Jose.

The yellow-necked caterpillar is quite abundant in many orchards, but this may be kept under by the use of arsenical poisons and in some cases by hand picking. The woolly apple louse is on the increase and will undoubtedly cause harm unless checked. The most serious injury from this pest is its work on the roots, forming galls, knots and the like.

The pea louse is abundant in many sections and the only practical method of controlling seems to be in raising early varieties. If the crop can be harvested by June 15, but little damage will result. Sweet peas are just as badly affected as garden or field crops. For small lots a strong decoction of tobacco will answer. Kerosene emulsion has been tried, but killed the vines.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange—*December 22nd*, 1900.—Ninety days rate on London opened on Monday 17 at 9 7/8d., fell to 9 5/8 on Wednesday, rose to 9 7/8d this afternoon but closed after hours at 9 25/32d.

There is little to add to what we wrote last week. The real factors of the situation seem for the moment so evenly balanced that neither bulls nor bears are able to make any permanent impression. To-day, for example, on the strength of Pará loans and other operations, rates were boosted to 9 7/8d. slumping again to 9 3/4 in the afternoon in consequence of a report of the reappearance of the "plague" at Santos. Any reason is sufficient to put rates up or down. The tendency is however upward, nor does it seem likely that, in the overbought state the market is supposed to be in, any new "bear" attempt would be successful. As regards the Pará loan we understand it is for £500,000 firm and £500,000 option. The business is said to have been closed in London and to be only waiting word for the Minister to receive instructions to sign the contract. The statement of the *Imprensa* that the loan has been negotiated through one of the Banks here is incorrect: no Bank had anything whatever to do with it. It is possible the business may be closed by the end of the year but exactly when or how it will be drawn cannot be said; anyhow it is highly improbable that the Pará Government will let the market into its secrets in this respect. . . . We are of the opinion that the factors are all in favour of steady rates for the next month, at least, with perhaps a rise to 10 1/2d. or more.

Beyond that it would be unwise to attempt to foresee as the whole future of coffee is so obscure and exchange rates so intimately related to coffee prices, that a slump in the latter might, with renewal of specie payments, be taken as the signal for a regular onslaught by the bears. Even if it were so we believe they would get the worst of it, as on the present footing it seems indisputable that the balance of trade and probably of money payments is in

our favour. Besides, it must be remembered that practically specie payments will be renewed from January when the 25% of duties payable in gold will be remitted, as it is with this gold that the interest of the debt will be paid in July next. If exchange does not fall in January or February, even if it do so in July or August, it will not be renewal of payments but some other cause to which it must be attributed. During the past week coffee sales were animated reaching 177,000 at Rio and Santos as against only 106,000 the previous week and 166,000 for the corresponding week last year.

Prices of coffee have again given way in foreign markets, the average Spot New York qualities for the past week being only 6·94c., but even so above that of the corresponding week last year, 6·81c.

The value of coffee cleared during the week amounted to £395,664 against £152,500 the previous week and £275,054 the corresponding week last year.

Coffee—*Santos, December 22nd*, 1900.—The downward tendency of the price of coffee was only checked during the latter half of the week under review, when it became apparent that the force of the bear movement in the consuming markets had spent itself, and prices became so attractive for consumers as to induce them to send large orders to buy of which only comparatively few could be filled at bottom rates of Wednesday, when some lots changed hands at about 5$600 for *superior*. The turn came very quickly and as there was some desire to cover and very little willingness on the part of the dealers to sell at the ruinous values below 6$000, prices rose to 5$800 and 5$900 and in some cases to 6$000: on Thursday this rise coincided with the fall of exchange to 9 5/8d.

Yesterday dealers were still less inclined to sell although 6$000 for *superior* was freely offered, and few lots only were for sale at about 6$100 to 6$200.

The position of our market is, no doubt, very peculiar and critical, for any inquiry of some importance would produce a sharp rise here.

It is said, and apparently not without reason, that all the weaker holders amongst dealers and Fazendeiros have got rid of their coffee and the 700,000 bags at which the first-hand holdings are estimated will not be offered for sale below 6$000.

The apprehensions uttered in consuming markets that a debacle might take place here and hundreds of thousands of bags be forced on the market in a day or two, or even in a week, are unfounded. The margin question, which is answerable for the collapses in the future markets of any produce, can never come into question here.

The demand was mostly for lower and medium grades of which more are coming forward now; yet fine grades are still difficult to be moved. There were large offerings of *Peaberries* and several big lots have been taken out of the market at low prices. Shipments have been somewhat lighter lately and are only just equal to arrivals, so that stock does not accumulate. Receipts continue large.

The estimate of the running crop by the Bureau of Agriculture appears rather early and, for this reason, one can hardly attach much importance to it. The total yield of the crop is estimated at 7,580,000 bags of which, deducting 172,500 bags for local consumption, 645,000 sent to Rio, and adding 300,000 coming from Minas, 7,062,000 bags remain for export in Santos.

Havre was the chief buyer during the week, paying from 30s. 6d. to 31s. 6d. for *superior* and 29s. 6d. to 30s. 6d. for *good average*. Hamburg and Rotterdam were less inclined to buy and the latter evidently stood under the influence of forced sales. The States are in the market only since Thursday and no business of importance has been done with those quarters.

The market here gained to-day further strength notwithstanding higher exchange and with very small offerings on the part of the dealers, 6$100 and 6$200 was paid for *superior*.

From S. Simáo in the State of S. Paulo a correspondent of the *Correio Paulistano* writes that "hail storms and gales have been frequent in this district during the present year and done much harm to the crops, whilst rains have been too frequent and made weeding difficult. Emigration continues and it is difficult to know what we are to do for labour in the season."

Coffee Census.—The Government of S. Paulo has at last determined to start a regular Coffee Census specifying not only the area and number of trees on each plantation, but their age and state of bearing. In this way the foundation will be laid for as precise crop estimates as such matters will permit, which will only have to be extended year by year and the state of the crops reported on monthly or quarterly, to furnish far more perfect elements for the trade than any yet known.

We have long advocated such an organisation and are happy to see the São Paulo Government at last taking it up in so thorough a manner. By keeping things back and deceiving consumers it is possible occasionally to gain a temporary advantage, but in the long run big crops, like murder, will out, and what is gained at the start is more than lost at the close. All that is wanted is that the statistics organised should be thorough and accurate, a true expression of facts whatever they may be.

Official estimates by the Agricultural commission of the current crop at S. Paulo give the probable total at 7,585,399 bags for 151 of the 153 Municipal districts into which the State is divided. In the 1st district the luxuriant flowering reported in the last bulletin did not set and at least half was lost in consequence, planters say, of the rains being followed by great heat. In spite of this, however, it is certain that the coming crop will be equal if not superior to this. In the 3rd district (Ribeirão Preto) the flowering was splendid promising a fine yield. At S. Rita and Passo Quatro the flowering was imprecedented, much being lost afterwards in consequence of drought. On 17th November a little hail fell but the state of the crop is decidedly encouraging. At Pirassununga the drought did some damage but only to cereals. At Sertaozinho the crop promises to be magnificent. In the 5th district the flowering was very good and prospects excellent. At S. Barbara do Rio Pardo & Sorocaba the prospects are good and also at S. Pedro. At Faxina there are 300,000 trees in flower. At S. Roque the trees are doing well.

A PLANTER'S SON.

The *Daily Mail* tells a wonderful narrative of a hermit millionaire whose father was a tea planter and smuggler. This seems exciting so we reproduce it. "Thirty years ago," says the *Mail*, "George Johnston, millionaire and laird of the Fife Isle estate, near Dundee vowed that no man should see his face again, and he kept his vow. But now he is dead. His father, Army officer, Indian tea planter and smuggler, gathered a huge fortune, and settled on the Fife Isle estate. He was hard and morose, strange in habit, and violent in temper. Yet he fell in love with Jean Douglas, the daughter of a peasant, and married her. She bore him a son and died. That was a bad day for George Johnston's father. He brooded, they say, over his loss; his temper became ungovernable. His son's was hardly better. One day the son tied the father in a carpet, threw him into a room, and decamped to the woods. The police caught him, and he was sent abroad. Thirty years ago the father died and the son returned to live a solitary, sordid life, without the touch of romance which redeemed his father's. Never once did he set foot across the threshold of the dilapidated manor house. A maid cooked his scanty meals, but never saw him. She would lay the food down, ring a bell, and withdraw. Only then would Johnston come out of his den. He had a craze for purchasing the tops of all the hills in the county. The Marquis of Bute proposed to construct a railway from Falkland Palace to the town of Falkland partly through Johnston's ground, but Johnston would have none of it. When he died a box of 40,000 sovereigns was found, and bank notes innumerable, stowed away in odd corners.

COFFEE IN THE UNITED STATES IN 1900.

The imports of coffee for the last trade and fiscal year ending June 30, 1900. were smaller than for the previous two years, says the *American Grocer*:—The United States Bureau of Statistics reports as follows:—

	Quantity. Pounds.	Value. Dollars
Imports	787,983,611	52,466,99
Exports	38,191,140	3.690,81
Net imports	749,792,471	48,776,17
Net imports, 1899	801,756,868	52,370,18
Net imports, 1898	851,691,084	62,674,18

The above table shows imports of 5,680,245 bags, as compared with 5,643,602 bags reported as arrivals by the New York Coffee Exchange.

The total deliveries for the year ending June 30, 1900. were 6.035.623 bags in the United States; 8,937,076 bags in Europe; total, 14,972,699 bags, against 13,480,904 bags in 1899; 14,571,90

bags in 1898. The deliveries for each month in the calendar year in the United States were follows :—

	Bags.
January	678,862
February	435,481
March	589,743
April	444,554
May	364,459
June	437,365
July	364,883
August	289,060
September	362,201
October	501,051
November	459,004
December (estimated)	548,165
Total	5,474,828

The visible supply of the world, January 1, 1900, was 7,036,093 bags; on January 1, 1901, it will be about 7,800,000 bags. The advance in coffee, which began in September, 1899, continued well into 1900. No. 7 Rio, which averaged 5·51 cents per pound in September, 1899, rose to 8·71 cents in February, 1900, reacted to 7·66 cents in May, and again advanced, until the high average of 9·39 cents was reached in July, since which time there has been a gradual falling off in price, until the average fell to 7·11 cents in December. This drop in prices has been due to an increased visible supply and a total production considerably ahead of average annual requirements of about 14,500,000 bags.

Sales of the New York Coffee Exchange about 7,500,000 bags.

The outlook is for cheap coffee throughout 1901.

The following table shows the average monthly and average annual spot cost of coffee :—

	No. 7 Rio. Cents.	Maracaibo. Cents.	Padang. Cents.
January	7·91	9·50@10 25	24·50 @25 25
February	8·71	10·00 ,, 11·00	23·50 ,, 25·00
March	8·27	10 00 ,, 11·00	23·50 ,, 25·00
April	7·94	9·75 ,, 10 50	23·00 ,, 24·00
May	7·66	9·50 ,, 10·25	21 50 ,, 23·00
June	8·53	9·75 ,, 10·25	21·50 ,, 23·00
July	9·39	9·91 ,, 10·58	21·50 ,, 23·00
August	8·87	10·42 ,, 10·92	21·50 ,, 23·00
September	8·40	9·75 ,, 10·25	21·50 ,, 22·50
October	8·27	9·50 ,, 10·00	21·50 ,, 22·50
November	7·82	9·50 ,, 10·00	20·00 ,, 21·00
December	7·11	9·28 ,, 9 73	19·36 ,, 20·68
Average, 1900 ...	8·24	9·74 ,, 10·39	21·90 ,, 23·16
,, 1899 ...	6·18	7·74 ,, 8 57	24·50 ,, 25·59
,, 1898 ...	6·30	8 37 ,, 9·14	24·04 ,, 24·99
,, 1897 ...	7·73	12·92 ,, 13·45	23·59 ,, 24·71
,, 1896 ...	15·00	13·88 ,, 19·30	23·68 ,, 24·41
,, 1895 ...	15·83	17·00 ,, 20·88	26·54 ,, 27·12
,, 1894 ...	16·40	18 78 ,, 21·02	21·29 ,, 23·48

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION, CALCUTTA.

The following is an Abstract of Proceedings of a Meeting of the General Committee held on 22nd ultimo. PRESENT :—Messrs. H. C. Begg (*Chairman*), W. Brown (*Vice-Chairman*), H. S. Ashton, G. A. Ormiston, A. Tocher, R. R. Toynbee, and T. Traill.

The Hon. Mr. J. Buckingham, C.I.E., Chairman of the Assam Branch of the Association, the Hon. Mr. R. H. Henderson, Chairman of the Cachar Branch, and Mr. A. J. G. Cresswell, Honorary Secretary, Cachar Branch, also attended by invitation. Proceedings of the meetings of the Committee held on the 8th and 11th January, having been approved in circulation, were confirmed.

Proceedings of the Assam Branch for December were to be recorded, after previous circulation.

The Hon. Mr. Buckingham, the Hon. Mr. Henderson, and Mr. Cresswell, were present in order to discuss with the Committee, the difficulties experienced by Tea planters in connection with the working of Act XIII. of 1859. The Hon. Mr. Buckingham explained briefly that many district officials, both in the Assam and Surma Valleys, do not approve of the manner in which the Act is at times used by Garden Managers. He, therefore, thought it was very desirable that some procedure should be decided upon, which Managers might follow, and which would be approved of by the Assam Administration. There had been rumours that the Chief Commissioner wished to amend the Act. So far as he (Mr. Buckingham) could ascertain, there was no intention to do so at present. But if planters did not agree upon uniformity in their procedure under the Act, there could be no reasonable doubt that it would be amended sooner or later, and most likely so amended as to make it much more disadvantageous to planters than at present. It was, therefore, he considered, of importance that a uniform mode of procedure should be decided upon and communicated to Garden Managers. There were three main points which should be insisted upon. They were :—

(*a*) There must be a written agreement for each individual labourer. That was of special importance, as the Assam Administration distinctly objected to verbal agreements. Moreover, the latter were not to the advantage of the Manager, as the witness was often absent when he was needed to prove the agreement.

(*b*) There must be a substantial advance. That was also of great importance. There had been advances of Re. 1; and it was true that, in accordance with the provisions of the Act, Magistrates were bound to take cognisance of cases brought under such contracts. But convictions could not, of course, be obtained.

(*c*) There must be a maximum limit to the period of the contracts. He (Mr. Buckingham) suggested that the period should be four years.

A full discussion of the points brought forward, and of the application of the Act generally followed. All present were agreed that a written agreement was desirable, and that there were no great difficulties in the way of its being given by planters. But upon the point as to what amount might be considered a substantial advance, the Committee were not able to offer an opinion. The advice of Messrs. Sanderson & Co. had been taken regarding it in 1899 (*see* Circular No. 717-O, of 20th November, 1899), when a case in which an advance of one rupee had been given was under consideration. No definite opinion as to the amount had, however, been received; and it was now agreed that the Hon. Mr. Buckingham and the Hon. Mr. Henderson should ascertain the views of Messrs. Sanderson & Co. with reference to it. Upon the third point—the limit of time—the Committee agreed with Mr. Buckingham that four years would be a suitable period. Another important difficulty was also mentioned by Mr. Buckingham. It had reference to the second section of the Act, wherein it is stated that if a workman or labourer has received money from the complainant (the employer) on account of work, and has neglected or refused to perform the same, "the Magistrate shall, *at the option of the complainant*," either order the defendant to repay the money advanced, or to finish the work. It seemed to Mr. Buckingham that according to the last opinion given by Messrs. Sanderson & Co. (*see* Circular No. 48, of 22nd August, 1900), it would be possible, under this section, for a labourer, after working for a period on a garden, to repay the advance made to him, and to terminate his contract. He was not sure if this were so, but he thought it was a point upon which legal advice was necessary.

The Hon. Mr. Henderson was inclined to think that such cases very rarely occured; but Mr. Cresswell gave several instances which had happened in Cachar.

It was agreed, after further discussion, that this point should also be referred to Messrs. Sanderson & Co. for further consideration and advice.

The Hon. Mr. Buckingham and the Hon. Mr. Henderson agreed to interview Messrs. Sanderson & Co., and to discuss the different points with them, and to report to the Committee.

Letters, dated 28th December, 1900, and 4th January, 1901, from the Secretary, Indian Tea Association, London, were brought up for final consideration and disposal, after previous circulation. The chief matters dealt with in these letters were :—

(*a*) **Increase of French Import duty on tea.**—In the letter, dated 28th December, Mr. Tye stated that he had been informed by the Secretary of the British Chamber of Commerce in Paris, that a decree of the French Government would shortly be published "postponing for a further period of six months (from the 1st January, 1901) the application of the maximum tariff, with a view to further action being taken."

(*b*) **Green teas.**—In the letter, dated 4th January, the London Committee asked what was being done in regard to the allotment of the proposed bounty on Green Teas. They also suggested that arrangements be made in good time so as to ensure the manufacture of a larger supply of green tea next season. The following extract from a circular, dated 4th January, published by Messrs. Wm. Jas. and Hy. Thompson, was also quoted in the letter, *viz.*:—"the best uncoloured teas sent there (the United States) from Ceylon, resembling the *namuna* tea made in India years ago, are finding favour: they are not green teas in the accepted sense."

The General Committee also had before them the following papers on the subject of green teas:—

(i) A letter, dated 18th January, from Messrs. Finlay, Muir & Co., covering a copy of a letter from Messrs. P. R. Buchanan & Co., London. This last named communication contained a suggestion that the Association should issue to the Managers of all gardens which are members of it, a full description of how best to make green teas; and should send suitable samples to be copied; and should also encourage the importation of several of Dean and Rae's steamers to such gardens as intend to make green tea in large quantities.

(ii) A letter, dated 14th January, from Mr. L. C. Baines (Messrs. Moran & Co.), offering to visit the principal tea centres in America and Canada, and to ascertain their requirements. He asked if, in the event of his offer being accepted, the Association would be prepared to meet part of the expenses of the journey.

The Committee, after a full discussion of the various points brought out in the above named papers, decided to take the following steps:—

(*a*) To telegraph to the London Committee, asking for two chests of the Ceylon tea referred to by Messrs. Wm. Jas. & Hy. Thompson to be sent out immediately.

(*b*) To ask the London Committee by the next mail, if there was any objection to the bounty being allotted upon the so-called *namuna* teas. It was believed that this description of tea, which is evidently similar to that referred to by Messrs. Wm. Jas. & Hy. Thompson, could be manufactured much more easily and successfully than any teas which could be accurately denominated as green teas. For the manufacture of the latter it appeared that special appliances were needed; while for *namuna* teas the existing machines would suffice. It was proposed, therefore, that a bounty of 1½ annas per pound should be offered next season on 250,000 lbs. of Green *or namuna* tea; the manufacturer to have the option of choosing which description of tea he would make. This proposal was made on the assumption that the statement made by Messrs. Wm. Jas. & Hy. Thompson was correct, *i.e.*, that *namuna* teas are in demand in the United States. The London Committee were to be asked to give their opinion upon this latter point.

(*c*) To inform Messrs. Finlay. Muir & Co. that the Committee did not feel in a position, at present, to issue instructions as to the proper method of making green tea, or to recommend any particular machine for use in the process. The other suggestion, that samples should be sent to Managers, was one upon which the Committee were arranging to act.

(*d*) To inform Mr. L. C. Baines that a sum of £50 would be granted to him in part payment of the expenses of his journey to America. He would be expected to make enquiries in the principal tea centres in the United States and Canada respecting the quality of the green teas required there; and also to obtain and send to Calcutta a few chests of the descriptions most in demand. It was also to be suggested to him that he should, if possible, go *viâ* Japan in order to obtain some information regarding the manufacture of Japanese green teas.

Considered a letter, dated 18th January, from Mr. H. H. Mann, B. Sc., asking the Committee to obtain the consent of Messrs. Williamson, Magor & Co. to a pruning experiment being conducted on their Majulighur Tea Estate, Bishnauth.

The Comittee directed that a letter making the request should be sent to Messrs. Williamson, Magor & Co.

Recorded a letter, No. 23-F, of the 13th January, from the Secretary, Calcutta Fire Insurance Agents' Association, in reply to the Committee's representation upon the Fire Insurance Tariff for Tea Garden Premises. The recommendations made by the General Committee were:—

(1) That subject to a provision in connection with the drawing of fires from boilers, the Fire Insurance Agents' Association be asked to abolish the additional rate of 2 annas per cent. charged "if the boiler and firing place are inside the building, or in a building communicating therewith, except by double firepr doors."

(2) That the Agents' Association be asked to reduce the ditional rate of 4 annas per cent. for fans to 2 annas per cent. the case of a building of brick and iron with hardwood floors, b with bamboo or cloth trays in its artificial withering chamb Further, that with non-inflammable racks consisting of wire n ting a nominal charge of ½ anna be suggested as being sufficie

(3) That a reduction of the rates for withering and fermen ing houses be asked for.

(4) That a reduction of the rate for carpenter's shops shou be asked for in those cases where it can be stipulated that neith fires nor artificial lights are used.

That some discount be allowed where the electric light is us in the factories.

The Committee of the Fire Insurance Agents' Association declin to entertain any of the foregoing proposals. Regarding (they stated that the Tea Tariff was favoured when the charge f this risk was fixed at two annas only. To abolish it would be direct opposition to the principle upon which all Tariffs were fo mulated. With reference to (2), the suggestion was opposed to th basis upon which additional rates are charged in all Tariffs. Re pecting (3) and (4), the experience of the different Companies connection with risks on buildings used for these purposes did n warrant a reduction; nor could any discount be allowed on accou of the electric light.

MEETING OF SOUTH MYSORE EUROPEAN PLANTERS.

At a Meeting of the European community held at Munzeraba Club, on 24th January, the following were present:—Messrs. G Anderson, C.I.E., J. G. Crawford (President of the South Myso Planters' Association), Whetherall (Sub-Divisional Officer), A. F Park, W. L. Crawford, J. Aird, W. Galiffe, Foulkes, Taylor, Lak Pittock, T. Anderson, Cant, Rutherford, Woods, Butcher, Robinso DeSalis.

Mr. J. G. Crawford proposed that Mr. G. Anderson should tak the chair.

Seconded by Mr. J. Aird and carried unanimously.

All present having risen, the Chairman addressed the followin words:—

GENTLEMEN,

The mournful event which has so suddenly called us together is national bereavement and an universal sorrow which will be deepl deplored throughout the whole civilized world—Her Most Graciou Majesty the Queen-Empress has passed away.

The world's ideal of a Christian Queen, Woman and Mother, ful of tenderness, sympathy and solicitude for all around her and wh has always bestowed on her family and subjects alike, the untirin help of her consolation, benevolence and encouragement, is no more

Blessed with every attribute which could possibly add to the grace ful charms of a loving disposition, she has given to her subjects noble example, both in her own home and while discharging th exalted obligations of the sacred trust confided to her care.

We, and our parents, have had ample opportunities for watchin and appreciating the numerous manifestations of her motherly love her womanly tenderness, and her queenly condescension, and th great spontaneous outburst of universal thanksgiving during th Jubilee celebrations for the blessings of security, justice and freedom which have been maintained throughout the Empire during he glorious and unexampled reign was the clearest possible proof tha she was enshrined in the loving hearts of hundreds of millions o people in all parts of the world. History abounds in characteristi incidents of her beneficent intentions and her Christian trustfulnes and resignation.

In health or in sickness, in affluence or in poverty, in prosperity o in misfortune, in happiness or in sorrow, our beloved Queen-Empres has always been the first to send inquiries, felicitations or condolence

She has lived for her people and her people have blessed her.

Her charity was unbounded and her benign influence was so diffused as to reach and permeate the hearts and homes of even th humblest of her subjects and was the means of strengthening thos

es of affection, gratitude and admiration which have bound hundreds f millions of loving hearts to her throne and sacred person during uch a long and glorious reign in which with transcendent wisdom and enevolence she has ruled

"With those mild arms of truth and love
Made mighty by the living God."

Although we are only a small community, let us join in the univer-l mourning and make arrangements for giving heartfelt expression o our profound sorrow by tendering our most humble condolence hrough His Excellency the Viceroy and to Her Highness the Maharanee Regent of Mysore who, we well know, are overwhelmed ith grief.

Mr. J. G. Crawford proposed that the Chairman and Mr. J. Aird dopt measures for conveying to His Excellency the Viceroy a heartfelt xpression of profound sorrow on behalf of the European community f South Mulnad of Mysore at the sad intelligence which has been eceived of the death of Her Most Gracious Majesty the Queen-Empress, together with their most loyal and humble condolence with he members of the Royal Family and also with Her Highness the Maharanee Regent of Mysore.

The following telegrams were despatched from the room :—

To

HIS EXCELLENCY THE VICEROY OF INDIA,
Calcutta.

The lamented death of Her Most Gracious Majesty the Queen-Empress has caused the most profound sorrow to the members of the European community of South Mysore Mulnad, who, at a Meeting eld to-day, have directed me to convey to Your Excellency a heart-elt expression of their grief and their sincere and humble condolence ith all the members of the Royal Family.

To

HER HIGHNESS THE MAHARANEE REGENT OF MYSORE,
Madras.

Your Highness' European subjects in the Southern Mulnad desire o tender a sincere expression of their profound sorrow at the death f Her Most Gracious Majesty the Queen-Empress and condolence ith Your Highness and members of the Royal Family.

The Meeting then closed with the usual formalities.

SHEVAROY.

Proceedings of a Meeting of the Committee of the Shevaroy Planters' Association held in the Victoria Rooms, at 1 P.M., on Monday, the 4th February, 1901. PRESENT :—Messrs. J. C. Large, C. Rahm, W. J. Lechler, Rev. M. Anderson, and Mr. R. Gompertz, *Honorary Secretary.*

Read correspondence with the Traffic Manager of the Madras Railway regarding the rates to be charged for conveyance of parcels from Suramangalam to the Hills.

Resolved that the Honorary Secretary do write to the Traffic Manager saying that if the contractor will accept the rates offered by the planters for parcels delivered within the Yercaud Union, the planters would be willing to accept the rates fixed by the Traffic Manager for parcels delivered outside those limits.

Read correspondence between Honorary Secretary and Mr. S. M. Hight regarding a coffee-stealing case which occurred on the Scotforth Estate.

Resolved that this meeting approves of the course adopted by the Honorary Secretary.

Read circular No. 5/01 from the Secretary, U. P. A. S. I., inquiring at which port the Association wants a Harbour.

Resolved that this Association would prefer Calicut or Beypoor.

The following papers were read and recorded :—

No. 3/01. Circular from Secretary, U. P. A. S. I., regarding "*The French Import Duty.*"

No. 83/00. Circular from Secretary, S. P. A. S. I., forwarding letter from Honorary Secretary, Wynaad, who wishes Ceylon duty on tea removed.

No. 6/01. Circular from Secretary, U. P. A. S. I., Planters' Associations replying to Chairman's circular regarding *Differential Duties.*

No. 7/01. Circular from Secretary, U. P. A. S. I., regarding the position of the Tea industry.

No. 8/01. Circular from Secretary, U. P. A. S. I., regarding "*The Proposed Tea Cess.*"

2/H. Letter from Mr. Hardy *re* the conveyance of parcels from Salem to Yercaud.

6/C. Letter from Collector of Salem who wishes the opinion of Honorary Secretary as to whether planters are likely to undertake mule breeding.

The following papers were laid on the table :—

Brazilian Review, dated November 27th and December 4th, 11th, and 18th of 1900.

Planting Opinion, dated January 12th, 19th, and 26th of 1901.

Proceedings of the Indian Tea Association, dated December 5th, 1900 and January 8th, 9th, and 17th of 1901.

Proceedings of the Central Travancore Planters' Association, dated January 12th of 1901.

Proceedings of the Wynaad Planters' Association, dated January 2nd of 1901.

Bulletin No. 8 of Agricultural Series (procedure to be adopted in the Systematic Examination of varieties of crops).

Bulletin No. 7 (note on Sugarcane diseases).

Bulletin No 9 (experiments on the growth of wheat and maize at the Cawnpore Experimental Farm).

Bulletin No. 10 (experiments at the Cawnpore farm on the growth of wheat (*a*) with green manuring and (*b*) in rotation with leguminous crops).

Bulletin No. 11 (a note on trials of an Aermoter in Well irrigation).

Bulletin No. 42, Vol. II. (native beliefs regarding the hair-marks on horses and cattle).

YERCAUD,
5th Feby., 1901.

ROBT. GOMPERTZ,
Honorary Secretary, S. P. A.

MARKET REPORT.

[*Per Mail advices of 18th January*, 1901.]

COFFEE.

The London Commercial Record says :—A dull tone has prevailed in this market, and with the exception of a few lots of good colory qualities, prices generally have been in favor of buyers. Further supplies to a moderate extent of new crop Neilgherry and Wynaad have been brought to sale, but the quality is disappointing and the assortment by no means favorable; the greater part remained unsold, and the few transactions which have taken place have been at comparatively low prices. Nyasaland is rather easier. With few exceptions Central American descriptions generally shew a further decline. The market for "futures" has been irregular, but the closing rates shew no material change for the week; latest sales include May Santos at 32s 6d, September at 33s, and December at 33s 6d to 33s 4½d

Auction supplies to-day comprised 10 casks 5 tierces 6 barrels Plantation Ceylon, 183 bags East India, 672 bags Nyasaland, 100 bales Mocha, 155 barrels 124 bags Jamaica, 820 bags Vera Paz, 466 bags Costa Rica, 1,512 bags Guatemala, 251 bags Salvador, 60 bags Columbian, 51 bags Peruvian, 48 bags Nicaragua, 570 bags Ecuador, and 3,887 bags Santos. The auctions went off quietly at about steady prices for good qualities, but the commoner grades were lower.

London ...	Santos ...	March delivery ...	32s 3d.
New York ...	No. 7 Rio...	„ ...	5 80 cents.
Hamburg...	Santos ...	„ ...	32¼ pf.
Havre ...	Santos ...	„ ...	39¼ francs.

Imports, Deliveries and Stock of Coffee in London, are as follows :—

	STOCK.		IMPORTS.	
	1901.	1900.	1901.	1900.
Tons ..	14,788	14,474	908	1,154
	HOME CONSUMPTION.		EXPORT.	
	1901.	1900.	1901.	1900.
Tons ...	742	700	365	734

The preceding figures exhibit—	Tons.
the Imports a decrease this year of	246
Home Consumption an increase of	42
Export a decrease of	369
Stock an increase of	314

Auctions this week have passed off as follows:—

Ceylon—*Plantation.*—12 packages partly sold—smalls 42s 6d to 50s, pea-berry 46s 6d.

East India.—1,821 bags 92 cases partly sold, as follows—*Neilgherry*, smalls 41s 6d to 49s 6d, low middling to middling 45s to 53s 6d, pea-berry 65s; *Wynaad*, bold dull greenish 54s to 54s 6d; *Coorg* (old crop), smalls 40s to 44s, low middling to middling 50s 6d to 52s, bold 61s to 62s, pea-berry 48s to 64s.

Nyasaland.—31 bags sold—picking 32s to 33s.

Costa Rica.—1,776 bags mostly sold—smalls 33s to 43s, low middling greenish to colory 48s to 52s 6d, middling to good middling colory 54s to 62s 6d, bold 62s 6d to 70s, good ditto 78s 6d to 84s 6d, pea-berry 52s to 76s.

Guatemala.—Of 1,798 bags offered 430 bags sold—small 41s 6d to 43s, low middling to good middling 48s to 53s, bold 66s to 69s, pea-berry 58s to 67s.

Salvador.—Of 137 bags offered 30 bags sold, low middling 44s.

Nicaragua.—46 bags sold, country-damaged 36s 6d to 38s 6d.

Colombian.—Of 1,511 bags catalogued 1,170 bags sold, smalls 34s 6d to 36s 6d, low middling to middling 42s 6d to 51s, bold 49s to 53s 6d, extra bold 64s 6d to 65s, pea-berry 48s 6d to 54s 6d.

Venezuelan.—16 bags partly sold, smalls 41s, pea-berry 56s.

Mexican.—716 bags partly sold, good ordinary brownish 37s 6d to 38s, low middling to middling 42s to 47s, pea berry 48s

Brazil.—52 bags Santos, quay terms, partly sold, without reserve, at 30s 6d.

43 barrels Jamaica, 108 half-frazils Mocha, 62 bags Singapore Liberian, and 486 bags Ecuador were bought in.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	1,734,000	2,223,000	1,995,000	2,879,000
Santos ...	5,650,000	4,815,000	4,057,000	4,695,000
Total...	7,384,000	7,038,000	6,052,000	7,574,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 10⅛d, previous day 10$\frac{7}{32}$d.

Havre, *Jan.* 17.—Good average Santos January opened barely steady at 39¼f. and closed quiet at 39f., March opened at 39¼f. and closed at 39¼f., May opened at 39½f. and closed at 39½f., September opened at 4 ¼f. and closed at 40f., December opened at 40¾f. and closed at 40½f.

Hamburg, *Jan.* 17.—Good average Santos January opened quiet at 32pf. and closed steady at 31½pf., March opened at 32½pf. and closed at 32¼pf., May opened at 32¾pf. and closed at 32¾pf., September opened at 33¾pf. and closed at 33½pf., December opened at 34pf., and closed at 34pf.

New York, *Jan.* 17.—Closing prices of No. 7 Rio were as follow:—

	Jan.	Feb.	Mar.	April.	May.
January 17...	5·60	5·70	5·80	5·85	5·85
January 16...	5·70	5·80	5·85	5·90	5·90

EAST INDIA SOLD IN PUBLIC SALE SINCE 11TH INSTANT.

Mark.	District.	Size 1.		Size 2.		P.B.		T.
Rookery ...	Neilgherry	13	not sold	59	not sold	12	not sold	6
Manaar ...	,,	3	,,	36	,,	7	,,	8
Walker's Estates								
Touramulla ...	Wynaad	34	54/ 54-6	71	41-0	23	,,	18
Matheson's Coorg								
Cotta Betta ...	Coorg	47	not sold	61	43-6	50	62-0	8
,,	,,	55	,,	35	44 0	27	64-0	
Cowrie Cadoo ...	,,	20	61-0	15		5	61-6	1
Kowrie Cadoo ...	,,	16	62-0	13		4	58-0	2
Chengal ...	Neilgherry	10	not sold	38	not sold	8	not sold	3
Oland ...	,,	4	,,	22	49/ 49-6	5	,,	11
Adderley ...	,,	7	,,	34	not sold	7	65-0	3
Kotergherry ...	,,	2	,,	28	,,	10	not sold	4

TEA.

China.—At auction during the week 5,445 packages were offered and partly sold with difficulty at unchanged rates, except for Green Teas which were well competed for at a slight advance. Souchong 3d to 5½d, new make 4½d to 6⅝d, Kaisow 3½d, Lapseng Souchong 5½d, Scented Orange Pekoe 10d, Scented Caper 4d to 6¾d, siftings 3d to 5½d. Moyune Green:—Gunpowder 9¼d to 1s 1d, Impe 3½d to 7d, Foong Mee 10¼d to 1s ½d. Sow Mee 8d, Young Hy 3⅝d to 8½d, Hyson 3¼d to 4d per lb.

Indian.—A slightly larger quantity was put forward, *viz*:—52, packages contrasted with 51,000 packages last week, and 60, packages in the year before.

There was a steadier tone and more general buying, though pri for common grades seldom shewed any recovery. Fair to g kinds with useful cup met with better competition and the m desirable brought firmer rates. Over 8d per lb. there was an proved enquiry, especially for Broken Pekoes with strong liq which in many instances marked an advance, and higher figu were recorded for finest lots.

For 48,800 packages on Estate Account 6⅞d per lb. was obtai versus 8¼d per lb. for 47,000 packages, and 9¼d per lb. for 42, packages in the two preceding seasons.

Ceylon.—Public sales comprised 29,400 packages, compared wi 28,500 packages on the 8th instant and 30,000 packages at this ti twelve months since.

Pekoe Souchongs and Pekoes under 5½d per lb. were again plen ful, but were taken up freely without change in quotations. Owi to the Russian holidays shipping orders were scarce, the Ho trade, however, gave support to both Pekoes and Orange Pek with full flavour, which on the whole went well. Broken Pek ruled somewhat irregularly and occasionally dearer. Choice tip parcels were very sparsely represented.

In consequence of the preponderance of inferior consignmen the weekly average has declined to fractionally over 6½d per (which point it touched on the 19th June, 1900), opposed to 6 per lb. on the 10th instant and 7¾d per lb. on the 18th January year ago.

Java.—Rather over 2,000 packages of direct import passed t hammer, prior values being maintained in the majority of cas For the 24th instant 1,900 packages are advertised.

Deliveries.—The clearances of all Tea (on which duty has be paid) from the London warehouses, as per official returns a *viz.*:—

From 1st to 15th January,	1901	...	10,284,607 lbs.
Do. do.	1900	...	*15,838,156 ,,

During the week the following have been printed for sale b public auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offere Pkgs.
India ...	47,679	5,209	52,888
Ceylon ...	26,983	2,388	29,371
Java ...	1,164	880	2,044
Total ...	75,826	8,477	84,303

Also 565 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated January 18th, 1901, says:—

Quantity brought to Auction in London from 1st June to date

	Indian. Pkgs.	Ceylon. Pkgs.	Jav Pkg
1900-1901	1,037,806	789,077	34,6
1899-1900	1,118,283	765,981	37,1

54,639 *pkgs.* Indian
30,314 ,, Ceylon
2.044 ,, Java
} Total 86,977 packages were offered in public auctio this week.

In view of the serious over-production of Indian and Ceylon Te Proprietors of Estates are trying to arrange some plan by whi the output may be reduced. Committee meetings of the Indi and Ceylon Tea Associations have already been held with th object in view.

Customs figures showing the movements of Tea from 1st Ju to 31st December are given below, the figures extending over t first 8 months of the season. The re-exports of Indian and Ceyl Teas, especially to countries in Europe and "other countries," a encouraging, and indicate that the low prices are having conside able effect in stimulating foreign demand.

Indian.—The quantity brought forward was slightly above th of last week, but the market showed more animation than has be the case for some time past, buyers operating with more confidenc the result being that prices for all grades continued steady, wi

* This embraced one large payment in advance.

here and there a tendency towards higher quotations among useful liquoring Teas. The Official Wire gives exports to U. K. for the first half of January as 6,210,000 lbs., against 5,2 0,000 lbs. for same period last year, making total exported to U. K. from 1st April, 1900, to the middle of January 150,900,000 lbs., against 141,192,000 lbs. last season.

Week's average of Tea sold on Garden Account 1901, 49,012 pkgs., av. 6·86d. 1900, 48,112 pkgs., av. 8·15d.

Total Tea sold on Garden Account 1st June 1900 to date, 852,303 pkgs., av. 7·51d. 1900, 856,130 pkgs., av. 8·45d.

CEYLON.—Although the auction was comparatively heavy, comprising 30,314 packages against 28,201 last week, bidding was somewhat more animated, and prices generally were steady, with a slight tendency here and there towards better rates for useful descriptions. Private advices from Ceylon give shipments to U.K. for first half of January as 6,500,000 lbs., against 3,500,000 lbs. last year, and estimate the quantity for the month as 10,000,000 lbs., against 10,500,000 lbs. in January last year. Average for week 6·15d., against 7·71d in 1900.

Ceylon Tea sold on Garden Account 1st January to date, 67,727 pkgs., av. 6·68d. 1900, 77,756 pkgs., av. 7·80d.

JAVA.—A fair quantity was brought forward and met with rather better competition, although some parcels were withdrawn for higher limits. 11,973 packages are advertised to be sold in Amsterdam on the 24th instant.

Bank Rate 5 per cent. Exchange on London three months sight:—Calcutta 1/4⅜. Colombo 1/4 13/32.

COCOA.

Auctions on Tuesday embraced 3,721 bags, which met a quiet demand, but 2,680 bags were placed, at somewhat irregular prices. Trinidad decline 1s to 2s per cwt., whilst other growths were a little easier, except Ceylon which appreciated somewhat. Of 1,883 bags Trinidad catalogued 1,700 bags sold at 70s to 73s for fine and very fine red, and 67s to 69s 6d for middling. 155 bags Grenada mostly sold at 68s 6d for fine. 81 bags Dominica realised 64s to 66s 6d for common to fair. 60 bags Jamaica about half-sold at 66s 6d to 67s for good fermented. 62 bags St. Lucia found buyers at 65s to 67s 6d for dark to good. 25 bags Surinam partly sold at 67s 6d. Of 989 bags Ceylon brought forward 670 bags were placed at 94s to 101s 6d for fine bold, 85s to 92s for good medium and bold, and 63s 6d to 67s 6d per cwt. for smalls, broken 70s. Privately nothing of interest passing.

PEPPER.

BLACK.—The market is quiet, and value for arrival is about 1/16d per lb. lower. About 150 tons Singapore have been sold at 6½d down to 6 7/16d March-May shipment. On the spot sales have been made at 6 5/16d down to 6¼d for fair Singapore.

At public sale on the 16th instant 98 bags good brown Tellicherry realised 6¼d, and 36 bags Ceylon 6⅛d to 6¼d per lb, for fair to good clean heavy brown. 200 bags Aleppy and 134 bags Trang bought in at 6⅛d, also 25 bags damaged Singapore. To-day quiet.

The shipments of Black Pepper for the first half of January compare as follows:—

	1901.		1900.	
U. K.—Singapore ...	50	50	*nil*	130
„ Penang	*nil*		130	
Continent		110		50
U. S.		700		110
Total tons ...		860		290

WHITE.—Is also very quiet. About 50 tons have been sold, *viz.*, Singapore on the spot at 9 9/16d, and at 9½d down to 9⅜d for February-April shipment. Sales of fair Penang on the spot at 8 9/16d, and a little lot February-April shipment at 8 11/16d.

At auction on Wednesday 267 bags Singapore and 189 bags Penang retired unsold.

The shipments of White Pepper for the first half of January compare as follows:—

	1901.		1900.	
U. K.—Singapore	30	30	40	160
„ Penang	*nil*		120	
Continent		20		30
U.S.		120		—
Total tons ...		170		190

LONG.—52 bags withdrawn.

GINGER.

COCHIN.—206 bags were brought forward, and 132 bags sold "without reserve" at 29s 6d to 30s for bright small and medium washed rough very wormy, and 29s per cwt. for common washed partly shrivelled, being rather below valuations.

CAPSICUMS.—10 bags fine Aden bought in at 65s per cwt.

CLOVES—*Zanzibar.*—There is very little life in the spot trade but values are maintained, the few sales reported being at 4¼d to 4⅜d for dullish to fair. For forward delivery, however, the market has further improved, although the week's business is not extensive, probably not more than 3,000 bales; January-March sold at 4 13/32d to 4 7/16d, March-May at 4⅜d to 4 7/16d (closing sellers at the latter), and June-August at 4⅜d per lb. and buyers.

20 bales, offered at auction on Wednesday, sold at 4⅜d for fair and 4¼d for barely fair.

PENANG.—15 cases mostly sold—dark unpicked 4½d to 4¾d per lb.

CARDAMOMS.

There was a poor demand in auction, and in most instances lower prices were accepted. The following prices ruled:—Ceylon-Mysores, fine bold pale (well bleached), 3s 8d; medium to bold pale, 2s 8d to 3s 1d; medium brownish, 2s 2d to 2s 5d; medium long lean, 1s 10d to 1s 11d; small pale, 1s 5d to 1s 9d; brown and split, 1s 2d to 1s 4d; very small pale, 1s 2d; wild native longs, 1s 9d to 2s 9d; seeds, 1s 8d to 2s 4d. No Ceylon-Malabar sold.

CINCHONA.

At the monthly public sales of bark, on Tuesday—the first of the year—presented 1,740 packages, the bulk of which sold with good competition, at full to rather higher prices. The unit value was about 1½d, against 1⅝d at the last public sale in Amsterdam and 1⅝d at the corresponding time last year.

550 bales *South American* sold—yellow quill 5¾d to 9d, broken quill 7d to 8¼d, flat 11⅞d per lb.

285 packages *Ceylon Cinchona* offered and 100 packages were placed, as follows:—Succirubra, chips and shavings 3⅛d to 4d, ditto renewed 5⅞d, root 3⅝d; Hybrid, chips 6⅛d; Ledgeriana, chips 7⅞d per lb.

Of 649 bales *East India Cinchona* catalogued, about 550 bales sold, *viz.*:—Officinalis shavings 4⅜d to 7¼d chips 3¼d to 6¾d, chips and shavings renewed 5d to 9½d. stem and root 6½d to 8d, branch 2½d to 3d; Ledgeriana, chips 1s, branch 8d, root 2¾d per lb.

Of 256 bales *Java Cinchona* 80 bales sold—Succirubra, root 4d; Ledgeriana, branch, 3d to 6d, root 3¾d; Hybrid, chips 8d to 8¾d per lb.

The shipments of Java for the first half of January were 610,000 Amsterdam lbs., contrasted with 216,000 Amsterdam lbs. in the corresponding period last year.

The *Chemist & Druggist* says:—There was a steady demand for the small supply offered in auction on Tuesday, and the greater proportion sold at an average unit of 1⅜d to 1 7/16d, or about equal to the last London sale, and 5 per cent. advance on the Dutch auctions last week. The shipments from Java for the first half of the month were 609,000 Amst. lbs., against 216,000 Amst. lbs. last year.

The following table shows the quantities offered and sold:—

	Packages offered.	Packages sold.
East Indian cinchona	549	437
South American cinchona	550	550
Ceylon cinchona	256	63
Java cinchona	285	100
	1,640	1,150

The following were the approximate quantities of bark purchased by the principal buyers:—

	Lbs.
Messrs. Howards & Sons	83,414
American and Italian factories	43,534
Frankfort-on-Main and Stuttgart factories ...	22,580
Imperial Quinine factory	21,078
Brunswick factory	16,266
Mannheim and Amsterdam factories	11,144
Paris factory	890
Druggists, etc.	28,676
Total quantity sold	227,582
Bought in or withdrawn	84,296
Total quantity offered	311,878

The prices paid for sound bark were as follows:—

JAVA.—Ledgeriana, original stem, 5⅛d to 8¾d; branch, 3d to 6d; root, 3¾d. Original red stem, 4¼d, and branch, 5⅜d per lb.

CEYLON.—Crown, chips and shavings, 6⅛d; broken quill and chips, 3⅛d. Red chips and shavings, 3¾d to 5⅞d. Ledgeriana chips, 3⅞d; and chips and shavings, 2d.

SOUTH AMERICAN.—Bolivian cultivated Calisaya, fair to good quill, 5¾d to 7⅝d; broken quill, 7d to 8¼d; fair flat cultivated Calisaya, 11⅞d per lb.

EAST INDIAN.—Crown, chips, 7⅛d; chips and shavings, 3¼d to 7⅞d; broken quill and chips, 4¼d to 5½d; chips renewed, 3d to 9½d; stem and chips, 3¾d to 3⅞d. Ledgeriana, chips, 8d to 1s; chips and shavings, 1¾d; stem and chips, 2¾d per lb.

QUININE.

A reduction of 1½d per oz. in the official quotation was announced on January 12, makers of German sulphate now quoting 1s 1d per oz. for 1,000-oz. lots in tins of 100 oz. Messrs. Howards & Sons now quote 1s 3d in bulk and 1s 5d in vials, either prices for no less than 1,000 oz. Whiffen's prices have also been reduced to 1s 2d for either bleached or unbleached. Salts of quinine have also followed the reduction. The decline of 10 per cent. in the unit at the Amsterdam bark-sale is responsible for the alteration in prices. The second-hand marked became easier on the news of the official reduction, the week opening with sellers at 1s 0½d spot and buyers at 1s, a small business being done at 1s 0½d for May. The result of the London bark-sale on Tuesday, however, gave a firmer tone to the market, although little business has been done, 1s 0¼d having been paid for spot and March delivery. There are said to be large orders on this market for U.S. account, which may have the effect of driving prices up.

	IMPORTS.			DUTY PAYMENTS.			EXPORTS.*		
	1900.	1899.	1898.	1900.	1899.	1898.	1900.	1899.	1898.
Indian ...	119,227,109	116,783,293	108,402,134	64,857,829	72,353,260	76,939,537	6,690,216	4,833,316	4,976,374
Ceylon ...	64,770,354	61,334,746	56,920,855	53,433,847	53,069,003	48,049,225	8,526,939	7,883,465	6,918,682
China ...	17,430,149	30,352,770	22,391,126	5,964,725	9,364,308	8,442,773	8,359,264	7,120,496	8,942,451
Other Countries ...	5,534,561	4,519,568	3,867,721	3,627,467	3,788,439	2,875,978	554,314	461,849	653,618
Total lbs. ...	206,962,173	212,990,377	191,581,836	127,883,868	138,575,010	136,307,513	24,130,733	20,299,126	21,491,125

*ANALYSIS OF ABOVE EXPORT OF TEA FROM UNITED KINGDOM DURING THE LAST TWO YEARS (NOT INCLUDING TRANSHIPMENTS).

	INDIAN.		CEYLON.		CHINA.		OTHER COUNTRIES.	
	1900.	1899.	1900.	1899.	1900.	1899.	1900.	1899.
Countries in Europe ...	4,141,296	2,738,751	5,298,120	4,713,782	5,005,252	3,877,386	420,696	269,450
United States ...	365,179	380,606	551,641	921,462	174,382	241,535	14,901	7,546
British N. America ...	777,586	928,845	1,119,614	1,212,029	223,120	274,318	23,837	29,256
Newfoundland ...	71,721	49,615	217,586	155,668	148,804	154,455	2,101	3,289
Other Countries ...	1,334,434	735,499	1,339,978	880,524	2,807,706	2,572,802	92,779	152,308
Total lbs. ...	6,690,216	4,833,316	8,526,939	7,883,465	8,359,264	7,120,496	554,314	461,849

(AVERAGE FOR ALL INDIA 6·86d., JANUARY 18TH).

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.
Neilgherry ...	**109**	**6·16**												
Glenfruin ...	36	5	...	...	36	5	...	...	...	...	...	...	...	...
Prospect ...	73	6¾	31	7½	42	6	...	...	...	...	...	...	...	...
Travancore ...	**2990**	**4·98**												
Arnakal ...	170 p	5	60	4¾ 5	30	4½	44	6¼	19	4	1	3¾	16½c	3¼4½
,, ...	104 p	5¼	12	6¼	38	3 4¾	28	6½	11	4¼	7	3¾	8½c	4¼
Ashley ...	60	5	...	...	33	4¼	27 c	5¾	...	...	...	...	...	...
Atchencoil ...	93½c	4½	12½c	5½	34½c	4¾	8½c	7	24½c	4	10½c	2½	5½c	3¼
Balamore ...	107 p	4½	...	...	77½c	3½ 4	26½c	5¼	...	...	2½c	3¼	2½c	3¾
Braemore ...	112 p	4¾	26	5	39	4¼	24	5¾	11	4¼	6	3½	6½c	3¼
Carady Goody ...	121	6	30	9	39	4¾	32	5¾	20	4¼	...	...	...	...
CMR ...	24	4¼	...	...	14	4	8	5	...	...	2	3¼	...	...
Corrimony ...	230½c	4¾	...	...	146½c	4¼4½	75½c	5¾	..	...	1½c	3½	8½c	3¼
Ellangy ...	99 p	4½	...	...	44	4½	26	5	17	3¾	...	...	12½c	3¼4¼
Glenmore ...	169½c	4½	...	...	96½c	4¾	69½c	4¾	...	...	1½c	3	3½c	3
Invercauld ...	38	4½	9	5	16	3¾ 4	8	5	5	4	...	...	...	...
Isfield T Co Isfield...	150 p	4½	19	4¼	81	4¼	28	5½	18	3¾	...	...	4½5	3¼
Kinmylies ...	32½	3¾	...	...	29½c	3¾	...	...	...	...	2½c	3½	1½c	3
Mahandragherry ...	64½c	3½	...	...	59½c	3½	...	...	..	...	3½c	3	2½c	3
Mount ...	99	5¼	...	...	33	4¾	33	6⅓	12	4	...	...	21	4¾
Poonmudi ...	77 p	4¾	21	5½	40	4½	9	5½	...	...	3 p	4	4½c	3¼
Seafield ...	182½c	5	...	...	120½c	4 4¾	60½c	5¾	..	...	1½c	3½	1½	3
SIT Co Kuduwa K	178	5	62	4¾ 5	...	...	24	7¼	69	4 4¼	...	...	23	5¼
Stagbrook ...	244 p	5¾	116 p	8½9¼	57	5 5¼	...	...	55	4¼4½	16	4½	...	...
Sth Trav Co Ven ...	119 p	5¾	...	...	48	5½	35	7½	23	4½	...	...	13½c	4
Trav T Est Co BA	263	4¾	90	5½	80	4¼	64	4½	22	4	7	4	..	...
,, Pambanar ...	236	5	28	7½	125	4½	47	5¾	21	3¾	...	...	15	4
W	19½c	5½	...	...	19½c	5⅛	...	...	...	...	...	...	...	...
Wynaad ...														
Wynaad T Co Per ...	293 p	4¾	95	5	...	...	80¼c	6¼6½	94	4¼4½	19	3½	5½c	4½

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

VOL. VI.] MADRAS, SATURDAY, FEBRUARY 16, 1901. [No. 7.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 22nd instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

POLLI BETTA, 12*th February*, 1901.

Coorg. —*Weather.*—Continues cloudy and warm. There was rain out East last Saturday. *Crop*—Hot weather conditions having now supervened, it is felt that it is useless allowing the berries any longer on the trees to ripen, and stripping is being carried out as quickly as possible. Labour is sufficient. *General Health.*—Small-pox is very prevalent: jungle tribes are taking kindly to being vaccinated. Paddy crops, which is a bumper one this season, has been harvested.

ECONOMIC ENTOMOLOGY IN QUEENSLAND.

IT is wearisome work recounting what is being done elsewhere, while so little is being attempted in the Madras Presidency. In the United States, there is an admirably organized, strongly manned, Department of Agriculture. In Queensland, there are Instructors of Fruit Culture, Coffee Culture and Tobacco Culture: there is also an Entomologist. Madras can show us nothing but a nominal Agricultural Department, the leading spirit in which is Professor of nothing but the Art of Writing Reports to prove that Inaction is Progress. It is with feelings near akin to envy that we scan the official report for the year ending 30th June 1900 of the Entomologist to the Government of Queensland. The report tells us of various insect-foes reported upon, mostly those that prey on fruit and vegetables, cereals, sugarcane, and ornamental plants. Of insects that prey upon Coffee never a word; so that we might almost assume that Coffee in Queensland is free from insect-foes? Under the head of Vegetable Pathology we read of the following among the principal constitutional plant derangements arising from uncongenial soil or atmospheric conditions:—"*Coffee.*—Leaf Blight, caused by Cladosporium sp., Russell River; physiological (?) disease, Cairns; physiological (?) disease, Tinana; Leaf Blight, caused by Cerospora sp., Mackay; Leaf Incrustation, caused by lichen (*Strigula sp.*), Cairns; Fungus Disease (?) caused by Pellicularia sp., Russell River." Special reference is made to the working of the Diseases in Plants Act, 1896. This, it is stated, has involved the preparation of some eighty-five separate reports, many of them dealing with more than one subject. These reports have related to the following amongst other topics:—Procedures involved in carrying out the Act; the condition of fruit or plants so far as related to existence of disease in connection therewith: the nature of disease observed; the degree of vitality or virulence that it manifested; and the effect due to the action of disinfecting processes upon plants or fruit; or upon the diseases or insect-pests occurring in or upon them.

We also note that six lectures on entomology were delivered at the Agricultural College to a class averaging fifteen students, "all of whom bestowed marked attention on the instruction thus afforded." Various investigations in the field were carried out. Numerous collections were made, and in this connection it is especially interesting to note the Entomologist's remark that the work of the year has served to emphasise the necessity for a special effort being made to largely increase the comprehensiveness of the various divisions that the collection comprises. He suggests that a small sum of money might be with great benefit devoted to the fulfilment of this need, for the Entomologist, owing to the urgent requirements of other duties, can give little or no time to accumulating and preparing for permanent preservation and display insects specimens as well as illustrations of their depredations and of their serviceable work. He rightly observes that specimens of every insect that is directly injurious or beneficial in each of the stages of its metamorphosis and of objects serving to throw light on its life history should find a place in the cabinets, and that exponents of the insects fauna generally of each of the major divisions of the colony should be secured in order that cognizance may be taken of the extent to which the interests of the residents in such of them are or may be affected by the different members of this section of animal life and of the kinds of insects that are respectively concerned. The information of a class that so comprehensive a collection may be calculated

to afford is frequently in demand. In Madras, planters alone appear to have arrived at the stage of realising how necessary entomological research and study is. The Government remains unconvinced, or at least inactive. The scientific side of agriculture in this Presidency is almost entirely neglected. This, too, at a time when coffee-planting on the Lower Pulneys has been practically destroyed by insect-pests, and when other coffee districts have felt the effects of such pests more or less severely.

In appointing an Entomologist the Government of India has taken a step in the right direction, but a step so absurdly short as to make the Government itself appear ridiculous. Imagine a man who feels that he must jump across a deep chasm, 15 feet or so in breadth, putting one foot forward an inch or two across the verge, as if to estimate the depth of the chasm, in view of failure to reach the other side! This is a simile that fairly reflects the Government's action. The good that may eventually result from the work of one entomological scientist in the vast continent of India is so remote that it need no more be taken into account than would such a movement as we have referred to on the part of a chasm-leaper. It is not in regard to coffee alone, or tea and coffee and cinchona and pepper and vanilla, and cocoa and other products in which European planters are interested, that India needs entomological and scientific investigation. Sugar-cane, wheat, oil-seeds, cotton, jute and various other products all call for similar inquiry, for every plant has one foe at least, and the development of the agriculture of the country depends largely upon the suppression of these foes. To set one man against them is to provoke ridicule. Even a large staff such as is attached to the Agricultural Department of the United States would find work enough to do to cope with these plant-Boers, fighters in armies at times, guerilla warriors on occasion, foes to be met successfully only by a war of extermination conducted on the most advanced principles. The Government of India is in the position of Commander-in-Chief; the Governors of Presidencies and Lieut. Governors of Provinces are Divisional Commanders. Upon them eventually will depend the issue, Victory or Defeat.

PLANTERS' ASSOCIATION OF CEYLON.

It is notified that the Annual General Meeting will be held within the "Ferguson Hall," Victoria Commemoration Buildings, Kandy, to-day, commencing at 3 P.M. The following is the Agenda paper :—

To receive the Annual Report.

To elect a Chairman, Secretary, and Committee for the ensuing year.

Resolution to be proposed by W. D. Gibbon, Esq. :—"That Mr. Edward Rosling, be elected Chairman for the ensuing year."

Resolution to be proposed by the Hon'ble Mr. J. N. Campbell :—"That Mr. Alexander Philip be elected Secretary of the Planters' Association of Ceylon for the ensuing year."

To receive the Report of the "Thirty Committee."

To appoint 24 Members of the Planters' Association of Ceylon to serve on the "Thirty Committee" for 1901.

To appoint a Committee to manage the affairs of the Labour Federation of Ceylon for the year 1901.

To appoint a Cacao Committee of the Planters' Association of Ceylon.

To receive Abstract of Accounts of the Planters' Benevolent Fund for the year 1900.

Resolution to be proposed by Edward Rosling, Esq. :—"That action be taken by this Association with a view to forming a combination amongst Indian and Ceylon Planters, to cope with present unsatisfactory condition of the Tea market, consequent over-production."

Resolution to be proposed by Edgar Turner, Esq. :—"That the opinion of this Association the time has arrived to approa the Government of Ceylon asking for (1) the abolition of the Imp duty on Tea in Ceylon, (2) the appointment of Inspectors to gu against the export and import of rubbishy Teas."

Resolution to be proposed by Hon'ble J. N. Campbell :—"Th Government having been unable to comply with the request fo reduction of Railway Rates the appointment of a Commission the incidence of taxation be asked for."

Resolution to be proposed by James Westland, Esq. :—"Th Government be asked to contribute from Surplus Revenue to t Tea Cess Fund a similar sum to the amount collected."

And for such other business of which due notice is given.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I

Alleged Adulteration of Indian and Ceylon Teas.

The Indian Tea Association has issued the following circul to all members of the Association :—

DEAR SIRS,—I am directed by the General Committee to subm for your information, the subjoined copies of papers relating certain allegations which have been made in India, and repeated England, to the effect that adulterated tea sweepings are sold as t by Indian and Ceylon Planters.

2. The General Committee are of opinion, as you will notice fro their letter, that these statements are not in accordance with t facts concerning the disposal of tea sweepings. They believe rarely happens that the sweepings find their way on to the mark as tea. But they deem it to be of the highest importance that eve these isolated cases, if such there be, should not occur. The therefore, venture to recommend all the members of the Associ tion to exercise the greatest possible caution regarding the dispos of the waste tea from their factories, in order that no part of it m by any chance be sold for human consumption. In no case shou it be sold locally to Native buyers but should be sent to Calcutta be disposed of for chemical purposes.

Yours faithfully,
W. PARSONS,
Secretar

No. 1633—1900.—Dated Calcutta, 21st December, 1900.

From—The Secretary, Bengal Chamber of Commerce, to t Secretary, Indian Tea Association.

I am directed by the Committee of the Bengal Chamber of Co merce to forward, in original letter, dated 12th December, from t Secretary, Ceylon Chamber of Commerce, enclosing copy of a Co mercial circular printed in Holland, and containing statements alleged improper practices, on the part of Indian and Ceylo Planters, in regard to the Manipulation of tea, which are stated have been most damaging to the interests of tea on the Contine of Europe.

The Committee of the Chamber are asked to co-operate with t Ceylon Chamber in tracing the origin of this obnoxious article, b I am directed to forward the papers to you as coming more withi the province of your Association to deal with than that of t Chamber. The Committee think it might perhaps he advisable the General Committee of the Indian Tea Association would ta

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nicho son's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf peopl unable to procure the Ear Drums, may have them free.

Address—No. 989 D, THE NICHOLSON INSTITUTE,
Longcott, Gunnersbury,
Londo

[w. 26-5-00—26-5-1901.]

up this matter direct with the Committee of the Ceylon Chamber, as it is entirely connected with the interests of tea, but at the same time they will be glad to hear from you as to whether you have any other suggestions to make with regard to it, are as to what action is proposed to be taken by the General Committee.

COLOMBO, 12*th December*, 1900.

From the Secretary, Colombo Chamber of Commerce, to the Secretary, Bengal Chamber of Commerce.

I am directed by my Committee to draw the attention of your Chamber to the enclosed Circular, to which a translation is attached.

This Circular was originally forwarded to our Ceylon Commissioner in Europe, Mr. J. H. Renton, from Switzerland, with an earnest appeal to have the statement publicly and authoritatively contradicted.

Its effect, we are assured, all over the Continent, but especially in Holland (where you are aware Anglophobia is just now rampant), has been most damaging to the interests of Indian and Ceylon Planters.

Mr. Renton referred the matter to the Ceylon Association in London, and through the efforts of the Secretary and other gentlemen the following facts have been elicited.

The Editor of the *Globe* admits that the paragraph appeared in his Journal, and states that it was copied from the Calcutta *Englishman*.

Further attempts to trace the origin of the article have failed, probably owing to the anxiety of the London organ to suppress its share in this gross and damaging libel.

My Committee has been urged by the London Association to take the matter up officially, and they feel that the first step is to request your Chamber to vigorously co-operate with them in tracing the origin of the obnoxious article.

The allusion to "maunds" certainly seems to point to an Indian source, for we do not use the term here.

Requesting the favour of your early attention, and promising the ready support of my Committee to any scheme which may suggest itself to your Chamber for dealing with the matter.

BULLETIN COMMERCIAL.

De la Maison Wd. J. van der Chijs and zoon's.

Delft (Hollande), Nov., 1900.

Le Journal Jingo le Globe vient de publier un article instructif sur la manipulation des thés Ceylon et Assam. Il parait que nombre de plantateurs anglais mêlent à leurs produits les balayures de leurs fabriques de thé. On a constaté, en analysant chimiquement plusieurs échantillons, que ceux-ci renfermaient moins de 50 per cent. de thé; le reste n'etait que du sable ou d'autres déchets. Les acheteurs ont ainsi été frustrés de la moitié de leur argent.

A Ceylon surtout. cette fraude se fait, frequement; les balayures s'y vendent á 5 roupies le maund (80 livres anglaises). On peut s'etonner que des plantateurs anglais se prêtent à une pratique aussi malpropre pour un si faible gain. Mais beaucoup d'entre ceux qui cultivent les thés Ceylon et Assam, sont obligés de recourir á ce moven deloyal, pour pouvoir encore payer des dividendes a leurs creanciers.

Translation.—The Jingo paper the *Globe* publishes an instructive article on the manner in which Ceylon and Indian teas are manipulated.

It appears that numbers of the English planters mix the sweepings of the tea factories with their produce. Chemical analysis of several samples has proved that these contain less than fifty per cent. of tea, the balance consists of sand or other waste. Buyers have thus been cheated of half their money. It is in Ceylon that this fraud most frequently takes place. These sweeping sell at five rupees the maund (80 lbs. English). One is astonished that English planters lend themselves to such an improper practice to obtain so small a benefit. But many of them who cultivate Indian and Ceylon teas are obliged to have recourse to such improper methods in order to be able to pay dividends to their creditors.

No. 82-O.—Dated Calcutta, 30th January, 1901.

From the Assistant Secretary, Indian Tea Association, to the Secretary, Bengal Chamber of Commerce.

ALLEGED ADULTERATION OF INDIAN AND CEYLON TEAS.

I am directed by the General Committee of the Indian Tea Association to acknowledge the receipt of your letter No. 1633-1900 of 21st December, with enclosures,* upon this subject.

2. The Committee have given attention to the representation from the Ceylon Chamber of Commerce. They have also made enquiries into the origin of the Dutch Commercial Circular to which that Chamber refers. They find that, on the 10th September, the Calcutta *Englishman* published a Circular, issued by Messrs. Barlow & Co., of this city, respecting the disposal of tea sweepings and factory refuse. On the 13th September, a letter over the signature of "One in the trade" appeared in the *Englishman* on the same subject. A comparison of it with a *Globe* leaderette, published on the 6th October, seems to show that it is the basis of the latter. A further comparison also makes it evident that the Dutch Commercial Circular—a copy of which the Ceylon Chamber sent to you—is a more or less freely translated summary of the *Globe's* remarks.

3. Having thus, as they believe, traced the latter to its source, the Committee instruct me to say that they are in accord with the Ceylon Chamber in thinking that the effect of the Circular on the Continent must have been damaging to the interests of Indian and Ceylon tea growers. It is, the Committee think, a matter of very great regret that irresponsible writers in the public press should make statements which are certainly not borne out by the facts, and which are calculated to do harm to an industry, the present position of which is so serious as to cause grave alarm to all concerned in it. It is true that in the tea industry—as in most other industries—waste products (in this case tea sweepings) are sold by producers. But the sweepings are used for chemical purposes; they are not sold as tea. They do not, therefore, appear in the returns of tea sent to the United Kingdom; and even if they did, through accident or ignorance, they could not get into consumption there. They would be rejected by the London Customs Authorities; and their owners would have to bear the loss. Further, the quantity would be so small that it could neither depress the market, nor seriously prejudice tea as a beverage, as is suggested in the letter in the *Englishman* and reiterated in the *Globe*.

4. You will understand therefore that the General Committee are distinctly of opinion that the statement made in the newspapers should be corrected; and they will gladly co-operate with with your Chamber, and with the Ceylon Chamber, to that end.

5. In conclusion, I am to say that the Committee have submitted copies of the papers to the members of the Association, and have desired the latter to exercise the greatest caution in regard to the disposal of sweepings.

6. Copies of the newspaper articles referred to in the second paragraph are attached for information.

Englishman, 10th September, 1900.

TEA WASTE AND DAMAGED TEA.

Messrs. Barlow & Co., 37, Strand, Calcutta, have sent out the following circular:—

A considerable quantity of the above occurs on all factories from various causes, and is swept out of the tea house and thrown among the bushes or on the ash-heap. Hitherto there has been nothing else to do with it. We have, however, lately learned that though useless for human consumption, it has a certain value for other purposes. We recommend you, therefore, to have all the following collected and put into good old rice bags and sent down to us in these bags, when we will dispose of it for you to the best advantage

Tea Fluff.—This is fairly abundent in every part of the sifting room, and should be regularly cleared off the walls, roofs, beams, etc.

Tea Refuse.—This includes all pickings during sifting, tea blown into odd corners from the driers, teas accidentally left in the corners or under bins, etc., till soft and unfit for mixing with sound and marketable teas.

Tea Sweepings.—This includes all tea house sweepings after the work is done, freed of dirt and dusty earth or sand as far as possible.

Damaged Tea.—Any tea rendered unfit for mixing with sound and marketable tea, from any cause whatever, such as water, fire, or smoke, should be collected and put separately into bags. Any sunk tea, or tea otherwise damaged by water, should be re-dried as soon as possible.

It is, however, to be particularly noted that any such damaged tea is to be kept entirely separate, and not mixed with the above, till you have received instructions as to what is to be done with it.

Such tea should not be thrown away, as it is of some value.

Tea Dust.—Not fit for human consumption on account of the earthy dust mixed with it, should be sent down in bags.

* Letter of 12th December, with accompaniment, from the Ceylon Chamber of Commerce.

We believe it is the practice with some concerns to sell the above refuse locally. This is a most objectionable practice, as it frequently gets into the hands of Natives in Calcutta, and possibly out of India, and is sold as tea much to the detriment of the reputation of Indian teas. The practice is, therefore, most harmful, apart from all sanitary considerations. We trust you will do your best to stop such traffic.

We give our absolute guarantee that none of the supplies of the above sent to us will be used for human consumption in any way whatever.

N.B.—Tea stalks by themselves are useless and should not be sent down, as we are advised at present, but any normal mixture of stalks with the above refuse will not affect the sale.

Please advise us about what quantity of the above you will have available from now to the end of the present season. On hearing from you instructions will be sent to you for forwarding it to Calcutta.

To the above, Mr. J. Buckingham, C.I.E., adds the following note:—

In publishing Messrs. Barlow & Co's Circular, I would call the attention of District Chairmen to the para *re* selling refuse tea to Kvas or other traders for consumption. I have had some such samples sent me from Calcutta, and it appears to me we are doing an incalculable injury to Assam tea by allowing any such refuse to be sold for consumption.

The Calcutta Tea Association, in a Circular, dated the 10th January, 1900, alluded to the above subject, and strongly urged precautions should be taken that nothing but pure tea should be offered for sale, "in order that the good reputation for cleanliness and purity hitherto enjoyed by Indian teas may be in no way impaired."

Englishman, 13th September, 1900.

TEA RUBBISH.

To the Editor of the *Englishman*.

SIR,—The disposal of the above has recently been discussed in your columns; and I would ask your permission to draw attention to the pernicious results of selling the fluff, sweepings and sandy dust which collects in tea houses. If owners will consult their best interests they will give instructions that all such rubbish is either buried or used for manure, rather than dispose of it for chemical purposes, or for human consumption as tea. The fact of allowing any proportion of such rubbish to be included in the weight of shipments, tends to depress the markets, not only for sound clean Dust and Fannings, but for all tea. The buyer who requires tea for chemical purposes, failing this supply of rubbish, will of necessity be compelled to buy sound low grade tea, and so enhance its value. The owner, therefore, who sells quantities of sweepings at a nominal price of five rupees per maund, is doing himself and all interested in tea a grave injury. He may pocket his Rs. 5 per maund, but he loses much more than this in the price obtainable for his clean dusts and fannings, which he packs and sends to the market, and at the same time he adds materially to the weight of the visible supply of tea. I feel sure this matter only requires attention to be drawn to it, to have this increasingly harmful practice put an end to.

While on the subject, I may add that a great deal of dirty dust, 50 per cent. of which is sand, is offered on this market, which, for the benefit of all concerned, should never appear at all. It is largely bought by natives for consumption, and a most pernicious beverage it must be. If such rubbish was not available, the producer would obtain all the more for a clean pure article, really fit for human consumption. I earnestly hope that producers will interest themselves in this matter, as the evil is becoming a serious one. It is surely a case of penny wise and pound foolish. Ceylon is now suffering from allowing rubbish, which deserves not the name of tea, to be included in her shipments. I have trespassed somewhat largely on your valuable space, and the importance of the matter, as affecting a most important trade, must be my apology.

Yours, etc.,

ONE IN THE TRADE.

LONDON *Globe*, 6th October, 1900.

TEA SWEEPINGS AND THEIR MISUSE.

If the Calcutta *Englishman* is accurately informed, there is a growing disposition among Indian tea-planters to follow the same suicidal course that brought China tea into such grave disrepute. Until recently, the almost invariable practice in Indian gardens was either to destroy or use as manure the sweepings of the factories. To some extent, this rubbish is composed of tea dust but sand and even worse refuse also enter largely into its composition. In some samples subjected to analysis, fully fifty per cent. was not tea at all, and the buyers was consequently cheated out of half his money's worth. The same discreditable fraud is said to prevail to an even greater extent in Ceylon, with the result of a downward tendency in prices, both in the Colony itself and in the European market. As the sweepings only fetch five rupees a maund—80 lbs.

Apropos of the above the *Englishman* remarks:—In connection with the circular of the Indian Tea Association published elsewhere it is only fair to ourselves to state that the quotations and the letter referred to were printed in the most perfect good faith. We cannot hold ourselves responsible for the opinions of our correspondents. We would be failing in the first duty of a newspaper if we refused to give expression to forms of opinion besides our own. Those connected with the tea industry need hardly be reminded of the *Englishman's* editorial confidence in their perfect honesty and integrity. At the same time our readers will notice how grossly the facts have been distorted by the Holland firm.

* * *

Commercial Federation.

The *Natal Advertiser*, of 28th December, 1900, says:—

Moved by the danger of an attack on the interests under its peculiar charge, the United Planters' Association of Southern India, have issued an appeal to other commercial bodies in the Empire to consider the advisability of a commercial combination of Great Britain and her colonies against the world, which, by means of differential duties, would afford some protection to British-grown products and manufactures. The circular details the circumstances which have prompted this appeal, namely, the retaliatory action of France towards Brazil, in imposing double duties on the imports of tea, coffee, and spices from countries not having commercial treaties with France or not enjoying most-favoured-nation treatment. It is somewhat of a surprise to learn that among these are India, and all the British colonies, except Canada. It is easy to understand the alarm occasioned in India by the action of France, which, although directed specifically against one country only, would yet operate against many others entirely innocent of blame. The incident is, as the circular rightly states, a warning of the grave risks to which British trade is exposed. But when we come to consider the remedy opinions will inevitably differ. The Association urge a commercial combination between Great Britain and her colonies, which will impose differential duties on foreign-grown products, and thus afford protection to British-grown products. Now we have a firm belief that before the century upon which we are now entering is past its infancy some such combination will be an accomplished fact. The precise nature of the compact is, of course, a matter of pure speculation. Canada, has however, shown the way, by inaugurating a differential tariff in favour of the mother-country. No doubt, the basis of such a combination will be, as is now the case with Canada, reciprocity, *i.e.*, that those countries which admit British and colonial products on fair terms, will have the same terms granted to them. But while admitting that an Imperial commercial combination is a probable result of the "closer union" between the mother-country and the colonies which has been so marked during recent years, we do not think it will come as the outcome of any endeavour to protect any one particular industry. With regard to the case now under discussion it seems to us that the danger to which reference is made is due to the carelessness with which the treaties between India and the colonies and France have been negotiated. If care had been taken to safeguard their interests by insisting on most-favoured nation treatment, the present difficulty would not have arisen. When Canada adopted her new fiscal policy with regard to Great Britain a similar difficulty arose. It was found that the treaties between Great Britain and Germany, and Belgium did not confer most-favoured nation treatment upon Canada, and as they interfered with the desire of the Dominion to give preferential treatment to Great Britain the treaties were denounced. The same course ought to be adopted with regard to all the colonies. All commercial treaties between Great Britain and any foreign country should be negotiated on the basis of the Empire as a whole, *i.e.*, most favoured treatment should be common to the whole Empire. That would of itself establish the commercial unity of the

npire in a striking manner, and would prevent such difficulties those referred to in the circular. That would, at any rate, be a st step towards commercial combination, and if the action of the uthern Planters' Association leads to any movement in that rection it will be a benefit to the Empire.

* * *

The Middlesborough Chamber of Commerce discussed the . P. A. S. I's suggestion at some length. In a report of a eeting held on 17th ultimo, the *North Star* says :—

ENGLAND AGAINST THE WORLD.

The Secretary reported the receipt of a letter from the United anters' Association of Ceylon [*sic*] in which it was stated that at the nual meeting of the Association, held at Madras [*sic*] in August, was decided, after considering the critical condition of the tea d coffee industries, the Association should communicate with the dian Tea Association, the Ceylon Planters' Association, the dian Chambers of Commerce, and the many firms of merchants d brokers interested in the tea and coffee trades in England and r colonies, with a view to ascertaining whether a movement in vour of a commercial combination of Great Britain and her lonies and India against the world, which would be a system of fferential duties, and afford some protection to British-grown oducts and manufactures, would receive support. The resolu-on, said the writer of the letter, might be said to have resulted om the recent revision of the French tariff with regard to the port of produce from India and the British colonies and pendencies. They were, doubtless, aware that the French Govern-ent had recently passed a law doubling the duties on coffee, tea, d spices imported from countries not having treaties of commerce th France, or not enjoying most-favoured nation treatment, nongst which were India, the British colonies and dependencies, th the exception of Canada. Although it was possible that the ench Government might be induced to reconsider the action ferred to, what had been done already served as an unmistakable rning of the grave risk to which British trade was at present posed, and the burdens it might be called upon to bear. There as a strong and growing feeling in favour of what might be termed perial fiscal federation for the protection of British interests ainst those of the rest of the world.—The Chairman: They are oking after the interests of their own trade.—Mr. Grigg thought e only possible solution would be free trade within the Empire. he scheme was an immensely important one, and he thought the clination of that Chamber had been to support such an idea as a eans of welding the colonies more closely still to the mother-untry. He did not think it would be possible for them to support resolution which came from a Trade Association. That was an tremely big scheme, and should be dealt with by other than trade thorities for the protection of their own trade.—Mr. Dawson id they wanted the whole of the nations of the world as eir customers. and that was proposing that they should go against l the world. Unless they were going to get something substantial om the colonies, it was not worth their while. He did not think ey had sufficient information.—Alderman Wilson: Has not the ew Commonwealth of Australia agreed to support a free trade olicy?—Mr. Grigg: It is still the subject of discussion.—The hairman: If we combine in this matter against the world, the world ay turn round and combine against us.—Colonel Sadler said they ould not combine for offensive action in the way it is put in this tter. There was nothing to prevent Great Britain having a iendly alliance with her colonies, with proper differential rates. was not necessary to have free trade between the mother country nd her colonies, because the circumstances of some of the colonies ould not warrant them in giving up so much for many years to ome. Their revenue was largely dependent upon the duty on goods nported. Everyone would like to see a friendly alliance with the olonies, with a view to greater inter-commerce between us and em. He thought the answer to the question should be that that hamber was in full and complete sympathy with the desire that ere should be a friendly arrangement, with differential other rrangements, that might be satisfactorily and mutually agreed pon, with a view to the extension of trade between Great Britain nd the colonies. They should say nothing about "against the orld."—The Chairman: That is the most objectionable feature.—lderman Wilson said Canada was now giving England advan-ages.—Colonel Sadler proposed that a letter such as he had suggested should be sent.—Mr Grigg seconded, and the motion was carried.

The Acting Honorary Secretary of the Central Travancore Planters' Association has sent in the replies he has received to the enquiry of the Indian Tea Association *re*

* * *

Compulsory Cess.

The replies represent 8,203 acres, and are without one dissentient voice in favour of the suggestion of the I. T. A. The whole district, with one exception, whether members of the Association or otherwise, is represented in these replies. The Acting Honorary Secretary remarks :—The conception in question I have not yet had time to hear from, but, as he is an old and loyal Ceylon man, I have not a doubt he will fall into line with the rest of us.

NOTES.

Cinchona in London. A firm market is reported. Price per unit 1½d. Monthly sales 1,100 packages.

Coffee in London. Latest cables state :—Stock 13,991 tons ; fortnight's landings 1,000 ; deliveries 1,900 tons.

The Production of Coffee. During the last ten years the production of coffee all over the world has about doubled !

Planters' Association of Ceylon. Mr. W. D. Gibbon will, at the annual general meeting of the Planters' Association to-day, propose that Mr. Edward Rosling be elected Chairman for the ensuing year.

Salada Tea. Twenty-eight per cent. is the exact increase in the "Salada" business in the city of Toronto. The *Canadian Grocer* remarks :—This, after the tea has been ten years before the public, makes it the more gratifying.

Tea Stocks in Australia. Stocks in bond in Melbourne on the 12th ultimo were 5,694,741 lbs., as against 3,146,948 lbs. at same time last year. Stocks in bond in Sydney on the 11th ultimo were 3,029,690 lbs., as against 1,498,670 lbs. at same time last year.

The British Tea Duty. Forced buying of Tea in London lately appears to have been partly induced by the doubt whether there may not be a further enhancement of the import duty very shortly. Such an increase is regarded as at least a possible contingency.

Indian Coffee for the United States. More coffee per head of population is consumed in the United States of America than in the rest of the world. This makes all the more significant the fact that East Indian coffee is almost unused in the States. Indian and Ceylon tea-planters have worked hard to cultivate American demand and taste. What have Indian coffee-planters done ?

Calcutta Tea Sales.

At the tea sales at Calcutta on February 6th, 14,000 packages were offered, and a few useful Assam invoices were shown. The bulk of the offerings were of ordinary quality ; and between 2,000 and 3,000 packages consisted of dust, and odds and ends. Prices were irregular, but may be quoted as fairly steady. All decent liquoring teas continued to meet with a strong demand.

A Tea-Testing Spoon.

The *Canadian Grocer* says :—Tarrant, Henderson & Co., tea exporters, Colombo, Ceylon, are distributing among the wholesale trade in Toronto, through their agent, Mr. Fred. Dane, a silver tea-testing spoon. On the handle, besides the firm's name, is a maple leaf in relief. As the wife of Mr. Henderson is a Canadian, this probably accounts for the presence of the maple leaf design.

The Ceylon Import Duty and Rubbishy Teas.

The following resolution is to be proposed at the coming annual general meeting at Kandy to-day by Mr. "Edgar Turner :—That in the opinion of this Association the time has arrived to approach the Government of Ceylon, to ask for (1) the abolition of the import duty on Tea in Ceylon, (2) the appointment of Inspectors to guard against the export and import of rubbishy teas."

Cheap Ceylon Teas for Canada.

A Montreal correspondent says :—There have been reports of some trading in Ceylon teas at ridiculously low figures, 9½c. c.i.f. for Pekoes, but some believe that the contracts will hardly be filled at this figure. The quotation came from Colombo, and as London has been ruling lower than either Calcutta or Colombo it seems strange that this break should occur which puts the primary market below London.

The Annamalai Hills.

A correspondent of the *Madras Mail* recently stated that over 2,000 acres had been planted-up on these hills, about 1,000 acres being under coffee. He remarked :—"I have picked about 1½ tons of crop from plants, a few hundred of which were put out very late in 1897, the balance in 1898, and at the present time not only all the 1898 but a large proportion of the 1899 planting has a large, even spike, promising a fine blossom after the next rain. Quality of bean looks excellent, and I am having the above small lot cured and shipped." Tea, rubber and cardamoms are also being grown.

Good Prices for Bark.

Mr. W. R. Tatham writes to a Colombo paper :—"With reference to Mr. Geo. Christie's letter giving prices realised by him for a parcel of cinchona bark sold in November last, it may also interest your readers to know that a parcel of bark sold in London in August last, from Oolapane estate, fetched even a better price than that from Kanapediwattie ; the prices being as follow :—

Stem bark sold at 10d. Sterling a lb.,
Branch bark sold at 7d. sterling a lb.,

the average price for the whole parcel being 9d. a lb., or, say, at present rate of exchange, cents 54 per lb.

Tea in Australia.

Melbourne advices dated 22nd ultimo report a steady market ; Sydney showed more animation. Messrs. Alfred Harvey & Co. remar about Ceylon Tea :—"Shipments from Colombo to date a 12,925,000 lbs. as against 10,820,000 lbs. at same time la year. Consignments have been on a somewhat smaller scal without, however, any improvement in quality, and the mark has been a dragging one. Medium Broken Pekoes have bee in full supply, and show good value to buyers. Low commo Souchongs have been immovable, and shippers are apparentl not now further loading the market with quite such undesirabl sorts as have found their way here of late. Stocks in bon on the 12th instant were 960,718 lbs."

The Multiplication of Pests.

Discussing Government's respons bility to planters in respect of inse pests, the *Nilgiri News* remarks :—"That efficient conservancy, to which we owe the flourishin condition of State Forests, is what preserves the insects aliv and enables them to travel beyond the natural woods an menace the planters' industry. One of the most effectiv measures of conservancy is a firetrace, which keeps periodica conflagrations out of the forests thus protected. In forme years, this was unknown and, consequently, once in two o three years, great fires ravaged the forests and destroyed th myriads of insects that found shelter in decayed trees an shedding barks. Now this purifying, or destructive agenc is kept out of the forests and hence the multiplication insects inimical to tea and coffee."

Tea Consumption in the U. K.

The total English imports of te have risen by 35 per cent. in sixtee years. In 1884 they were 214 millio pounds ; in 1899 they were 289 million pounds. Englan lost at the same time a quarter of her re-export trade, showin that the habit of tea-drinking is increasing among the popu lation. The consumption in the United Kingdom is no nearly 6 lbs. of tea per head of the population. There i no European country (except Holland) where the tea-con sumption exceeds 1 lb. per head. While more tea has bee consumed it has been cheaper tea, its value for custom having fallen from 11¾d. per lb. in 1884 to slightly unde 9d. in 1899. The basis of the tea-trade has shifted. In 188 65 per cent. of England's tea was supplied by China and Japan now they only supply 14 per cent. In 1884 Ceylon sent tw million pounds of tea ; in 1899 it had risen to 102 millions.

Java Quinine.

On December 8, a circular wa issued by Messrs. Tiedemann and va Kerchen, representatives of the Bandong quinine factory, t all interested in cinchona and quinine in Java. It ran a follows :—"We enclose copy of the conditions for the suppl of cinchona to the Bandong quinine-works for the 190 auctions which it is proposed to hold on the first Wednesda after each auction of bark at Amsterdam. We presume tha you have followed the course of the quinine-auctions durin the year 1900, and it may have struck you that the differenc in the unit price between Amsterdam and Batavia ha gradually diminished, and at the last auction, held o November 28 at Batavia, there was a difference of ¾c. pe unit in favour of the last-named place. We would, therefor advise you to send at least a portion of your annual harves to our factory. We enclose tender-form, which kindly retur filled up and signed."

nam Tea.

The English *Daily Messenger* (published in Paris) states :—"Some statics have just been published which show the great increase the importation of tea from Annam which has taken place thin the last eight years. In 1892-9 France imported only 8 kilos. ; in 1895, the importation was 3,742 kilos ; in 1898, was 18,000 ; in 1899, in anticipation of the Exhibition, it ıped to 60,000 kilos. ; while in 1900, it is expected to be out 100,000 kilos." In writing on tea from Annam, a ench journalist states :—" We must admit that it is wanting aroma ; but this is of secondary importance. In certain ses aroma is a thing that can be added ; it is easy to add it, d to do so only requires a certain *technique de fabrication*." is a pity to spoil so charming a phrase—an ordinary writer ould have said—adulteration. The French phrase, however, so delightfully vague that we record it. But what do the e o'clock tea drinkers think of this method of supplying oma ?

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ondon Proposals on the Tea Problem.

A special telegram dated London, 11th February to the *Times of Ceylon* says :—The special Joint Committee the Indian Tea Association and the Ceylon Association in ondon have issued a further report, in which their recomendations are as follow :—

Estates averaging 11d. on their 1900 crop to January, 1901, to exempt.

Estates averaging from 9d. to 11d. during the same period to duce their output by 5 per cent.

Estates averaging from 7d. to 9d. to reduce their output by per cent.

Estates averaging 7d. and under to reduce their output by per cent.

The reduction to be allowed in various ways, either by stricting the area, by finer plucking, by making green tea, by sending tea to exploit the native Indian market, for hich a plan is being prepared. The scheme to be contional on the estimated reduction aggregating 18 millions. he Joint Committee further strongly deprecate any new earings.

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uinine Auction in Batavia.

Detailed particulars of the October quinine auction in Java are given by the American Vice-Consul as follows :

-1. Editio I., consisting of 3,175·2 kilogs. (7,000 lbs.) in ts of two cases containing eight tins with 22·68 kilogs. 5·02 lbs.) ; sold at 23·45 and 24·60 fl. per kilog. (2·2046 s.). 2. Editio II., consisting of 750 kilogs. (1,653 lbs.) in ts not less than 22·68 kilogs. (50 2 lbs.), and not above 5 kilogs. (55 11 lbs.) in weight, packing at purchaser's otion ; sold at 23·45 and 24·60 fl. per kilog. The average rice realised, 24·34 fl., equals the unit price of 0·0992 fl. for e bark at Amsterdam. 3. Editio III., consisting of 120 ilogs. (264·5 lbs.) in five lots of one case of 24 tins of one ilog. each (52·9 lbs.). Two lots were sold at 28 fl. per ilog., but the remaining three lots, not realising the limit, ere not sold. Although there were few buyers and the idding was slow, the Vice-Consul added the fair prices were ealised.

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ondon Tea Market.

Messrs. Gow, Wilson and Stanton's cable dated 7th instant reports that here is a dull tone generally among buyers and that the arket for medium liquoring pekoes and broken pekoes shows a slight decline ; while the market for common pekoes and broken pekoes also shows a slight decline. The price of fair liquoring Ceylon Pekoe Souchong is 5d. (a farthing down) and the average price of Ceylon tea sold on garden account this week was 6¼d. (an eighth of a penny down)—as against 6½d. and 7½d. respectively in the corresponding week last year. *Reuter* reports that fine qualities of Ceylon tea are steady, while the market generally is easier. Pekoe Souchongs are quoted at 4d. one eighth of a penny down) and the average for the week at 6¼d. (a farthing down) as against 6½d. quoted for Indian tea : 28,000 packages of Ceylon tea were offered for sale, of which 23,000 were disposed of ; while of the 59,000 packages of Indian tea offered, 48,000 found purchasers.

Coffee in London.

The *Produce Markets' Review* of 19th ultimo says :—Supplies of new crop Central American, together with some old crop which had been kept in the parchment and only recently husked have been offered more freely, and a large proportion found buyers, thus establishing a more fixed market than has been observable for some time. The quality of the new crop, particularly of Costa Rica, continues by no means satisfactory, and rates are in consequence much below those ruling for the same marks last year ; the few really fine parcels fetched, however, very satisfactory prices. Importers of new crop East India would not accept the prices offered, and only a few lots were sold, but should the quality of the later shipments turn out as well as is reported there will no doubt be a good demand from the home trade. In the terminal market very little has been done, and the quotations have hardly varied, but at the close with smaller Santos receipts an advance of 6d. has taken place.

Tea in London.

The *Produce Markets' Review* of 19th ultimo reports regarding Indian Tea :—A steadier tone has prevailed in this market and the bidding at the public sales has shown more animation than for some time past. Common descriptions have attracted more attention, and although there is no quotable change in values the tendency has been firmer, and last week's prices well supported. Some of the Teas notably from the Sylhet and Dooars districts are of improved quality and have been readily bought, and there appears every probability that the market for the more useful kinds ranging between 5½d. and 7d. will become distinctly firmer as the future imports bid fair to contain a smaller proportion of these Teas. The next better descriptions have been briskly competed for, and a large business has been transacted at in some cases advanced prices, while the tendency is to still higher values. The finest kinds still continue in limited supply and advanced prices has been recorded, a few stand-out parcels having been actively bid for and show a distinct rise. At the public sales 54,639 packages were catalogued and 49,395 passed the hammer, while a fair portion of 5,234 withdrawn was afterwards sold.

Proposed Quinine Laboratory in Java.

The *Chemist and Druggist* says :—There has long been felt in Java an urgent need for a laboratory for the examination of quinine, and of everything connected with the cinchona industry, such as the analysis of bark, manures, soil, &c. The absence of such a laboratory has been a source of

great inconvenience, the planters having had considerable difficulty in ascertaining the comparative values of certain varieties of bark. In addition to this there has been no ready means of testing the quinine intended for the Batavia auctions. The analyses were either made by Mr. P. van Deersum, Director of the Government Cinchona Plantations, or samples were sent to Holland for analysis, in which case the results were only known after a lapse of about three months. When the unit price was low and a small increase in the quinine-content of the bark was of comparatively little value, these means were considered sufficient, but since the industry has become more flourishing, and the majority of the planters send their production to the Bandong works, the establishment of a properly equipped public laboratory in Java has become an urgent matter. A Committee was therefore formed, and after several meetings they report that the proposed laboratory should be established without delay. At the head of it should be placed a capable chemist holding a diploma from one of the Dutch Universities, whose engagements would be for a term of five years, the remuneration to be 500*l.* per annum to commence rising by yearly advances of 50*l.* to a maximum of 700*l.* An allowance of 125*l.* is to be made for travelling expenses to India and Europe, the latter for the purpose of studying the arrangement and practice of some of the large European laboratories. It is estimated that the total amount required for the five years will come to about 4,200*l.* against which must be placed the receipts from analyses made. The charge for analyses would be 5fl. (8s. 4d.) to members, and 10fl. (16s. 8d.) to non-members. A yearly total of about 2,000 examinations would, it is said, be sufficient to cover expenses.

LETTERS TO THE EDITOR.

OVER-PRODUCTION.

DEAR SIR,—Before leaving for a short stay in England, I have been asked to publish my views on the Tea Question with reference to over-production, &c., and have sent a letter to the *Madras Mail*, &c., of which I enclose a press copy. If you can spare the space in your paper, I shall feel obliged if you will publish the enclosed letter in an early issue.

PEERMADE,
4th February 1901. GEO. NICHOL. THOMSON.

[INCLOSURE.]

SIR,—I have read with much interest a Circular on "Position of the Tea Industry" sent out by the Indian Tea Association, and at present being circulated in this district by the Hon'ble Mr. G. L. Acworth. I have given my opinions on the above subject to Mr. Acworth and he has advised me to publish them and if you consider my suggestions of any value, I shall be glad if you will publish same in your paper. I do not think that any of the suggestions in the circular are of much value because they all aim at curtailing the yielding capabilities of individual gardens, and by their nature all are necessarily voluntary schemes. It will be found impossible to get a majority of the tea planters in India to agree to any scheme that interferes with the immediate management or cultivation of their estates, such as abandoning portions for stated periods, rules as to plucking and destroying of inferior teas.

I may be wrong, but it is my honest opinion that all shou take a wider view, and that expansion of outlets, and n reduction of output, should be the main object of everyo interested in the tea industry. Any scheme with the obj of reducing output, would, if at all possible, only be of temp rary relief. We must remember that there is still a larg acreage to come into bearing. A new market for our tea or a present market extended, would be a permanent bene to the industry as a whole, so it is my opinion that nothin will be done of much consequence in the present crisis to r lieve producers, until Government are induced to pass a *co pulsory cess*, on all tea leaving India, the same as is now force in Ceylon.

The letter addressed by the Secretary of the Indian T Association to the Secretary, Government of Bengal, Revenu Department, on "An Indian export duty on tea" or what would rather name, an appeal to Government to assist t planters in collecting a cess to enable them, in the prese crisis, of collecting necessary funds for preserving a larg Indian industry from ruin, I say, as this letter has not receive a favourable reply, I would suggest a vigorous agitation i the tea Districts of India, in Calcutta, and in London by th Tea Associations there, in order to induce Government to giv a little help to those who are so anxious to help themselve We at the present time are fortunate in having as ou Viceroy an enlightened statesman, who will not be boun down by red-tape, and who, I am sure, is wise enough to b guided by a precedent that has worked so well in Ceylo With the funds that a compulsory cess of, say, 3 annas pe 100 lbs. would bring in great results, I am confident coul be accomplished. An overland trade in green and black tea with Russia, Tibet, &c., could be pushed and energetic step taken to make a large market for our teas at our door. Wit a capable business man resident in Calcutta, as manager o an Indian market fund, and a competent staff under hi great results would reward continued efforts, in pushing ou teas in India itself. It is true that it will be a hard task t educate the natives into the use of tea, but we must remembe that tea-drinking was originally an Asiatic custom. Th millions in China, drunk tea before it was known in Europe I recently wrote to the Ceylon papers on this subject under *nom de plume* and the gist of what I wrote applies to India and is contained in the following five propositions, whic I will put here in the order of merit, the first of which doe not yet apply to India.

1. Increase the tea cess.

2. Agitate for a reduction on the duty on tea at hom and keep on agitating until a reduction is made.

3. Moderate manuring. Manure more for quality tha quantity.

4. Waste no valuable time on wild schemes for reducin output, but concentrate all attention on the means for increas ing the demand for tea.

5. Advertise, advertise, all over the world.

6. Those interested in producing should endeavour t become interested in the large distributing companies at hom and a reserve and Extension funds of tea companies, migh be used for buying shares in companies at home, like th Mazawattee, &c.

I hope others interested will come forward with their views on this question, at this present time, which all admit is a very critical period to tea producers, both in India and Ceylon.

COFFEE.

SIR,—I. A. Rucker & Bencroft's market report of 7th timo, received by the last mail, contains the following notes the position of coffee :—

" It is interesting to note that, during the past six years, eliveries on the average have increased by 35,500 tons er annum.

" Thus for 1901 it might be argued that deliveries should tal, say, 885,000 tons against 851,500 tons last year. Most eople will be of opinion that invisible stocks are larger than ey were in 1894 or 1895 and that the figure of 33,500 tons rather on the heavy side. It is amusing, but at the same me instructive to note that, if 30,000 tons = 500,000 bags = 3½ % increase on last year's deliveries, be taken as a fair ssessment of annual increase ten years hence, we shall require, ell ! Let our readers make the calculation for themselves. nother interesting way of looking at the position is to note at our visible supply is now 447,000 tons against two years go 391,000 tons, and it might be argued that, at the present me, we are only producing 30,000 tons = 500,000 bags = ½ % coffee in excess of requirements, a comparatively unimortant quantity."

" *With a large crop in front, it is no use pushing these argu-ents but those who live will see sooner or later a wonderful ransformation.*"

Now, Sir, is this prophetic last clause (the italics are mine) n our favor or not? The Santos correspondent of the *Brazilian Review* gives, as far as *we* are concerned, a hopeul view of the position in so far that he asserts that, in conseuence of the ruinous prices to Brazilian planters, add to hich their labour and transport difficulties, that the much-alked-of record crop on the trees now is not likely to be icked, for, says he : " Should the currency price of coffee ontinue to remain as low as at present, a great many of our lanters will not even be able to have labour, and we presume rom all we said before that, however brilliant the outlook for he next crop may be now, a large percentage of it will not be arvested unless currency rise again, and that in the near future, ecause the preparations for the crop have to be undertaken n a short time. It is therefore foolish on the part of Brazian finances and of coffee dealers in consuming countries to ase any calculations on the fact that a large crop of coffee ay be on the trees." * * * Difficult and anxious imes are again in store for the Brazilian coffee grower.

In the present state of affairs, it is more likely production vill *recede* than advance and a more healthy supply and emand be established to the comfort of all concerned ! !

SO MOTE IT BE.

GENERAL ARTICLES.

BANANA FLOUR.

A few weeks ago a friend who lives close to the Buff Bay River, ent us some flour made from the full green bananas ; we had it ooked in various ways, and preferred it to cornmeal, yams, or oco. The people living near the river after taking off the skin, ut the banana in thin slices and lay them on the stones, one day's ot sun is sufficient to dry them, after which they are put in a nortar, pounded and sifted, and the flour is made. We made 10½ uarts flour from two bunches of bananas and borrowed a mortar hat (we did not know) had been just used for pounding castor-oil uts. This oil-flavoured flour we gave to the horses and they ate it reedily. Banana flour is not a new thing, and may never become one of our exports, but what is to prevent the people, when they go to their fields, drying their waste bananas while they are working and carrying the dried pieces home to pound at night. Sheds could easily be put up in the fields to protect from rain. When there is no demand for bananas for export, sufficient flour might be made to keep over the months when there is demand—and then the small bunches could be utilised. Breadfruit can be made into flour in the same way as the banana. If the flour is not good enough for ourselves, we can feed it to stock. I have seen cattle and horses eating half-rotten bananas and breadfruit. How much better for them would be banana or breadfruit flour.—*Journal of the Jamaica Agricultural Society.*

THE COFFEE SITUATION IN THE UNITED STATES.

Mackey & Small, coffee importers of this city, have issued a review of conditions that have governed coffee, which shows that its position is one of over-supply. They say :—

" It is our opinion that the advance that took place last year was brought about from three causes. *First*, the bubonic plague, necessitating the quarantining of vessels for a long time, and, in the opinion of many, there was no relief in sight. This fact caused a transfer of seaport stocks to the interior in this country and Europe of fully 1,000,000 bags.

" *Second*, the estimated Brazil crop of 10,000,000 bags, which turned out 9,000,000 bags.

" *Third*, that the mild crops, including Victoria and Bahia, would fall short of the previous year fully 750,000 bags.

" The transfers of stocks and the final outturn of Rio and Santos crops together thus amounted to 2,000,000 bags. The elimination of this weight of supplies at seaports caused the momentary advance in prices. At the end of the crop of 1899-1900, the much-predicted decrease in milds, Bahia, and Victoria did not materialize. The bubonic plague proved to be imagination served as a subterfuge. The receipts up to December indicate total for the season of 10,000,000 bags. This supply is corroborated by reports that the hulling out of the cherries shows an increase of 10 to 15 per cent in weight over last year's crop.

" The deliveries so far show a decrease of about 1,000,000 bags, compared with last year, which reasonably proves that the consumption has been feeding on the transferred supplies mainly made on the bubonic plague. With a visible supply on December 1 of 7,900,000 bags, we are in the same statistical position as we were when options were 4·10, without taking into consideration the prospects of the next crops.

" In looking back, we find that December, 1882, records the lowest price for coffee up to that time—5 cents for No. 7 on the Coffee Exchange in New York, and 2$000 for the same grade at Rio Janeiro, with Brazil Exchange at 21d.

" In seeking the causes that established this price, we find the most important factors were the sudden increase in production, the quickening of supplies to seaports by new means of transportation, and the establishment of exchanges for future operations to the detriment of spot values. These conditions augmented supplies at seaports much beyond natural yearly production, and brought about the low value then established. Even at that time, we believe that consumption was greater than the actual production.

" Owing to generally improved conditions of labour and the great change in the systematic introduction of coffee to the consumer by roasted pound package, we find that with average Rio and Santos crops from 1882 to 1896 of 6,000,000 bags, consumption had overtaken production, also the supply, and influence of future sales, which in turn caused the inevitable result, the great inflation of values in 1887, when No. 7 on 'Change reached 22 cents. Part of this rise was owing to failure of the 1887-1888 crop by reason of climatic conditions, but the principal cause was consumption overtaking supply.

" This sudden advance brought a flood of substitute sin the market and an almost total absorption of working stocks. The average price from 1887 to 1891 was a high level, and relief from what appeared to be a coffee famine came from the crop of 1891-1892.

" The average high values from 1887 to 1897 stimulated production, being greatly assisted by the mode of cultivation in the Brazils

through Italian labour. The result of all this brought to the market the gigantic crop of 1897-1898, which amounted to 10,500,000 bags, and marked the beginning of the first period of over-production. The two following crops of 9,000,000 bags each relieved the pressure to some extent caused by the 1897-1898 crop.

"The war with Spain created a belief that duty would be imposed on coffee in the United States. Then came the bubonic plague scare. Both reports were accepted by the public, and served their purpose in advancing values, although they never materialized.

"After two crops of 9,000,000 bags and having received five months' receipts of the present crop, the visible, supply December 1, is within 100,000 bags of the largest recorded stocks. It seems to be the consensus of opinion that the present crop is 9,500,000 to 10,000,000 bags, and the next will be 11,000,000 to 11,500,000 bags.

"We can, therefore, safely say with these lights before us that we are in reality in a period of over-supply, brought about by over-production of coffee, and not by increased means of transportation or the new methods of doing the coffee business."—*American Grocer.*

FIBRES, ETC., IN BEHAR.

In the course of remarks on Indigo Land, a correspondent of the *Englishman* says that, as auxiliary crops, sugar and fibre plants are also receiving attention. He then writes :—

FIBRES AND COUNTRY CROPS.

On either side of the avenue leading to the bungalow are plots of fibre-producing plants. Three kinds of *Sansevieria,* or Bow string hemp, are being grown, the *Trifaciata,* the *Zeylanica* and the *Cylindrica.* It is estimated that results will show about 1½ tons of fibre to the acre. The plots are being treated with *seet.* Some eight acres of land have been set apart for the cultivation of rhea. The *Nivea* variety composes the bulk, but a little *Tenacissima* is also being experimented with. From root cuttings put in last year three crops have been cut, the plants averaging six feet high. The rhea is being grown on old indigo land, and is also being manured with seet. The plants are in rows two feet by four feet apart. One of Faure's decorticating machines has been ordered and in view of the careful and methodical manner in which the experiments are being conducted they should go a long way towards solving a problem about which so much controversy has long been rife. The literature on the subject of ramie has attained colossal proportions, but it is difficult to separate the ounce of fact from the tons of useless theory and valueless statistics. What the planter in Behar would like to know is whether it will pay him to plant out a portion of his lands to grow ramie and what it costs to produce the fibre in a marketable state. He wants definite information as to how many and what sort of crops can be cut during the year? What weight of ribbons or filasse can be obtained per acre? The rhea responds to manure, but does the extra growth compensate for the additional expenditure? What is the best method of dealing with the plant after it is cut: which decorticating machine can be recommended and what are the actual capabilities of the various patents now on the market under ordinary working conditions? Questions like these must occur to any planter who is considering the advisability of taking up the cultivation of one of the most beautiful and valuable textile fibres in existence. The experiments at Dalsingh Serai will no doubt throw considerable light on a subject which is at present a very open one. If, as is hoped, they indicate a profitable outlet for the planters energy and capital we may trust to see the cultivation of rhea in Behar undertaken on a sufficiently extensive scale to guarantee the manufacturers at home laying down machinery, etc., with the knowledge that they can depend on receiving constant and uniform supplies of the raw material to keep their looms running and meet the demand created for ramie made goods. It must be evident to all that the cultivation of a textile plant like ramie on the garden plot system is unlikely to prove much of a commercial success: if it is worth touching at all it is worth handling on a comparatively big scale. On a strip of land close to where the fibre experiments are in progress Mr. Coventry showed me fourteen different plots devoted to Indian rape, from which colza oil is extracted. The object sought to be ascertained is the most suitable manure for this plant. The experiments last year proved very successful. The yield of seed from an unmanured plot was equal to 4½ maunds per acre, while the application of chemical manure gave 32 maunds per acre, an increase of over 7 per cent. One cwt. of the manure entailed the additional expe of about Rs.15 per acre, 4½ maunds per acre, is a low average yi and it is possible to get 8 or 10 maunds from ordinary unmanu lands in this district. In the same way the average yield on manu land may be put, say, at 20 to 25 maunds per acre. Based on th calculations a substantial profit seems to be assured to the plant who are disposed to follow Mr. Coventry's lead in the use of artific manures. Last year's experiments had reference chiefly to the ki of chemical plant food most needed, but those now in progress a intended to determine the exact quantities required to give pa ing results.

TEA IN THE UNITED STATES IN 1900.

The year 1900 proved very unsatisfactory to the importers of te says the *American Grocer.* Many, anticipating that the war wi China would lead to a heavy reduction in supply, imported large and the result has been an overstocked market. and sales at a lo The purchases of Congou tea for the season of 1900-01 mount up 18,500,000 pounds, or double the annual average import for t preceding three seasons. For months there has been a saggi market, and few, if any, importers made any money this seaso The total consumption for the year will be about 90.000,000 pound The amount of tea in warehouses at the close of the year is six more million pounds greater than held January 1,1900.

The following table shows the average monthly quotations standard grades of Japan and Formosa Oolong tea :—

	Japan. Good to Medium. Cents.	Formos Superio Cents.
January	26·50@27·50	26·00@28·
February	25·00 „ 26·50	26·00 „ 28·
March	25·00 „ 26·50	26·00 „ 28
April	25·00 „ 26·50	26 00 „ 28
May	25·00 „ 26·50	26·00 „ 28·
June	25·00 „ 26·50	25·50 „ 27·
July	26·50 „ 27·00	26·50 „ 27·
	New Crop.	New Crop
August	26 50@27·50	26·50 „ 27·
September	26·50 „ 27·00	26·50 „ 27·
October	28·00 „ 29 00	26·00 „ 27·
November	28 00 „ 29·00	26·00 „ 27·
December	27·84 „ 29·00	26·00 „ 27
Yearly average, 1900	26·24 „ 27·37	26 08 „ 27·
Do. do. 1899	26·50 „ 27·50	26·75 „ 28·
Do. do. 1898	21·47 „ 22·63	24·89 „ 25·
Do. do. 1897	17·71 „ 18·83	20·42 „ 21·
Do. do. 1896	14⅝ „ 19⅝	19¼ „ 20½
Do. do. 1895	13 „ 17½	20 „ 23
Do. do. 1894	13 „ 18½	19 „ 22

ARROWROOT AND GINGER IN QUEENSLAND.

Mr. W. Castles, of the Logan Butter Factory, who has ha extended experience in arrowroot cultivation, whilst writin in very complimentary terms in the November issue of th *Queensland Agricultural Journal,* says :—

"I notice in your Farm and Garden Notes for December yo state 'Arrowroot and Ginger may be planted.' As one of the ol est arrowroot planters, I found that the earlier we got our arro root planted, the heavier was our yield of starch. Early in Se tember, we found to be our best planting time, and when we ha dry seasons, the largest bulbs were planted. This enabled the pla to be nourished, and to grow up a large and strong pla even in a dry season, and when rain came in those years, som times in December, the plant had reached four feet high owi to the nourishment obtained from the bulb alone, and we ha a heavy crop. We found the arrowroot which, in the seventie we occasionally planted in December, was only fit for see It was so late in the flowering that the frost of the ensuing Wint had overtaken it before the bulbs could mature, and the result w very little starch. Indeed, our December planting was always i tended to provide seed only for the next Spring. With regard ginger, we grew this for years and found out that it is essentially

plant requiring shade. If you notice the wild ginger, the native of the colony, you will always find it in the richest soil, and in the deepest shade of our scrubs. After trying for years to grow it by early planting, and having the mortification of seeing it cut down to the surface of the ground by the hot sun, I tried the experiment successfully of planting corn thickly in the rows on the land I intended to plant with ginger, and when the corn had grown high enough to give sufficient shade, I planted the ginger in rows between the rows of corn. I did not allow the corn to remain longer than the ginger required the shade, but cut it down for green feed. Ginger requires rich land and allowing the corn to mature would injure the ginger crop by robbing the soil.

Our contemporary remarks:—We quite agree with Mr. Castles as to the time for planting arrowroot. In the early days he speaks of, we planted arrowroot in September, and heavy crops resulted. In our October issue of the Journal we recommended planting in October (The Field in October). But circumstances will occur in farming which often made it impossible to do the right thing at the right time. The mill may break down in August, at the height of the season, or heavy rains may set in, rendering it impossible to get on to the land with horses. What we had in view in stating the arrowroot might be planted in December, was to point that that month is not too late for planting, although possibly the resulting crop might be deficient in starch. Those who are planting ginger would do well to note what Mr. Castles says about shading the young plants.

PEPPERS OR CHILLIES.

The Queensland Agricultural Journal inquires why should not Queensland enter upon the production of chillies on a commercial scale? and then proceeds to say :—

The capsicums grow luxuriantly in all parts of the Coast country, and bear fruit almost all the year round. Their cultivation affords for less labour than the cultivation of cereals, sugar-cane, or, indeed, of any other farm crop except Sisal hemp. The plants should be set at a distance of 4 feet in the rows, and from 5 to 6 feet between the rows. They will grow on almost any kind of soil, but prefer a dry, rocky soil with sandy loam, containing some lime. It is difficult to arrive at a correct estimate of the yield of tried capsicums from a well-grown shrub during the year. Some estimate the annual return at 2 lbs., others say that 3 lbs. and even 4 lbs. may be reckoned on. The selling price of dried chillies in the London market varies from £18 to 34 per ton according to quality—for instance, in April, 1899, fair red Zanzibar sold at 29s. 6d.; good red Japan at 33s. 6d. to 34s. per cwt. The present wholesale price in Brisbane for dried chillies is 1s. per lb., equal to £112 per ton. A sample of capsicums grown in the West Indies, dull and uneven in colour, was valued at 20s. per cwt. What is evidently required is an article bright in colour, even in quality, and possessing great pungency.

The Government botanist has received a sample of a large red, sweet capsicum dried in such a manner that the skin is perfectly transparent and the seeds inside are quite dry, and can be shaken like the dried peas in a "rattle-pod." We have no information as to how the specimen was dried, whether naturally or artificially, but the pod was certainly not opened previous to drying.

A consignment of capsicums prepared in this manner would, no doubt, bring a good price in the English market. Another enticing method of preparing chillies for export is to bottle the long red variety in a solution of salt and water. This preserves the shape and colour of the fruit, and gives it a very attractive appearance.

The *Bulletin of the Botanical Department*, Jamaica, says on the subject of chillies :—

Pod peppers or capsicums, the fruits of *capsicum annuum* and allied species, are a well-known spice and condiment. They are an indispensable ingredient in curries, and are largely consumed in the fresh and dried state and in pickles. Some forms of capsicum known as Bell peppers are entirely free from the acrid and burning pungency so characteristic of these fruits, and may be eaten cooked as a vegetable or in salads.

Chillies, Bird or Guinea peppers, the fruits of the shrubby capsicum minimum (usual much smaller than the preceding) grow generally in tropical countries. These are in chief demand in commerce. When thoroughly dried and compounded, and afterwards passed through a hand-mill and sifted, they are the principal source of the well-known Cayenne pepper.

"It is estimated that about 100 tons of dried chillies are annually received into England from the West Indies and the East and West Coasts of Africa."

In the *Kew Bulletin* (1892, p. 18) the following information respecting chillies was given in an article on the agricultural resources of Zanzibar contributed by Sir John Kirk :—

"The small red peppers, or chillies, are largely grown in the more dry and rocky part of the Island, where the upheaved coal presents a honeycombed surface that favours the accumulation of rich soil in the crevices. The pods are picked when ripe, sun-dried, and packed in neat bags made of the split fronds of the Hyphæne palm for shipment. This is an industry that has sprung up within the last thirty years."

Zanzibar chillies, as they appear in the market in a dry state, are small, red, thin, carrot-shaped fruits about 1 inch in length.

The following further particulars are contained in a report on the spice and other cultivation of Zanzibar and Pemba (F. O. Report, 1892, Misc. Series, No. 226) :—

"The pepper plant growing in the Island is capsicum minimum, usually termed the "shrubby capsicum," and producing the bird's-eye chillies forming the basis of Cayenne pepper. This is to be found in a small degree in every shamba, but the principal source from which the annual exports are derived is the eastern side of Zanzibar, and the cultivation here is chiefly in the hands of the Wahadinu people.

"Judging from observations made during my brief visit to this portion of the Island, east of Dunga, the small isolated patches from half to 1 or 2 acres in extent, and combined with tobacco, tomato, pumpkins, etc., I regret my inability to quote the annual total exports, but I believe they are large, and an undoubted source of revenue. As the chillie is, as yet the only product of any value grown in this less favoured portion of the Island, I consider that this cultivation could be extended, and the returns are certain and profitable.

"Another variety of pepper (? capsicum annuum) bearing a larger red and yellow pod is also cultivated, but the produce from this is all consumed locally."

The latest account of Zanzibar chillies is contained in the report of Mr. Consul Cave on the trade and commerce of Zanzibar, for the year 1897 (Foreign Office, 1898, No. 2129, Annual Series) :—

"The production of chillies has risen from 16,336 frasilas in 1896 to 17,698 frasilas in 1897, an increase of 77,670 lbs. The average price was 2 dollars 37 cents per frasila, as against 2 dollars 57 cents per frasila during the previous year. A better price than this could doubtless be obtained for Zanzibar produce if a little more care and attention were devoted to its cultivation and harvesting, but up to the present time it has been allowed to grow almost wild on the coral outcrop which covers the eastern portion of the Island, and the slight personal discomfort which attends the handling of pods prevents the native from exercising any care in its picking and subsequent preparation for market. Attempts have lately been made to obtain a better sample on ground which has been specially cleared and prepared for the purpose, but the results are not yet to hand."

JAPANESE CHILLIES.

In a note on recent additions to the Museum of the Pharmacutical Society (Pharm. Journal, 11th December, 1897), Mr. E. M. Holmes, F.L.S., furnished the following interesting particulars, at an evening meeting of the Society, respecting Japanese and other chillies :—

"During the last three or four years there has been in commerce a very bright red variety of capsicum minimum, Roxb (C. Fastigiatum, Bl.), said to be imported from Japan. In consequence of its clean, bright, and attractive appearance, it has commanded a higher price than other varieties. Mr. J. C. Umney has recently directed my attention to the fact that this variety is less pungent than the Sierra Leone and Zanzibar varieties, although far superior to them in colour. On further inquiry, I find that this fact is well

known to drug and spice brokers. Mr. Umney points out that when an alcoholic tincture of either the Japanese or Zanzibar varieties is diluted with about 14 parts of water, the former gives a much clearer solution than the latter, indicating less oily matter. All the bright red Cayenne pepper until recently in commerce is said to have been imported from Natal in that state. The entire pod pepper imported from Natal is a variety of capsicum annuum, much larger than the chillies, and of a dark, red colour and very pungent, whereas the powdered Japanese and Natal Cayenne peppers, placed side by side, are indistinguishable in point of colour. The other principal varieties of chillies at present in English commerce are, I am informed, those of Sierra Leone and Zanzibar, the former being of a yellowish, red tint, and the latter of a dull, dark red, and often of inferior quality, containing badly dried fruits, stalks, and foreign matter, but both are more pungent than the Japanese kind. The latter is, however, quite pungent enough for most people, although perhaps unsuitable, by reason of its lesser pungency, for medicinal purposes, as an outward application, etc. I am indebted to Mr. Young, of the firm of Messrs. Dalton & Young, for information concerning the different commercial varieties. Nepaul Cayenne paper is made from a small variety of capsicum annuum, and is remarkable for its violet odour. Neither this kind nor the Zanzibar gives a red, but a brownish powder.

The following comments on Mr. Holmes's paper were made at the meeting by Mr. MacEwan :—

"The subject of Cayenne pepper was interesting to many chemists quite apart from medical purposes, probably more capsicum being sold for feeding birds than for any other purpose. The pepper used in that way was tasteless, and seemed to contain a large amount of fatty matter. It was dark in colour, and the object was to heighten the colour of the feathers. It was supposed to come from capsicum annuum, and he should much like to know where it came from. It was only supplied by two or three houses, and attempts by others to obtain it had not been very successful. There was no doubt that the pepper as used was an untreated product. The late Dr. Brady on his return from Japan, passing through Vienna, came across a comparatively tasteless pepper, which caused considerable discussion at the time, as there was a large amount of it on the market, but the substance had been pretty much lost sight of since. He thought it would well repay inquiry, as very little had been done on the subject of peppers since Dr. Thresh dealt with it about eighteen years ago."

According to a writer in Spons' *Encyclopedia*, Div. V., p. 1803 :—

"Several varieties of *capsicum annuum* have little or no pungency; one of these is abundantly grown in Hungary, forming the paprika of the Magyars. Another variety, cultivated in Spain, is imported into this country in powder for giving to canaries, to improve the colour of their feathers. The Nepal capsicums, which have an odour and flavour resembling orris-root, are the most esteemed as a condiment."

SOUTH AMERICAN PEPPERS.

The following interesting account of the use of peppers in South America appeared in the *Saturday Review* of the 15th September, 1886 :—

"*Aji-aji.*—Pepper of peppers is the meaning of this compound Quichuan word, and both word and thing are largely distributed over South America extending from the Bibo-Bio in the south to the Atrato in the north; it is also found in the dialects of the Gran Chaco; in Aymara, in Andaqui, among the agricultural Indians of Choco, the mining Indians of Potosi, and Cerro de Pasco. . . . .

"There are two kinds of aji; but there is only one way of preparing it. The best is that which is made from the greatest variety of peppers. The pods of these are taken when fresh, stripped of their seeds, and ground into a paste of the consistence of fresh spring butter. The paste is put into a small well-dried gourd, prepared on purpose, of the size and shape of a well-grown orange. The gourd, when thus charged, is then coated with a layer of well-tempered clay, and placed in the sun to dry or to ripen, as the simple people who prepare it say in their own tongue. By the time when the clay is well baked, the pulp or paste within has been dried into a fine yellow powder, and is then fit for use. Many people, ignorant of this fine art of the Incas, have supposed, quite naturally, that these aji-laden gourds, with their exquisite flavour and refined taste, were some uncommon and little known natural fruits. T other method of preparing aji is to grind the seeds with the poo which simply adds great pungency to the pepper, and is alwa used in the preparation of maize, or Indian corn, which is boiled its own husk with much aji, and surpasses in flavour and pleasan ness any vegetable curry of the East. The gourds of aji, whe thoroughly ripe, are cleansed of their coating of clay, tied up suitable leaves, well secured by the fibre of the aloe, and muc resemble when ready for market reeves of large onions, a doze gourds making up one reeve of aji. The cost of these in the goo old times was 1s. 3d. for a dozen gourds; what the price may now is only known on the exchange. Time was when some of th old families of the interior who had passed their lives in ignoran of railways, daily newspapers, and quotations of the state of th markets, had their own special way of preparing aji, mixing wit it some delicately scented bark ground to powder, or other salutar substance known only to the reticent Indian. From such house no visitor was allowed to take his departure without carryin with him a supply of the latest made aji; no traveller went the capital of any of the Coast towns, but he carried with hi some of this excellent pepper as a present to the Archbishop Bishop of the Diocese, the ladies of Santa Rosa, or the good Fathe who once a year went long journeys to baptise the chidren, marr their parents, and otherwise maintain the influence and authorit of the church in the remote parts of the earth. But even this goo custom is fast dying out."—*Kew Bulletin.*

DISTRICT ASSOCIATIONS.

CALCUTTA TEA TRADERS' ASSOCIATION.

The Annual Meeting of the Annual Meeting, Calcutta Te Traders' Association, was held on Monday the 3rd instan The Secretary having read the notice convening the meetin the Chairman (Mr. H. C. Begg) said :—

Gentlemen,—Mr. Lockhart-Smith, who so ably presided over th deliberations of your Committee for a period of two years, wa obliged to resign the chair as he was proceeding home. You Committee did me the honour of electing me to officiate for him fo the remainder of the season, and I have the pleasure, therefore, t move the adoption of the report for the year 1900 which is no before you. I think I may be at liberty to say that the report is record of useful work both carried out and in progress. The mai objects for which the Association was formed were the regulatio of the tea sale and the adjudication of claims between buyers an sellers. In neither of these directions have the duties of the Com mittee in the year under review been more arduous than heretofor which is matter for congratulation. True, it is stated in the repo that the list of claims is somewhat larger than that of last yea but the average value is less by over ten rupees per claim; and the thirty-three claims submitted, about one-fifth or 20 per cen were met without waiting for the decision of the Committe There can be little doubt, gentlemen, that the losses which gi rise to these claims are to a great extent due to the practice, whic I am afraid still prevails, of packing excessive quantities of t into the chests. Special attention of producer was drawn to th matter some years ago, but as there appears to be a tendency to r vert to the custom, your Committee deemed it advisable to ma another representation on the subject, and it is to be hoped th it will receive attention. Another matter which has claimed a goo deal of the Committee's attention is tea thefts. With so muc handling as tea is subjected to during its journey from the garde to the market, it is scarcely to be wondered that thefts occur, an that the greatest difficulty is experienced either in tracing them in providing measures to prevent their recurrence. A Speci Committee, as you are aware, has been appointed to enquire int the working of the Calcutta Port Trust, and while the matter *sub judice*, it would be out of place to discuss it at present. I ma say, however, as regards the Port Commissioners' Tea Wareho —in which we are chiefly interested – that it is receiving speci attention. One or two of your Committee acquainted with th management of the warehouse have given evidence before th Commissioner, and their recommendations are adopted, we ma do to see an improvement in the working of the wareho

d a diminution in the number of thefts of tea which are supposed occur there.

The proposal to remove the tea warehouse into the Docks, and to ilise the existing building for other purposes, did not meet ith your Committee's approval on the grounds stated in page 3 of e report. Their action, gentlemen, I have no doubt, has your pproval; and you will, doubtless, likewise endorse the objection ey raise to the practice which prevails of utilizing the building r purposes other than the storing of tea for sale on this market. I ink, gentlemen, that it is not necessary for me to say anything rther, and I would now ask if any gentleman has any comments make upon the report or other remarks to offer upon any subject hich might be of interest to the Association.

There being no response, the Chairman then proposed—

"That the report as presented be received and adopted, and that e audited accounts to December, 1900, be passed as correct."

his was seconded by Mr. J. D. West, and, on being put to the eeting, was carried unanimously.

NEW COMMITTEE.

The result of the voting for the Committee for 1901 was then eclared as follows :—

Sellers.—Messrs. Jardine, Skinner & Co., Messrs. Begg, Dunlop & o., and Messrs. Williamson, Magor & Co.

Buyers.—Messrs. Balmer, Lawrie & Co., Messrs. Finlay, Muir & o., and Messrs. Barlow & Co.

Brokers.—Messrs. J. Thomas & Co., Messrs. Carritt & Co., and Iessrs. Moran & Co.

There being no further business the meeting closed with the ustomary vote of thanks to the chair.

WYNAAD.

Proceedings of a General Meeting held at Meppadi Club, n Wednesday, 6th February, 1901. PRESENT :—Messrs. Abbott, Atzenwiler, Behr, Carver, Hockin, Lance, D. Mackenzie, Mackinlay, B. Malcolm, J. S. Malcolm, Nicolls, S. H. Powell (junior), Taylor, Trollope, Waddington, Winterbotham, and G. Romilly, *Honorary Secretary.* Mr. C. E. Abbot in the Chair.

Death of H. M. Queen Victoria, Empress of India.

Before proceeding to the business of the meeting, the Honorary Secretary read the following telegram addressed to the Viceroy by the Chairman, U. P. A. S. I., on behalf of the planters :—"This Association desires to convey "through your Excellency its heartfelt sorrow for irreparable loss sustained by the death of our beloved Queen and "respectfully to express deepest sympathy with the "Royal family in its bereavement."

1. Proceedings of last meeting were taken as read.
2. Mr. A. A. Carver was elected a member of the Association.
3. The accounts for 1900 were presented and passed.
4. **Import Duty on Tea in Ceylon.**—Read letter from Chairman, U. P. A. S. I.—The Honorary Secretary stated that he had received no acknowledgment of his letter from the Chairman of the Madras Chamber of Commerce, but that he had heard indirectly that the question would be discussed at their next meeting.
5. **Crisis in the Tea Industry.**—Read I. T. A. circulars, Nos. 5, 6, and 8, also considerable correspondence on the subject. After a long discussion, the following resolution was put and carried unanimously :—

"That, in the opinion of this Association, none of Mr. Rosling's "suggestions are practicable, that a general temporary abandon"ment of 10 per cent. of the present acreage in bearing would be "unfair in principle and impossible of accomplishment. We con"sider that the only true remedy for the present depressed con"dition of the Indian Tea Trade is to push the sale of Indian teas "in new markets, and, with this object in view, we cordially endorse "the action of the Indian Tea Association in asking the Govern"ment of India to impose an export tax of ½ pie per lb. on Indian "teas."

All the tea proprietors present signed the circular letter issued by the Indian Tea Association, asking for the imposition of this tax and stating the acreage of their tea under cultivation.

Mr. B. Malcolm suggested that part of the fund should be devoted to pushing the sale of Indian tea in India.

6. **Kulputty-Meppadi Footpath.**—The Honorary Secretary stated that Mr. Jacobi, the Taluk Board Overseer, had been to see him, by direction of the District Board Engineer, and said that Rs. 100 had been sanctioned to provide bridges capable of carrying a horse, and consulted with him as to the nature of the bridges required. It was decided that 4-feet wide bridges of jungle materials, with a bamboo rail, over the streams where the fords were impassable, would suffice.
7. **Fees levied for Service of Warrants in Mysore.**—Read letter, No. $\frac{\text{D-40}}{\text{M.O.}}$, dated 10th January, 1901, from Collector of Malabar, saying "I have the honour to inform you that the order, under which the fee was collected, has now been cancelled. No fee will be levied in such cases in future. The fees already collected will be refunded on application."
8. **Payment of Money Orders.**—The Honorary Secretary stated that he had had an interview with Mr. S. Devadasen, Inspector of Post Offices, Calicut Circle, who had promised that in future all money orders at outlying stations would be cashed within twenty-four hours of their receipt.
9. **Census.**—Read letter from the Collector of Malabar stating that the preliminary census will be postponed to the week before March 2nd.
10. **Differential Duties and the French Tariff.**—Read letters from various Chambers of Commerce in England and Australia to the U. P. A. S. I. on the subject.

Resolved that the Honorary Secretary write to the Chairman, U. P. A. S. I, asking him to again address the Government of India and to enquire if the enhanced French duties on Indian produce will come into force after June next, and if any steps are being taken to avert the serious injury to Indian interests, which would be caused by such an enhancement.

11. **Harbour on the West Coast.**—Read letter from the Secretary to the Government of Madras, Marine Department, enquiring at which port the Association wants a harbour to be provided.

Resolved that, as long as a harbour is provided, the Association considers the selection of the port should be left to Government experts.

12. **Gold Medal, Paris Exhibition.**—Resolved that this Association does not approve of the U. P. A. S. I. paying 600 francs for the purchase of a gold medal.
13. Read letter from Mr. J. Barboza, License-holder for emigrants to Natal, New Town, 3rd Street, Madras, offering to supply coolies.
14. **Tanjore District Board Debenture Loan.**—Read letter from the Deputy Collector of Wynaad circulating prospectus.
15. **Indian Gardening and Planting.**—Read letter from the Editor circulating copies of the paper for circulation. Recorded with thanks.
16. **Pepper Blights.**—Mr. Waddington called attention to the increase of a disease among pepper vines. The following gentlemen were asked to serve on a Committee to investigate the blight :—Messrs. Abbott, Nicolls, Powell (junior), Waddington, and Winterbotham.
17. The following papers were laid on the table :—

Madras Agricultural Department—		
Do.	Bulletin No. 40,	on the seed drill.
Do.	do. „ 41,	ground-nut crop.
Do.	do. „ 42,	native beliefs on hair-marks on horses and cattle.
Allahabad	do. „ 8,	on crops.
Do.	do. „ 9,	on wheat and maize.
Do.	do. „ 10,	wheat in rotation with leguminous crops.
Do.	do. „ 11,	ærmotor in well irrigation.
Do.	do. „ 7,	sugarcane disease.
Indian Tea Association	Proceedings 8th January.	
Do.	do.	Letter *re* Bounty on Green Teas.
Do.	do.	Circular No. 4, on prospects of Indian Tea in Russia.

Indian Tea Association, December statistics.
Central Travancore Planters' Association Annual Meeting.
Nilgiris Planters' Association Proceedings, 17th January.
Malabar Gazette notice *re* Sale of Occupancy right in Waste lands.

A vote of thanks to the Chair terminated the proceedings.

(Signed) C. E. Abbott,
Chairman.
(„) George Romilly,
Honorary Secretary.

THE BACILLUS AND THE LION.

"I am no more afraid of a boiled bacillus than I am of a well-cooked lion," says Dr. Alexander Hill, Master of Downing College, and Vice-Chancellor of Cambridge.

Now, the authorities affirm that out of 900,000 babies born annually in England and Wales, probably not more than one in twenty lives out his natural life; and the writer thinks that estimate is too high.

All the rest die—bar the few accidentally killed—from preventable diseases, such as measles, scarlet fever, small-pox, influenza, consumption, etc., a long and dreary list; all the maladies on it having a family likeness, and all arising from, and propagated by, germs. It is likely that one-third of the cows have tuberculosis, and, of course, people drink the disease in the milk.

It really does look as though it would be a good idea to boil the bacillus—as early in his career as possible. If necessary, we might cook the lions later on; they are comparatively harmless, anyway.

"To sum the matter up," says another man-with-eyes-in-his-head, "I have noticed that among the preventable diseases the greater number are due to mistakes in eating and drinking."

Which brings us to the little story that John K. Orthwein tells. "About three and a half years ago," he goes on to relate, "I was in the South Brisbane Fire Brigade service. At that time I contracted dyspepsia—a sharp and positive form of it, with the pains and penalties I had often read of, but never realised before.

"It lasted four months, and might have stuck to me as many years but for one thing. My appetite disappeared altogether, I got constant colds, and my attempts to eat were miserable spectacles for my friends to witness, and worse still as experiences for me. I used to belch up a sour, acrid fluid, and life was hardly worth the price of it.

"My comrades in the brigade knew the bad form I was in, and, one after another, they told me to try Mother Seigel's Syrup. They were nearly all in the habit of using it for anything that ailed them, and were sure it would set me to rights.

"Anything to get out of this, I said, and got the Syrup without delay. The first bottle did splendid work, and when I had finished the third, my digestive arrangements were sound as a gold sovereign, and have been ever since. I can eat whatever comes my way, and catch no more colds. And this I owe to Mother Seigel's Syrup. No wonder it is popular all over Australia.

"I am no longer in the brigade, but live at Hubert Street, Woolloongabba, South Brisbane, Queensland, where I shall be pleased to see anybody who wishes further details of my case."—John K. Orthwein, *October* 7th, 1899.

The accuracy of the above statement is vouched for in writing by Mr. R. Cumming, Assistant Superintendent, South Brisbane Fire Brigade.

We may kill the bacillus by boiling it, and we may cook a lion if we can catch him; but the only certain way to get rid of indigestion, and the black flock of ailments which arise from it, is by the use of Mother Seigel's Syrup.

MARKET REPORT.

[*Per Mail advices 25th January* 1901.]

COFFEE.

The London Commercial Record says:—There has been no improvement in the general tone of the market. Further small supplies of new crop Neilgherry have been brought forward and meeting with scarcely any competition were nearly all bought in, but privately sales to a moderate extent, chiefly smalls, have been made at steady rates. Jamaica of fine ordinary to low middling qualities have been in fair demand and sold at about previ prices. Colory Costa Rica and Central American descripti obtained high prices, but less desirable qualities were slow of The market for "futures" has been flat on continued large recei at the Brazils and lower Continental advices, and prices show decline of 1s 3d since our last. Yesterday's business includ March Santos at 31s, May at 31s to 31s 3d, July at 31s 6d to 7½d, September at 31s 10½d to 32s 1½d, and December at 32s 3d 32s 6d. Closing rates are:—

London ...	Santos ...	March delivery	... 31s 0d.
New York	... No. 7 Rio...	„	... 5·55 cent
Hamburg...	... Santos ...	„	... 31¼ pf.
Havre ...	... Santos ...	„	... 37½ fran

Auctions to-day comprised:—436 bags East India, 594 ba Nyasaland, 15 half-bales Mocha, 119 barrels 32 bags Jamai 300 bags Vera Paz, 280 bags Colombian, 1,587 bags Guatema 249 bags Mexican, 33 bags Peruvian, 12 bags Nicaragua, 96 ba Costa Rica, 65 bags washed and 2,296 bags unwashed Dumo Santos. The auctions went off flatly and a good quantity bought Mexicans fully is lower; other descriptions about unchanged.

Imports, Deliveries and Stock of Coffee in London, are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	190
Tons ..	14,653	13,535	1,305	1,3
	Home Consumption.		Export.	
	1901.	1900.	1901.	190
Tons ...	1,083	1,218	563	1,36

The preceding figures exhibit—	Ton
the Imports a decrease this year of ...	2
Home Consumption an increase of	1
Export a decrease of	79
Stock an increase of	111

The following are the results of this week's auctions:—

East India.—Of 673 bags offered 280 bags old crop Coorg sol cherry medium to bold 41s 6d to 45s 6d, peaberry 48s 6d to 62s 6

Jamaica.—Of 21 barrels 103 bags offered 130 packages sol smalls 43s, good to fine ordinary 39s to 43s 6d, low middlin brownish colory 45s to 50s, peaberry 52s.

Nyassaland.—64 pags sold, pickings 27s to 40s.

Costa Rica.—200 bags sold, smalls 36s to 49s, low middling t middling 48s 6d to 57s, bold 61s 6d, good to fine colory bold 70s 6 to 84s, peaberry 59s to 76s.

Guatemala.—Of 1,419 bags offered 1,000 bags sold, smalls 35s 6 to 45s, low middling greenish 47s 6d to 48s, middling to goo middling blue 53s 6d to 56s, good bold blue 64s to 65s, peaberry 56 6d to 68s.

Salvador.—206 bags sold, smalls 34s, low middling 46s 6d to 47 good middling 54s, peaberry 50s.

Nicaragua.—Of 102 bags offered 10 bags sold, low middlin faded greenish 46s.

Colombian.—Of 565 bags catalogued 350 bags sold, low middlin to middling 43s to 49s 6d, bold 58s 6d to 59s 6d, peaberry 53s 6d country damaged, bold greenish 53s to 54s.

Mexican.—Of 1,823 bags offered 665 bags sold, smalls 39s to 43 low middling to middling 45s to 52s, good middling 54s 6d to 55 peaberry 48s to 62s.

Ecuador.—26 bags sold, good ordinary pale greenish 34s 6d.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98 Bags.
Rio ...	1,776,000	2,297,000	2,051,000	2,949,00
Santos ...	5,774,000	4,887,000	4,137,000	4,775,00
Total...	7,550,000	7,184,000	6,188,000	7,724,00
Crop...	—	8,971,000	8,772,000	10,461,00

Rio Exchange 10d, previous day 10d.

Havre, *Jan.* 24.—Good average Santos January opened stead at 37½f. and closed steady at 37½f., March opened at 37½f. an closed at 37½f., May opened at 37¾f. and closed at 37¾f., Septembe opened at 38¼f. and closed at 38¼f., December opened at 40¾f. an closed at 39f.

HAMBURG, *Jan.* 24.—Good average Santos January opened steady 30¼pf. and closed quiet at 30¼pf., March opened at 30¾pf. and osed at 30¾pf., May opened at 31¼pf. and closed at 31¼pf., Septem- r opened at 32pf. and closed at 32pf., December opened at 32½pf., d closed at 32½pf.

NEW YORK, *Jan.* 25.—Closing prices of No. 7 Rio were as follow:—

	Jan.	Feb.	Mar.	April.	May.
nuary 25...	5·50	5·50	5·55	5·60	5·65
nuary 24...	5·45	5·40	5·50	5·55	5·90

TEA.

CHINA.—Green teas continue to meet a good demand at full lues, Young Hyson realising in some cases more money, but ongous hang fire considerably. During the week 4,052 packages ve been offered at auction and partly sold as follow:—Moning d, Keemun 5½d, Formoso Oolong 5d to 10d, Scented Caper 4⅛d 6d, Ouchaine 3⅜d. Green tea:—Gunpowder 8½d to 1s 1½d, nperial 4d to 7¼, Foong Mee 9¼d to 11½d, Sow Mee 7d to 7½d, oung Hyson 4d to 8¼d, Hyson 3d to 6½d per lb.

INDIAN.—The usual Wednesday's sale was postponed until yester- y owing to the death of the Queen. During the week 51,300 ckages have been brought forward, compared with 52,900 ckages previously, and 56,400 packages at this period of 1900.

Common grades and thin liquoring descriptions were rather fficult to quit except at a slight concession. Useful invoices, owever, particularly those with improved flavour, (as in the case a few recent arrivals from Assam and Dooars), met better mpetition and quotations were as a rule higher, while fine and iest parcels being in request went firmly. Shipments from outh India for some time past have been disappointing in quality id prices in the majority of instances on a low level, but a nsignment from Kodanaad Estate possessing attractive cup ld well, 82 packages yielding 9¼d per lb.

For 45,000 packages on Estate Account 7d per lb. was obtained ntrasted with 8d per lb. for 48,300 packages, and 9¼d per lb. for 3,600 packages in the two preceding seasons.

CEYLON.—Auctions included 27,000 packages against 29,400 ckages on Tuesday before, and 35,500 packages a year ago.

Of the teas catalogued a fair proportion was again indifferent in haracter, and for these no material change was noticeable, though ot so many Pekoe Souchongs were obtainable under 4¼d per lb. n the other hand bidding was brisk for desirable lots, an ppreciable advance being often paid to secure the best.

The average is 7d per lb. On the 17th instant it stood at a ttle over 6½d per lb., and 7½d per lb. on the 25th January, 1900.

JAVA.—A slacker demand was apparent for most sorts and the 900 packages of direct import submitted to the trade received ss attention, a good many breaks being withdrawn in consequence low offers. About 1,500 packages are advertised for the st instant.

Deliveries.—Since the turn of the year these have been on a tisfactory scale, and although not equal to those of 1900, which ere exceptionally large in consequence of heavy payments made in nticipation of the rise in duty, they compare favourably with 1899. here is a fear in some quarters that the Chancellor of the Exche- uer may again select tea for incraosed taxation, which is no doubt ducing a few firms to forestall any such action.

Deliveries—The clearances of all Tea (on which duty has been aid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 24th January,	1901	...	...	16,82½,771 lbs.
Do. do.	1900	...	...	*21,121,353 „

During the week the following have been printed for sale by ublic auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India ...	... 45,870	5,425	51,295
Ceylon ...	... 25,706	1,321	27,027
Java ...	... 681	1,110	1,891
Total ...	72,357	7,856	80,213

7 Also 60 packages from second hands.

* This embraced one large payment in advance.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated January 25th, 1901, says :—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian. Pkgs.	Ceylon. Pkgs.	Java. Pkgs.
1900-1901	1,089,848	825,833	36,884
1899-1900	1,174,832	802,470	40,439

52,042 *pkgs.* INDIAN
27,756 „ CEYLON
2.210 „ JAVA
} Total 82,008 packages were offered in public auction this week.

On account of the very low prices caused through over production, the importance of restricting the output of Tea in India and Ceylon is now generally recognised by Producers. A Joint Committee of the Indian and Ceylon Associations has been formed and their report issued.

A well attended meeting of members of the two Associations was held on Wednesday, when influential representatives of the principal Tea Producing Companies were present.

A resolution was unanimously passed adopting the Select Committee's Report restricting the output of Tea, and agreeing to recommend all producers to support the same;—the result of the meeting being telegraphed to Calcutta and Colombo.

QUANTITY OF TEA (IN LBS.) ON WHICH DUTY WAS PAID AT ALL BONDED WAREHOUSES IN THE KINGDOM FROM 1ST JAN. TO 31ST DEC.

	1900.	*Percentages.*	1899.	*Percentages.*
Indian ...	138,025,026	55	134,018,921	55
Ceylon ...	92,470,009	37	85,137,946	35
China ...	13,143,854	5	16,677,834	7
Oher countries ...	6,153,197	3	6,726,112	3
Total lbs. ...	249,792,086		242,560,813	

	1898.	*Percentages.*	1897.	*Percentages.*
Indian ...	133,430,351	57	124,534,194	54
Ceylon ...	82,471,745	35	85,493,554	35
China ...	14,695,334	6	17,242,247	9
Other countries ...	4,816,675	2	4,129,783	2
Total lbs. ...	235,414,105		231,399,778	

INDIAN AND CEYLON TEA (IN LBS.) EXPORTED FROM GREAT BRITAIN FROM 1ST JAN. TO 31ST DEC.

	1900.	1899.	1898.	1897.
Indian ...	10,272,264	7,724,262	7,855,495	5,711,240
Ceylon ...	13,775,415	12,144,389	11,522,434	10,683,885
China ...	18,284,008	11,643,686	15,786,150	19,992,024
Other Countries ...	825,510	711,868	1,179,173	967,574

INDIAN.—The better tone noticed last week has been further accentuated, and buyers have been purchasing decidedly more freely than for some time past. Useful liquoring Teas showed occasionally slight advances, while the decline in common grades appears at length to have been arrested. The following averages are worthy of note:—"Okayti T Co.," 1/6½; and "Sealkotee," 1/4¾.

Week's average of Tea sold on Garden Account 1901, 45,525 pkgs., av. 6·88d. 1900, 49,018 pkgs., av. 7·98d.

Total Tea sold on Garden Account 1st June 1900 to date, 897,828 pkgs., av. 7·48d. 1900, 905,328 pkgs. av. 8·42d.

CEYLON.—The animation which was noticeable in the bidding last week has been more pronounced, and the market has perceptibly hardened all round. All descriptions met with improved competition, slight advances taking place here and there even in common Teas, while better rates were paid for the higher grades. The following average may be mentioned:—"Carolina T. Co. Goatfell," 1/2¾.

Average for week 6·98d, against 7·44d in 1900.

Ceylon Tea sold on Garden Account 1st January to date, 89,713 pkgs., av. 6·75d. 1900, 111,276 pkgs., av. 7·70d.

JAVA.—The Teas sold rather slowly, and many lots were withdrawn from sale—offerings consisting mainly of low priced descriptions, which are not in such demand as better liquoring kinds,

Bank Rate 5 per cent. Exchange on London three months sight:—Calcutta 1/4 1/32. Colombo 1/4⅜.

COCOA.

Auctions on Tuesday presented 5,283 bags, of which 2,150 bags sold at again lower prices for Trinidad and Guayaquil, other growths being unchanged, with the exception of good and fine Ceylon which advanced a little. Of 1,001 bags Trinidad 440 bags sold at 1s decline on fine; 70s to 73s paid for fine to very fine, and 68s to 69s for middling to good. Of 538 bags Dominica 280 bags sold at 64s to 67s for common to good. 496 bags Grenada nearly all sold at steady rates—fine 67s 6d to 68s 6d, good ordinary to fair 65s 6d to 66s 6d. 210 bags Jamaica partly sold at 65s to 67s for common to good. 10 bags St. Lucia realised 64s 6d, and 13 bags St. Vincent 64s to 65s 6d. 13 bags fine Tobago brought 67s 6d. 11 bags Surinam sold at 68s. Of 1,738 bags Guayaquil 400 bags sold at easier prices—72s for Caraquez, 73s for Machala, and 75s to 77s for winter Arriba. Of 1,695 bags Ceylon 400 bags sold at full to rather higher prices for the finer qualities, and steady values for other grades; fine bold red realised 100s 6d, fair to good bold and medium 80s 6d to 90s 6d, middling 75s 6d, and smalls 54s to 66s 6d per cwt. Privately about 800 bags Trinidad sold at 67s 6d for middling to 70s for fine. 100 bags Grenada at auction rates. 100 bags Dominica at 65s to 66s, and 500 bags Guayaquil, fair Caraquez at 70s to 72s, and winter Arriba at 75s per cwt.

PEPPER.

BLACK.—Is very quiet on the spot, with small sales of Singapo at 6¼d to 9 5/16d. For arrival 125 tons Singapore sold at low prices—February-April (s.) at 6 1/32d to 6 5/16d, and March-May (s.) 6⅜d to 6 1/32d.

Nothing offered at auction on Thursday. To-day easier. 2 tons Singapore sold at 6 3/16d near at hand and at 6 5/16d down to 6 March-May shipment, closing buyers at 6 9/32d.

25 tons Tellicherry sold at 58s c.i.f. February-March (New Yor

WHITE.—Also slow of sale. Fair Singapore on the spot sold 9 5/16d, and fair Penang at 8 9/16d. To arrive no transactions reporte

Of 323 bags Singapore brought to the hammer on the 24 instant, only a few odd bags sold at 9d to 9⅛d per lb, for dull, t remainder being bought in at 9⅜d to 10½d, as in quality. 91 ba Penang taken out.

GINGER.

COCHIN.—Catalogues embraced 170 bags, of which 62 bags so (Mostly "without reserve") at a 29s for small and mediu brownish rough, part lean and shrivelled and slightly mouldy, a at 22s per cwt. for rough shrivelled D's.

JAMAICA.—Supplies of desirable quality are scarce and high prices are obtainable, but holders' ideas are now beyond t enhanced bids. 10 barrels offered were bought in at 55s to 62s p cwt., 56s being bid in vain for middling washed.

(AVERAGE FOR ALL INDIA 6·88d., JANUARY 25TH).

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Du and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price
Neilgherry ...	**375**	**6·00**												
Glenmorgan ...	60 p	5¼	60 p	5¼ 5¾	...	...	...	...	...	...	...	...	...	...
Kodanaad ...	82 p	9¼	52 p	9 1/2¼	30	7	...	...	...	...	...	...	...	...
New Hope ...	233 p	5	65 p	5½ 8⅝	69	4¾ 5	31½c	6½	68	4	...	...	...	...
Travancore ...	**1118**	**5·54**												
Carady Goody ...	115	5⅝	26	8¾	28	4¾	41	5½	20	4	...	...	...	...
Fairfield ..	85	6¼	19	6¾	32	5½	21	7¾	10	4⅝	1	4¼	2	4¼
Glenmary ...	125	5¼	55	5	...	...	40	6¼	30	4¼	...	...		...
,, ...	125	5¼	45	5	...	...	30	6	30	4¼	...	...	20	6¼
Kanan DvHCoAn...	58½c	5½	...	...	8½c	5	13½c	6½	14½c	4½	6½c	4	17 c	6⅜
,, Munaar ...	165 p	7	41½c	7	41	5¾	62½c	10¼	21	4¾	...	...	...	...
Patanaveram ...	11	4½	...	...	6	5	...	...	5	4¼	..	...	1	3
Penshurst ...	126 p	5½	73	5½ 7¼	21	4¼	...	...	11	4	21½c	4½	...	...
Trav TEst Co BA.	153	5	44	5½	63	4¾	46	5¼	...	....	...	...	...	...
,, Pambanar ...	155 p	4¾	18	6¼	49	4¼	62	5	15	4	...	...	11½c	4
Wynaad ...	**256**	**5·29**												
Erramaculla ...	165 p	5½	...	...	60½c	5¾	55½c	6¾	40	4¼	...	...	10½c	5
Perindotty ...	52 p	5	...	...	38	4½ 5	14½c	6½	...	...	...	...	...	...
Richmond .	39 p	4⅜	14½c	6¾	9 p	4¾	...	...	16	4	...	...	...	...

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[w. 1-10-98—t.f o.]

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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DOMESTIC OCCURRENCE.—The fee for inserting a domestic occurrence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 1st proximo. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad. *February 12th*, 1901.—*Crop*—Many estates are finished, and pruning is now in full swing instead. *Prospects for next year* are encouraging. *Health*—good. *Labour*—more than abundant. *Weather*—heavy East winds, and increasing temperature; the thermometer ranges from 62° to 73° in the shade. *Interesting item.*—The guns fired on Saturday by the Gowdas and villagers for the passing of the Queen, impressed the solemnity of the day on all.

Coorg. POLLI BETTA, 20*th Feb.* 1901.—*Weather*—Regret to have to report rain yesterday, which must have been heavy in parts of the country. It is likely to be followed by more rain to-day. Of course, it is entirely premature. *Crops*—Gleaning in hand. Pruning being pushed on with. Except that small-pox is prevalent, the general health is otherwise fair. Labour sufficient.

THE CEYLON TEA DUTY.

EVEN in progressive Ceylon there are men who still rely upon protection. It has been urged, for some years past, that the Import duty on Tea in that island should be abolished; but there are still many men who oppose this suggestion. From our contemporary, the *Ceylon Observer*, we learn that, among the Russian buyers, the feeling is very strongly in favour of the abolition of the duty. What they feel is that at present all blending for the Russian markets has to be done in Russian ports, or at Hongkong; the rent for space in the former places is so expensive that the business is costly and could be largely developed if blending were done here. It would be possible to erect large stores in Colombo for the

blending business, and, in addition to the quantities of China tea that would be taken on the abolition of the import duty, the quantity of Ceylon purchases would be greatly increased. This appears to go to the root of the whole matter. What is feared by some Ceylon men is that, by facilitating the blending of Ceylon tea with Indian and China leaf, they may bring about a *reduction* in the demand for their own product. The Russian buyers assert, on the other hand, that, if blending were possible at Colombo, Russia taking only 9 million lbs. of Ceylon tea, the amount purchased in the Colombo market for direct export would rise in all probability to something like 15 millions. Another point urged in favour of conducting the blending operations in Colombo is that the tea could be made up in packets ready for consumption and would suffer less injury than at present from the variable climate of the Russian ports in which the work was perforce carried on at present.

Now it seems to be beyond a doubt that, generally speaking, Ceylon tea is wanted in Russia for *blending* purposes. We might question if, all the world over, more is not used for blends than sold as pure Ceylon tea. But for the moment our concern is with the Russian market. There Ceylon tea is liked, but, say the chief Russian shippers at Colombo, chiefly for the excellent beverage produced when Ceylon and China teas are blended. Now it stands to reason that any course that will encourage the use of Ceylon leaf and the disuse of China tea must be to the advantage of the former; and if, by buying China tea, importing it into Ceylon and there blending it, dealers can bring about an increased demand for Ceylon teas in Russia, the planters in the island must be gainers. In the long run the planter is not concerned with the *name* under which his tea is sold. Whether it go on to the market as "Ceylon," "Pure Ceylon," or a blend, matters not to him. What he has to study is how to sell the whole of his produce, and how to get the best price possible for it. It has been evident of late that former fears as to the abolition of the duty causing an influx into Colombo of rubbishy China teas, to be exported as "Ceylon," need not be allowed to affect Ceylon's policy. She has shown that she can send forth rubbishy teas without drawing supplies from China, and the demand for low sorts in foreign markets is not so brisk as to encourage the making of special efforts to increase the supply.

Then there is the question of blends of Indian and Ceylon teas. Doubtless the abolition of the duty would benefit Travancore in particular, for it would enable the tea from that State to be put upon the Colombo market, where there is a varied demand. But Travancore's gain would involve no loss to Ceylon. Far from it. Our own view is that, if the Ceylon tea duty be abolished, and if the enterprising merchants of Colombo lay themselves out to develop the blending of Indian and China teas with those of Ceylon, the importance of Colombo, as a tea market, will increase at a rate that will astonish even Ceylon planters, men who are accustomed to seeing things fill out rapidly from very small beginnings. The advantages that Colombo offers, as a distributing centre, should not be lost sight of. If, to sell a pound of Colombo tea in certain markets, another pound (or more) of China leaf is required for blending purposes, let Colombo have the handling of that other pound, and get a small return for her trouble. A point that should not be lost sight of is the advantage of having the control. Blended in London, in Hongkong or elsewhere, tea may be put forward under any name the blender likes. Blended at Colombo, teas cou easily be sent forth only under designations that wou amply advertise the fact that they were mainly or partly Ceylon growth. In fact, Ceylon men would, in a manne have the nursing of the opposition; an advantage by n means to be despised in days of keen competition. We regr that the Planters' Association of Ceylon has not seen th matter in this light, and has expressed an opinion against th abolition of the duty.

TEA AND COFFEE IN THE UNITED STATES.

Comparing 1900 with 1899 there was a large increase i the imports of tea into the United States and a large falling o in imports of coffee. But the figures for the last decade sho that, as a matter of fact, coffee figures have been on th increase and tea figures on the decrease—a circumstance tha casts a doubt upon the efficacy of Ceylon and Indian planter efforts to convert the Americans to the cult of tea. Th figures are as follows :—

IMPORTS TEA.

Year ending June 30.	Net imports. Pounds.	Value. Dollars.	Av. import price, ℔ lb — Cents.	Per capita population Pounds.
1891 ...	82,395,924	13,639,785	17 0	1.29
1892 ...	81,610,741	14,267,411	16·0	1·37
1893 ...	88,131,088	13,651,800	16·0	1·32
1894 ...	91 801,565	13,857,893	15·1	1·34
1895 ...	96,437,042	13,029,868	13·5	1·38
1896 ...	93,340,248	12,585,741	13·5	1·31
1897 ...	112,907,548	14,737,062	13·1	1·55
1898 ...	67.697,295	9,608,530	14·2	0·91
1899 ...	72,834,816	9,523,313	13·1	0·96
1900 ...	84,843,491	10,557,741	12·4	1·09

Average, say, 87,000,000 last year.

IMPORTS COFFEE.

1891 ...	511,011,051	94,628,119	*19·0	7·99
1892 ...	629,671,748	126,395,317	*20·0	—
1893 ...	551,395,250	78,444,496	14·0	—
1894 ...	547,068,994	89,600,572	16·4	8·01
1895 ...	643,234,766	94.599,880	14·7	9·22
1896 ...	572,671,840	83,534,366	14·6	8·04
1897 ...	724,559,536	79,893.943	11·0	9·95
1898 ...	851,891,346	62,674,241	7·3	11·04
1899 ...	801,756,868	52,370,184	6·5	10·08
1900 ...	749,792.471	48,776,176	6 5	9·74

Average, say, 6,58,000,000 per year.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

Differential Duties.

Introducing the circular of the U. P. A. S. I. on this subject, the *Antigua Observer* remarks :—

It affords us much pleasure to publish the following circular from the "United Planters' Association of Southern India" on the subject of the necessity for the Imperial Government to adopt an Imperial Fiscal Federation for the protection of British interests as against those of the rest of the world.

The cry comes from the far east to the distant west and is echoed back with fervor: for our industries have been brought to the verge of extinction by the unfair Free trade enactments of the Home government which admits foreign bounty fed products on equal terms with the unassisted products of her own colonies and closed her doors to our trade—leaving us at the mercy of Foreign States: and further

* Overvalued by reason of depreciation in Brazil paper milreis.

using her colonies to buy the manufactures of foreign states hereas had our produce found sale in England our wants ould have been supplied in exchange.

With the exception of a small quantity of Pine Apples *ne* of our produce goes to England.

Were it the case that England is entirely dependent on reign grown raw stuffs for her manufactures, or for food-uffs, the reason would be strongly in evidence for the course ursued; but her colonies encircling the world and producing very possible want of hers, makes her thoroughly independ-nt of other nations, both for imports and exports.

Foreign markets are barred against British produce by igh tariffs while the English market is open to them to the isadvantage of British interests.

There is scarcely a limit to the supplies that can be obtained rom British dependencies whether raw material for manufac-uring or for food, for there is land enough for cultivation and o increasing their exports.

NOTES.

he British Tea Duty.

A special cablegram, dated 15th instant, to the *Times of Ceylon* says :—The market is demoralised. Trade money is locked up in peculative duty clearances.

Ceylon Tea not paying its Cost."

The *Morning Herald*, of 25th ultimo, says :—Mr. W. Martin Leake, the Secretary of the Ceylon Association n London, in conversation with a *Leader* representative esterday, said that at the present time Ceylon tea was not aying its cost.

olombo Tea Sale.

The *Times of Ceylon* of 13th instant remarks :—In view of telegrams eceived from London, which report a very depressed and dragging market, the local market must be considered to have passed off with a steady tone, at fully previous rates for all desirable sorts. Quality is generally very fair, although some nvoices are not equal to what they have been.

The Tea Problem and Indian Opinion.

A telegram, dated Calcutta, February 14th, to the *Times of Ceylon*, says :—The consensus of opinion of those engaged in the tea industry favour restriction—on the condition that all accept the report of the Joint Committee in London—on the basis of reduction of acreage plucked. Many prefer the alternative of finer plucking. These two proposals will probably form a basis for united action.

The Assam Labour Bill.

The Surma Valley planters were to meet in Silchar on Monday to protest against the wages scale proposed by the new Labour Bill. Every one's idea is that had the proposed wage been given twenty years ago there might have been some excuse for it, but now that food, clothing, etc., are so cheap the proposed increase is a wanton piece of interference, calculated to seriously injure an industry which is already sufficiently down on its luck and more in need of every assistance Government can give.

The Colombo Tea Traders' Association.

The *Times of Ceylon* remarks :—It has been found that, with the growing size of the local sales of tea, that closing the catalogues at 2 p.m. on Saturday, does not allow of their being printed and circulated, together with samples, soon enough for sampling to take place without a great tax upon tasters owing to insufficient time. Hence the notice advertised to-day for the annual general meeting of the above Association on Friday next. It is also to be proposed that auctions commence at 11 a.m.

East African Tea.

The *Zanzibar and East Africa Gazette*, January 16th, says :—A small packet of tea was last week sent in from Dunga, the first fruits of the tea garden that was laid out there two years ago. The tea had a slightly new and unripened smell and taste, but otherwise compared favourably with the ordinary article, especially as regards strength. We are informed that it was manufactured with such appliances as were to hand : rolled on a deal table, sun-dried, and fired with an ordinary charcoal stove. We believe this to be the first tea made in East Africa.

Calcutta Tea Sales.

Calcutta news states that at the sale held on 16th instant, after an intermission of ten days, 13,000 packages were dealt with. A few Assam invoices of fair quality were offered ; but the sale largely consisted of red, stalky kinds. Prices were lower for all except the best ; but for a considerable business for various outside markets, it would have been difficult to quit all offerings. Calcutta sellers are not yet able to realize what London values have declined to. Reuter cabled a record for the week, but there is a feeling that the worst has yet to come. One further small sale will close the season.

Cinchona Bark and Quinine in 1900.

There is no doubt, says the New York *Drug Reporter*, of January 14th, that the influence of Java quinine on the market was felt more during the last six months than ever before, and from present indications it will continue to be a factor of considerable importance in the situation if the price continues to rule as much below the well known brands as it does to-day. Early in the year it was difficult to dispose of the larger part of the offerings at the Java auctions, but at the auction held on December 28th all the offerings were reported sold, and at a figure above the views of buyers in this market.

The New York Coffee Exchange.

The annual meeting of the New York Coffee Exchange was held on January 10. The report of the Treasurer, for the year ending December 31, 1900, showed current receipts of $15,645·18, including $12,480 dues from members. Current disbursements were $20,499·97. During the year $5,000 was paid on account of loan on the Exchange building. The total assets of the Exchange over liabilities are $188,378·18. The gross rentals from offices in the Exchange building during the year were $46,857·34. Operating expenses of the building, including agents' commissions, were $22,790·54.

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nicholson's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf people, unable to procure the Ear Drums, may have them free.

Address—No. 989 D, THE NICHOLSON INSTITUTE, Longcott, Gunnersbury, *London*.

[w. 26-5-00—26-5-1901.]

"Sad, but True: starved out" of Good Ceylon Teas.

A well-known Glasgow tea-dealer writes under date, January 18th, with this heading for his text :—"For 11 years we have been importing medium, good, and high-class teas. During the last five months we have had only three parcels that would come within this category ; and we are advised from Colombo that, in the case of the latter, they are not to be had, except at from 1½d. to 2d. per lb. over their selling value in London, but in many sales not to be had at all. Until recently we had dealers regularly looking in to see if we had any samples by the mail, but those days are gone. Nothing to be had now but poor characterless teas."

China Tea.

The total export of tea from all China during the first four months of season 1899-1900 and 1900-01, was as follows :—

	1900–01—Lbs.	1899–1900—Lbs.
To England	18,010,104	24,286,761
To the Continent ...	10,092,132	7,180,138
To Russia	30,531,666	28,022.655
To America	41,430,157	30.340,243
To Australia	6,251,538	6,094,660
To South Africa ...	1,300,864	1,120,961
Total ...	107,616,461	97,045,428

China thus exported 10,571,033 pounds more tea during the first four months of her season this year than during the corresponding period last year.

Doctored Coffee.

The Dairy and Food Commissioner of Ohio issued a notice on January 1, 1901, that on and after thirty days from date, the statute (Bates' R. S., Sec. 4200—6) against the practice of adulterating coffee by manipulation, such as coloring, coating, polishing, or powdering, whereby damage and inferiority is concealed, or whereby it is made to appear better and of greater value than it really is, would be strictly enforced. The following is the law on the subject (Bates' R. S., Sec. 4200—6, paragraph 6) : "(6). If it is colored, coated, polished, or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is." The Department holds that it is not a compliance with the foregoing to simply label the article "Compound" when coffees are filled, coated, and glazed to make them appear better or of greater value than they really are, and to retain water that has been added to increase weight. Additional information will be furnished on request.

Tea.

Messrs. Francis H. Leggett & Co., of New York, have issued a *brochure* of which the *American Grocer* writes :—This is a beautiful *brochure*, $4\frac{5}{8} \times \frac{3}{8}$ inches, in dark green cover with designs in gold. The frontispiece is a dainty reproduction in colour of a branch of the tea plant in blossom, and also showing the seed. The first chapters deal with the history of the world's most famous leaf. Included therein is a reproduction of Thomas Garway's famous circular, printed about the middle of the seventeenth century, and which, the author declares, "embodies the redundancy of a modern legal document with the pretentious ignorance and hifalutan language of the so-called medical treatises of to-day." In verbiage it savors of the school of Usufruct Tilden, and in its statement of the more modern school of dietetical philosophers who find virtues in baked cereals, when used as a beverage, equal to those t ancients claimed for sage tea. Tea picking, the manufact of the leaf, and the American industry form the subject other chapters. Consideration is given to the bearing of upon social life, and, in addition, several poetical effusions the leaf and its seductive qualities.

The Tanjore Railway Loan.

The following is the result of allotment of the Rs.20,00,000, Tanjore District Board 4 per ce Railway Debenture Loan of 1901, lately advertised in Prospectus of the President, dated 8th November, 1900 :—

Aggregate amount of Tenders ..	Rs. 9,42,500	Cash	Rs. 4,40,000
		Pro-notes	,, 5,02,500
Minimum rate of accepted Tenders.	,, 94-9-0		
Tenders at that rate received per cent.	,, Full.		
Total amount of accepted Tenders..	,, 6,17,000	Cash	Rs. 2,55,000
		Pro-notes	,, 3,62,000
Total amount to be received ...	Rs. 5,87,520	Cash Rs. 2,45,204	Rs. 2,45,
		Pro-notes face value, Rs. 3,62,000	
		At Rs. 94-9-0, closing rate of yesterday	Rs. 3,42,
		Rs. 6,07,204	Rs. 5,87,
Average rate at which Loan is issued	Rs. 95-3-7		

Coffee in London.

The *Produce Markets' Review* 26th ultimo, says :—The auctio have been only scantily supplied, and mostly with old cr Guatemala and Mexican, importers apparently wanting clear out their old stocks before the new arrives. To effe sales, somewhat lower prices have had to be accepted, thoug the decline does not amount to more than 1s. to 1s. 6d. p cwt. The knowledge that there was a moderately larg quantity of these coffees being held back has had a depressin effect on the market for some time, but in another few week when it is expected the balance will at least have been offere if not sold, some relief may be looked for. The few lots new Costa Rica sold quite up to recent values, and fine bol parcels fetched higher rates. The East India continue unsatisfactory, both from a home and export trade point view, and here again the weight of old crop remaining check any desire to increase stocks, and will do so until some reall fine parcels arrive. In the terminal market the receipts hav again proved beyond all expectation, and quotations hav accordingly declined from 1s. 6d. to 2s.. but the closing price are not quite the worst.

Indian Tea Report.

Messrs. Maccaughey's Tea Repo of the 31st ultimo, states that th week has shown a record as regards the quantity, the tota with Ceylons, being just under 100,000 packages. The trad could not stand such heavy offerings coming on the top the enormous call for money for extra duty payments, an prices of common tea must be quoted down again. Thursday quotations were noticeably weaker, with 3½d. per pound fo clean leaf and a fair amount at 4d. The impossibility giving proper attention to large quantities printed for Monda also had a depressing effect. The promise of a better marke is, therefore, not maintained and common grades lost mo than had been gained last week. Assams, when desirabl sold fairly well, and where Duars showed distinct improve ment, as in the case of Bamandanga and some other division

the Duars Company, there was good competition. Sylhet, andpur, and a few others sold well, but the quality, taken round, was very disappointing, and the averages were y low. All kinds of fannings and poor Broken Pekoes nain very cheap, and even in the case of the better class of oken Pekoes up to 1s. 1d. per pound, it was often difficult get near the valuations.

lian Teas in London.

The *Produce Markets' Review* of January 26, 1901, reports :—There is decidedly improved demand, and a large business has been ansacted at steady to firmer prices. The better medium scriptions have been actively competed for, and in many ses enhanced prices have been paid, the market closing ong with a good inquiry. These teas have for some time st offered exceptional value, and at the moderate advance ey are still worth the attention of the trade as a steadily creasing business is quite probable, and buyers will do well hold a larger working stock than usual, more particularly this class. The lower kinds have been freely bought, hich is mainly attributable to the teas from many of the rdens, particularly Sylhet and Dooars, showing better ality, and it is quite likely that clean sweet tea will not be tainable at lower prices. Should the reports from Calcutta, wever, be confirmed there will be a considerable quantity very inferior tea later on which will probably be offered lower quotations. There is but a comparatively small pply of the higher class sorts and consequently with an tive inquiry better prices have been paid. The public sales mprised 51,924 packages, all useful descriptions, which met ith a brisk demand and sold at somewhat firmer rates.

offee without Caffeine.

At a recent meeting of the Paris Academy of Sciences an interesting aper was read by M. Duclaux on "The Chemical Composion of a Coffee of the Grande Comore," the result of experients by M. Gabriel Bertrand, of the Pasteur Institute. It ppears, says the *Chemist & Druggist*, that this coffee grows a wild state in an island off the coast of Africa, where it as found by the explorer Humblot, and is signalised on ccount of the peculiar fact that it does not contain the slightst trace of caffeine, to which ordinary coffee owes its excitant roperties. One quality of this coffee is, therefore, that it an be taken as an after-dinner beverage at night without ny fear of insomnia. Referring to it from a scientific point f view, M. Bertrand drew attention to the fact that well-nown botanists, such as Professor Frœhner of Berlin, and Professor Baillon of Paris, have not been able to agree as to he specific nature of this coffee. The French botanist holds hat it belongs simply to the same species as ordinary coffee, *Coffea arabica*, while his German colleague treats it as a new pecies, and gives it the name of *Coffea humblotiana*. As a natter of fact, the botanical characteristics are practically dentical with ordinary coffee, but there is a distinct difference n the chemical composition. This is not apparently due to ny difference of soil or climate, as an analysis of *Coffea rabica* cultivated on the island shows it to contain 13 grammes of caffeine per kilo. M. Bertrand is of opinion the subject pens a new field of study to biologists.

London Tea Sales.

The London market goes from bad to worse. Messrs. Gow, Wilson & Stanton's cable of 14th instant, to Colombo records a further decline. Average 6d. (½d. down). Reuter reports that 21,000 packages Ceylons were sold out of 32,000 offered, and 34,000 Indians out of 56,000 offered. Average price of Indians remained unchanged, 6½d. The *Times of Ceylon* remarks :—"Ceylon Tea in London has fallen to a point which has been predicted from time to time by those pessimistically inclined, but whose forebodings have been received with incredulity by most of those interested in the price of tea. If proofs were wanted that we have overloaded the London market, Reuter's figures to-day give clear evidence that "tea for price" is not wanted at any price at home. For of 32,000 packages offered only 21,000 sold, even when Pekoe Souchong is quoted at 4d. by Reuter, and 4½d. by Messrs. Gow, Wilson & Stanton. The annals of the tea industry record no such average price as that of this week, and we add the prices for the same week for the past five years which are instructive as to the amount the rush for quantity has cost Ceylon tea planters :—

	d.
1901	6
1900	7⅜
1899	8½
1898	7½
1897	8
1896	8¼

If we have to give away our tea at less than cost, planters, we feel sure, would prefer that merchants who are handling our tea in Australia, Russia, Canada, and elsewhere, should have their share of the good things that are going, instead of the London middleman, gorged to such repletion that he will take no more, adding to the profits he has lately had thrust upon him. It would have been better for Colombo, and better for the tea industry generally, if the "fall back" upon London when prices gave way here two months ago had not been so quickly resorted to, with the result that the sterling tea average of to-day places so painfully before us."

GENERAL ARTICLES.

THE PLANTERS' ASSOCIATION OF CEYLON.

THE ANNUAL MEETING.

There was a large assembly of planters from various parts of Ceylon at Kandy on the 15th instant, in readiness for the Annual Meeting, which was opened the following day.

On the 15th three important sub-Committee meetings were held, when all questions concerning the Tea Problem were thoroughly threshed out.

A sub-Committee met to discuss the official estimate of crop for the ensuing year; and another sub-Committee met to consider the Over-production question; and a general meeting of Chairmen of District Associations was also held.

THE ESTIMATE FOR THE COMING YEAR.

On the 16th a General Committee meeting was held, when it was decided to delete altogether the paragraph in the report referring to the tea crop estimate for the coming year. The figures arrived at by the Committee were 146,000,000 lbs., of which it was estimated that 105,000,000 lbs. would be sent to London, as compared with 114,000,000 lbs. last year. The total estimate was thought to be too small, and another estimate is to be made.

THE GENERAL COMMITTEE'S RECOMMENDATION REGARDING OVER-PRODUCTION: TO REST 10 PER CENT. OF THE CULTIVATED AREA.

With regard to the Over-production question, this was discussed by the General Committee on the 16th, when it was resolved to recommend to the Association that ten per cent. of the area in cultivation be allowed to rest, and that a sub-Committee be appointed to ascertain what proportion of the estates would adopt the scheme.

The annual report was taken as read. The following are extracts.

FORTY-SEVENTH ANNUAL REPORT.

After the announcement that the register of estates and voters stand at 918, the first paragraph on the all-important subject of

TEA

is as follows:—

Last year was an abnormally wet season over a large number of the tea planting districts, but the weather generally was favourable for heavy flushing, with the result that shipments are approximately 10,000,000 lbs. ahead of the estimate, and 18,000,000 more than were shipped in 1899. This heavy increase, combined with the low quality and heavy shipments from India, have resulted in a lower average price than has heretofore been seen. Your Committee feels that unless these heavy annual increases in Ceylon shipments as well as those from Calcutta are checked, only still lower prices can be expected. The chief feature in the history of the tea trade during the past year was the raising of the British Import Duty from 4d. to 6d. per lb. with the result, as it would appear, of checking increase in the consumption. Foreign markets have received continued and greater attention, and considerably larger quanties of Ceylon tea have been shipped to other countries than the United Kingdom; nevertheless some 23,000,000 lbs. Indian and Ceylon teas have been produced during the past year in excess of all requirements. Adverting to the trade dispute of 1899, the compromise agreed to, *viz.*, the taring to lb., half-pound, would appear to be working fairly satisfactory, there being little loss in weight to complain of beyond 1 lb. allowed as draft, whereas previously the extra loss frequently reached from ½ to 1 per cent. Warehouse charges have met with a small reduction which your Committee trusts is merely an instalment of what will come, as the present reduction is quite inadequate.

Home consumption statistics for 1900 follow; while regarding the subject of duty, which is again attracting special attention in London, the following reference occurs, succeeded by an advocacy to pluck finer:—

Duty in December, 1900, was paid upon 16,302,079 lbs. of tea, against 15,615,802 lbs. during December, 1899. This is the first instance since the declaration of the Budget in March last that the *duty payments* have shown an increase over the corresponding period of the previous year. It is, therefore, possible that the large quantity of tea cleared in anticipation of the Budget may now be nearly worked off, and that figures may shortly assume their normal condition.

There is a strong feeling amongst some of the larger Indian and Ceylon tea producers, that in view of the over-supplied condition of the market, it would be advantageous to resort to finer plucking during the coming season, with the double object of reducing the supply and improving the quality of the crop.

TEA BLIGHTS.

During the past year blights on tea received the most careful attention of planters aided by the scientific experts at Peradeniya, Messrs. Carruthers and Green. There is not the same anxiety felt regarding insect pests and fungoid blights as there was about 18 months ago—for the condition of tea bushes all over the tea districts is satisfactory as regards appearance while as regards production, the increased export of tea—much exceeding the most sanguine estimate—speaks for itself. In this connection Mr. Kelway Bamber is experimenting with a view to increase the ability of the bushes to produce teas of better flavour and strength rather than increased quantity by employing manures which will be specially adapted to raising the former standard and thus probably enable the trees to withstand the effects of both insects and fungoid attacks.

COCOA.

The crop for the year 1900 was 33,697 cwts. against 42,527 cwts. for 1899. The serious falling off is due in the first place to the failure of the usual rains for the first 5½ months of the year, whereby the Spring crop was in a great measure lost, and the usual May and June blossoms failed to appear; and secondly to cocoa disease, which has caused the temporary loss of many trees in various estates and latterly the blackening off of pods. Disease among the red cocoa is, undoubtedly, serious and when neglected must end in disaster, but it has come within the personal knowledge of several experienced planters and of Mr. Carruthers that where proper precautions have been vigorously carried out, a very decided improvement as regards disease is distinctly noticeable in quite a number of estates, when compared with their condition two or three years ago. Cocoa stealing continues. The village headmen system if properly worked, is an ideal one for the suppression of this nat of crime.

CARDAMOMS.

The area now under this cultivation so largely exceeds tha any former year that it is the opinion of many growers that ca moms will, for a time, cease to be so remunerative, whilst oth maintain that the few thousands of pounds which Ceylon is cap of producing will not affect the market. Although the cultiva is being greatly extended in North Travancore, it is believed t there is a local market for all the land there can produce. exports during the year were 537,455 lbs. compared with 499,959 in 1899, crops generally have been short of estimates and many the older fields gave 50 per cent. less than their usual crops.

RUBBER.

During the past year little progress had been made in the pla ing of this product, scarcely any demand existing for seed exc the Castilloa variety. It may be of interest to note that one gr of estates in the Dumbera district exported 6,000 lbs. of Ce Rubber, which sold for at an average of close on 3s. for lb.

PARA RUBBER.

A demand for seed still continues for the Straits and Borneo well as locally though on a reduced scale as compared with previ years. With very few exceptions all rubber planted in Ceylon either throughout the tea or round the edges of swamps and on banks of streams. In regard to tapping there is still a great d to be learned, but it would appear from experiments that 1 lb. dry rubber per tree from 10-year old trees should (and if tap hard considerably more is obtainable) be a safe estimate and cos harvesting should not be more than 50 cents per lb. Present valu are about 3s. 6d. for best quality and 2s. for scrap.

COFFEE.

For some years no reference has been made to coffee, and reason is plain inasmuch as the exports of coffee for the year end 31st December, 1900, aggregate only cwts. 9,396.

After mention of the total exports of produce given in the append and the Customs' duty upon Colonial produce entering France fr countries which do not enjoy most-favoured nation treatment, t report proceeds:—

GOVERNMENT AGRICULTURAL DEPARTMENT.

This department of Government, so important in a Colony li Ceylon which depends for its prosperity mainly (it might be sa entirely) on Agriculture, has been inaugurated, and three ch officers have been appointed to meet the views of your Associati

THE BRITISH TEA DUTY.

Reduction of telegram charges between the United Kingdom a the East is dealt with; and then the recent resolutions on the r duction of the British tea duty. These resolutions having be duly transmitted to Government, it has been intimated that forwarding to the Secretary of State for the Colonies the s resolution passed by your Association urging on Her Majest Government a reduction of the Import Duty on tea in Gre Britain, His Excellency the Governor will give all the suppo he can.

THE CLOSING PARAGRAPH.

The past year has been one of more or less unrest everywhe with reduced dividends generally in connection with the Tea ente prise, and other Agricultural industry, while the effects of Wa Pestilence, and Famine elsewhere have been reflected and fe locally, both publicly and privately. The new year of your Asso ation beginning to-day will be memorable as the first of a Ne Century in the History of the World, while a retrospect of tim past warrants confidence in continued future welfare for Ceyl and its Agricultural enterprise, whatever developments or chang conditions occur in connection with your staple tea. Under circumstances your Committee commends again to the consta notice of all members and others with a view to practical acti and combinations, the motto *Unitas Salus Nostra.*

The Chairman, in moving the adoption of the report, reviewe the work of the past year. He said the present position of the T Trade demanded the closest attention. The price paid for the product had fallen to a lower level than had hitherto been reache and unless some relief could be afforded in the more or less i mediate future the proprietors of the poorer class of property mu be ruined. As regarded the estimate for the current year, th Committee felt it advisable, in view of the proposed reduction output, to call for a revised estimate before making public tho that had reached them. He pointed out, however, that everythi

led to show a marked decrease in exports to the United Kingdom ing the current year. He thought they might reasonably con-tulate themselves on the result of the one Pound Draft dispute. vernment had been approached, but were unable to agree to a re-tion of Railway Rates, and a motion on this subject would be ught forward by the Hon. Mr. J. N. Campbell. Labour appeared have been plentiful throughout the greater portion of the erent districts. The Benevolent Fund had continued to receive l-merited support at the hands of certain members of their com-nity, but he would like to see that support largely increased, as l as greater support given to the Hatton Nurses' Home. Con-ning the Ceylon Contingent, he feared that, as the war dragged so wearily, the glamour and novelty had worn off, and that they re apt not to remember so vividly their brothers at the front. If ssible they should send a Relief Contingent in order to let those o had been in South Africa one year return. The Rifle Corps vement had proved distinctly successful, thanks to the energy d zeal of the Hon. Mr J. N. Campbell. Regarding the work of e "Thirty Committee," he maintained that the American market s one to which they must look to take both black and green s. As to the work on the Continent, they had been kept fully vised. The green tea market required time for development d no present relief could be expected from this source.

RE-ELECTION OF MR. ROSLING AS CHAIRMAN.

Mr. W. D. Gibbon then temporarily occupied the chair, and, in eulo-stic terms, proposed the re-election of Mr. Rosling as Chairman. The motion was unanimously carried.

THE SECRETARY RE-ELECTED.

The Hon. Mr. J. N. Campbell moved the re-election of Mr. A. ilip as Secretary, referring to his long and faithful service to the ssociation.

The Chairman seconded, and the motion was carried amid applause.

OVER-PRODUCTION—THE CHAIRMAN'S MOTION CARRIED.

Mr. Rosling added as a rider to his motion the following recom-endations that had been made by the sub-Committee:—(1) "That combination with India, having for its object the reduction of tput, is desirable"; (2) "The sub-Committee considers that the ly scheme practicable is an all-round reduction of the plucking ea by ten per cent., conditional on eighty per cent. of the cultivat-tea acreage joining in the combination and upon India joining the same terms. If any proprietor prefers to make ten per nt. of his tea crop into green tea, this shall be accepted in lieu of duction of his plucking area by ten per cent"; (3) "That a b-Committee be appointed to obtain adherence to the scheme." r. Rosling's original motion was as follows:—"That action be ken by this Association with a view to form a combination nongst Indian and Ceylon Planters, to cope with the present nsatisfactory condition of the Tea Market, consequent on over-roduction."

The Chairman carefully weighed the *pros.* and *cons.*, of the heme, and observed that if the time was not now ripe for com-ination it never would be.

Mr. Sholto Skrine seconded Mr. Rosling's motion, remarking that ey had the satisfaction of knowing that their great rival—India—as pushed into an even closer corner than Ceylon. That being e case, they had the opportunity of forming a combination so as put tea produce on a reasonable footing in the markets of the orld.

Mr. J. H. Martin criticised the Chairman's motion on the ground at although 10 per cent. of the acreage would be rested, there was o guarantee that manure would not be applied to the balance of he acreage and it did not prohibit the opening of new clearings.

An amendment was moved by Mr. A. H. Thomas to the effect hat the cess be increased by one-half, but it was not seconded.

The discussion was continued by Mr. James Sinclair, who sug-ested the appointment of a Committee to confer with India and ork out the scheme; Mr. James Ryan and Mr. Labouchere Hillyer.

The Chairman replied to the criticisms, and the motion was even-ually carried almost unanimously.

The Chairman announced that the resolution would be telegraphed o Calcutta and London.

MR. TURNER'S MOTION REJECTED.

Mr. Turner's motion—"That, in the opinion of this Association, he time has arrived to approach the Government of Ceylon, asking or—(1) the abolition of the Import Duty on tea in Ceylon; (2) the appointment of Inspectors to guard against the Export and Import of Rubbishy teas," was, with slight verbal alteration, rejected the abolition of the Import Duty being strongly opposed by Messrs. A. H. Thomas, Sholto Skrine, C. Gibbon, the Hon'ble Mr. J. N. Campbell and others.

GOVERNMENT'S CONTRIBUTION TO THE TEA CESS FUND.

The motion of Mr. James Westland—"That Government be asked to contribute from Surplus Revenue to the Tea Cess Fund a similar sum to the amount collected last year," was also unanimously agreed to.

THIRTY COMMITTEE.

The following are extracts from the Report of the "Thirty Committee" for the year 1900:—

Finances.—The total collections paid into the Ceylon Tea (New Markets) Fund on account of the Export Duty on tea from January to 31st December, 1900, amount to R294,140·00. The balance in the Bank, brought forward from 1899, was R131,240·96.

Ceylon Tea in America.—A sum of £10,000 stg. was voted for disbursement by Mr. Wm. Mackenzie in pushing and making known Ceylon tea in America during 1900, and amounts aggregating £9,500 were remitted up to 31st December, 1900.

"As usual at the end of the year, I send a report upon our work in America. The methods pursued have been identical with those of former years, and are well known to the Committee. They are chiefly newspaper advertising, subsidies to advertisers, demonstrations, leaflets, sampling, etc. During the early half of the year our teas made fair progress in the States, and seeing how the whole tea industry was crippled by an excessive duty and very cheap coffee, we had little cause of complaint. But circumstances changed rapidly in the latter half. Large quantities of black China Congous poured into the States, prices fell several cents, and importers were disheartened. The English firms found themselves unable to dispose of Ceylon teas imported in June and July, except at ruinous losses. Then since October, the downward tendency has been so persistent in the kinds of tea America chiefly takes, that everyone was afraid to import knowing that however favourably bought one week, his teas could be undersold at next week's prices. When bottom has been touched, perhaps confidence may be restored, and orders may come forward. But as regards the States, we have to face the fact that the black China teas we have been for years trying to displace, are there in large volume. The reason generally ascribed for the immense importation of those teas is, the trouble in China. Merchants fearing the war would spread south, and hoping to get an advantage over rivals, ordered large quantities early in the season. To their surprise and disappointment, all of them got all they ordered, and the result is an over-supply. In Canada the situation is different. The figures for imports of teas are made up for 12 months to 30th June each year. As officially issued they are as follows:—

	To 30th June, 1898.	30th June, 1899.
Ceylon ...	3,406,000	6,857,000
Indians ...	2,032,000	4,643,000
Japans ...	9,260,000	9,294,000
China, etc. ..	5,329,000	4,077,000

This table shows the vast stride Ceylon and Indian teas made in the period—July, 1898 to June, 1899. Japans were steady during both years, and although British-grown teas bulked more largely during the last year, taking the two years together, Japans were 18,500,000 against British teas 17,000,000 lbs Since July, either imports of Japans have been small, or consumption has been very large, as there has been a great scarcity of these teas in Canada, and the price has gone up very considerably. The latest market reports from Quebec, Montreal, and Toronto predict a still greater stringency in the Japan tea trade in Canada, before arrival of the next crop. This condition of the Green tea supply should afford us a good opportunity for introducing *Ceylon Greens.* What is being done by way of shipping those from Colombo is better known in Ceylon than by me, as my figures are now a month old. But the price has evidently fallen considerably as might be expected, seeing that blacks are so cheap. I know that a Colombo firm wired on 31st December to Toronto offering to deliver *there* the *finest Green* at 6¾d. These had previously been costing 8½d. in Toronto. The stimulus of the bonus, added to the unprecedently low price of black tea, may well cause shipments to exceed the demand in Canada, which, we must not forget, is entirely in its infancy. The low price of blacks is itself sufficient stimulus to

create the supply of Greens in Ceylon. Our efforts and money should now be employed in encouraging those who are trying to make those teas known, and to get them into consumption. The unfavourable conditions in the States, during the last half year, made me spend less of our Fund there; while the favourable conditions in Canada justified me in increasing our efforts in that country."

UNIVERSAL INTERNATIONAL EXHIBITION HELD IN PARIS DURING 1900.

A sum of £2,000 sterling was granted towards the representation of Ceylon at the Paris Exhibition, and this amount has been paid to Government. Subjoined is the Official Report, on the Planting Exhibits at the Paris Exhibition by J. H. Renton as representative.

REPORT ON THE PLANTING EXHIBITS AT THE PARIS EXHIBITION, 1900.

In addition to my duties as representative of the Planting Community at the Paris Universal Exhibition of 1900 I had also to undertake the work of Special Ceylon Tea Commissioner for the whole of Europe. I, therefore, judged it wise to have an assistant who would remain in Paris throughout the whole time of the Exhibition, who would be specially in charge of the work inside the Exhibition and take the supervision of the tea-house and garden. I also thought it necessary to have a lady who would be responsible for the making and distribution of the tea, arrange for the ordering of the supplies and be in charge of the European and Native attendants. On the suggestion of Mr. F. G. A. Lane and with the approval of Mr. W. E. Davidson, I appointed, before I left Ceylon, Mr. R. V. Webster to the former post, and at the request of Mr. W. McKenzie I engaged Miss Parkinson for the latter. Miss Parkinson's long residence in Ceylon and her experience gained under Mr. McKenzie in "demonstrating" tea in America made her eminently a most suitable person for her post. Mr. Webster's experience gained in pushing Ceylon tea for the past ten years all over the world and his unique experience of no less than five Exhibitions, and of the manner in which tea shows are run, induced me to believe that he would be the best fitted to undertake the duties of Representative in the Exhibition of the Tea interests of Ceylon. Both appointments have been fully justified by the results.

Tea Exhibits.—The case containing these were provided with five divisions on each side. Each division contained twelve little spaces 8 feet by 8 feet—and three of these divisions were allotted to each estate, to hold samples of Broken or Orange Pekoe, Pekoe and Pekoe Souchong. Thirty-seven estates exhibited, but one or two exhibited fancy as well as Commercial teas. Three estates exhibited green teas. The cupboards below the exhibits were provided with glass doors: the boxes containing the balance of the teas were stowed away in them and the front filled up with teas in packets kindly lent by the Co-operative Tea Gardens, Maravilla Tea Company and the Harrow Estates Company.—A light wooden frame was run along the centre of the stand and two rows of photographs exhibited on each side. These were the photos provided by the Planters' Association illustrating upcountry scenes, work on estates, and in factories. The photographs enabled us to make this a fairly attractive show, but, as a rule, it was of interest only to experts or those specially interested either in the trade or in Ceylon generally. Samples of various grades of tea were of little interest to the general public. One cannot be surprised at for samples, such as these, can be seen in any grocer's window. So far, therefore, as our main staple was concerned, the exhibit in the Ceylon Court cannot be said to have done much to impress visitors with the importance of the tea industry of the Colony. I think that on a future occasion it would be better to have a dozen or more large circular stands with shelves, and to place the various exhibits and handsome glass vases or jars on them. Owing to want of space I had to abandon the idea of having a huge heap of Golden Tip Tea in bulk under glass, in a good position in the Court. In place of this heap on the suggestion of Mr. Webster, the four pillars in the main passage through the Ceylon Court were covered over under glass, with Golden Tip Teas. Mr. Webster undertook the bulk of the work in carrying out this main tea exhibit and made all the arrangements for the display of the photographs.

Cocoa, Coffee, and Cardamom Exhibit. These were all in one case. On one side the Coffee and Cocoa in bean, on the other the Cardamom, Cocoa in pod, Vanilla, and Nutmegs. The Coffee was exhibited in eight small spaces in the centre of the division, the Cocoa in sixteen spaces on either side of the Coffee. Cocoa exhibited from seven estates; Coffee arabica from two; Libe from one. In the centre of the division on the other side was Cocoa in pod and the Vanilla from Galagedera Estate; and on side of it, the handsome exhibit of Cardamoms from Duck Estate, while on the other were the Cardamoms from Forest and Mousakande and the Nutmegs from Doranakande.

The private exhibits made by the Co-operative Tea Gardens C pany, the Maravilla Ceylon Tea Company, and Lipton, Ltd. September and October, 1899. I advertised in the Ceylon papers t space would be reserved for private exhibitors in packet and bulk I had been urged to make up my own packet teas and sell ther some depôt in Paris, if the sale was not permitted at the Exhibit I felt that as neither the Planters' Association nor the 30 Comm tee were a trading body, that though such a course would be p fectly feasible during the Exhibition, yet after it was over, th would be no firm or business agency to carry on the sale of particular Brand. The Planters' Association being unable to the Brand or mark (specially adapted for the Exhibition) to one particular firm, I, therefore, was in hopes that private in viduals or firms would come forward and establish depôts in Pa with stands at the Ceylon Court, and run the chance of effect sales. Only the three firms above-mentioned availed themselve the opportunity. Unfortunately, Messrs. Lipton, Ltd, were o prepared at first to book orders for blends of Ceylon with Chi Without expressing any opinion as to whether or not this was best means of introducing Ceylon tea to the French public I f that in an Exhibition where Ceylon, and pure Ceylon tea on was supposed to be exhibited, it would not be right to allow Ble of Ceylon tea to be sold, or orders booked. Messrs Lipton, L agreed to withdraw their Blends and sell pure Ceylon tea. bu was not until June that they were able to commence sales. T exhibit made by the Co-operative Tea Gardens, and the Marav Co.'s was an especially attractive and handsome one, and their hibit combined with that of Messrs. Lipton, Ltd., have been t most powerful aid (so far as exhibits in the Ceylon Court wh in helping us to impress the general public with the importance the Ceyion Tea Industry. There is, of course, no question that t tea-house and the sale of tea in cup has been by far and away t biggest factor in bringing Ceylon tea before the notice of t general public and that the great success which this institution h had has enabled us to secure a splendid advertisement for Ceylon t without the help of any of the exhibits of the Ceylon Court. At t same time, the neat little packets exhibited in a dozen different kin of wrappers, by the two first-named companies took greatly wi the public and were a most efficient factor in introducing Ceyl tea. I felt very grateful that I could refer intending purchase of Ceylon tea to the depôts established by these two companies Paris in the first instance. In a short time the sale of Ceylon t in the Exhibition was commenced, and continued to the close. feel certain that if the Co-operative Tea Gardens Co. and the Ma villa Ceylon Tea Co. had not made this exhibit of pure Ceylon t in packets, Messrs. Lipton, Ltd., would not have followed suit, b would have stuck to their blends. I should then have been oblig to make up packet teas of my own, for the time being, or else all intending purchasers to go without being able to get Ceylon tea the Court. I wish it to be clearly understood that the sale of Ceyl tea in the Court has never been sanctioned by the Authoriti When these companies saw other articles being openly sold in the other Courts, and that tea was sold in Japan and Russia t Co-operative Tea Gardens Co. commenced selling at their own ri and Lipton, Ltd., followed suit after a time. On two occasions th have been warned to desist by the British Royal Commission, a on one occation by the French Authorities, but they have gone and taken the risk. In addition to their exhibit of Fancy Tea tins, Messrs. Lipton, Ltd., made a very attractive exhibit of Cof and Cocoa

Tea Factory.—Only one of the models was exhibited; the oth was placed on the top of the tea-house, there being no room for it the Court.

On 11th of June, Mr. Marcel, of Havre, applied for space which to sell packet teas, but by this time (nearly three mont after the opening of the Exhibition.) all the space had been allott and the various exhibits arranged. . . .

B.—TEA-HOUSE.

Tea-house.—The completion and furnishing of the tea-hou

sed a great deal of extra work and worry. The contractors had arted from the original design, the terrace or first floor should e been sorrounded by an open balustrade, instead of which a d high wall had been built. Although a roof was shown on the n, we had to provide an awning and blinds at our expense and, ng to the height of the wall, the floor had to be raised. Kitchen l counter space was insufficient, even although two additional ms were built on to the kitchen. The interior of the building was ely furnished and decorated by Miss Parkinson and Mr. Webster. e walls and pillars were covered with photos of Ceylon views and nery. The tea-house has had a success which exceeded all my i-ipations. We had to provide two more urns, and in June and y to increase our seating accommodation until it came up to e hundred from three hundred.

We served in	May	12,955	pots of tea.
Do.	June	22,351	,,
Do.	July	24,141	,,
Do.	August	19,312	,,
Do	September	25,009	,,
Do.	October	30,489	,,

Total...134,257 in six months

N.B.—A pot contains two cups of tea.

The above does not include the teas given gratuitously to the embers of the Ceylon Commission or their friends. I attribute is success to the following causes: *First*, to the goodness of the ticle: the tea was very carefully made and poured (after five inutes' infusion) into an urn, heated by hot water.

Secondly, to the Sinhalese boys, with their rapid and civil wait- g. We had to engage waitresses, in addition to the boys, but ere is no doubt that the boys a great draw. I want to take this portunity of expressing my appreciation of their very good and cellent behaviour during the whole time of their stay in Paris.

Thirdly, to some lady friends, journalists, and to others who from e very first have assisted us by advertising both the merits of ur tea and the attractions of the tea house. In the Summer, most usiness was done between four and seven o'clock, but in the utumn, especially at the end of October, the rush was always etween three-thirty and five o'clock. The tea-house was kept open ll eleven o'clock p.m. till the end of August, after which it was osed at eight o'clock.

C.—REWARDS.

Rewards.—I acted as British Juror in section 3 of class 39. *offee and Cocoa.*—I am glad to say I was successful in obtaining n award of some kind for each exhibitor in this class, although the umber of the exhibits sent were few, yet the total quantity of pro- uce was sufficient to occupy three times the space they did had e been able to obtain more room. I saw a Grand Prix was given r the best exhibits from other countries in this class, and I made n effort to get one for a Ceylon exhibitor. The jury awarded it Messrs. Lipton, Limited, mainly on the ground of the excellent nd variety of their Coffee exhibit. The French official catalogue r this class contained the names of only three exhibitors—Badulla, Haputale, and Northern Districts Planters' Association. The jury ery kindly, and without hesitation, accepted my amended list of welve individual exhibitors. At the same time it is a matter of egret that the official English catalogues, from which the French ere made, were not more carefully compiled in the first instance. he omission of individual exhibitors' names occasioned me a reat deal of trouble with the juries in class 59, 41, and 63. (Tea, pices, non-edible agricultural products, and mines.)

I see that in the official list of awards a Gold medal has been iven to the Ceylon Planters' Association in class 39. I fear this is n error. The class jury awarded no medal to the Ceylon Planters' ssociation, as a collective body, for the exhibit. I did not ask for t, because I did not see how the jury could award a second Grand rix in the same class to Ceylon, and I did not care that the ssociation should receive a lesser award than that given to an individual exhibit in the same class.

The superior jury, however, may have given it.

Class 59—*Tea and Spices.*—I am not quite so satisfied with the wards obtained in this class. The official catalogue contained nly the names of the various District Associations no individual states or companies being included. The jury in this class was ot nearly so complaisant as the jury in class 39, an official application had to be made to the French administration before the amended list of exhibitors could be accepted. Out of 37 exhibitors in Commercial, Black and Green Teas, 26 awards were made; but no awards have been given to Fancy Teas in Commercial Teas in packets. I am exceedingly sorry the Fancy Teas shown by the Co-operative Tea Gardens, Messrs. Lipton, Ltd., Kintyre, Pedro. and Hatherleigh Estates did not obtain extra and special awards, I think that the packet tea exhibit of the Co-operative Tea Garden, and the Maravilla Co. should have obtained a very high award. I drew the attention of the jury to the Golden Tip Tea kindly presented by Neboda, Taprobane, Mipitiakanda, Deaella, Newton, and Middleton Estates, for covering the pillars; but as I could not say they were exhibitors in the proper sense of the word (their names not appearing in catalogues), they obtained no recompense. Had I known how awards were given to "Collaborateurs," I should certainly have brought their names forward under this category. A Grand Prix was given to the Planters' Association of Ceylon for the Collective Exhibit of Tea. The jury proposed, in the first instance, to award the Grand Prix to myself on behalf of the Association. I declined to accept the suggestion, and pointed out that it should be given to the Association only.

I understood from the jury that they would give awards to the Cardamom Exhibits from the Duckwari, Forest Hill, and Mausakande Estates. I was sorry to see when the official list was published that no awards had been. On an appeal to the Superior jury, a Gold and Bronze Medals have been obtained for these exhibitors as "Collaborateurs," but these cannot be regarded as equivalent to a reward for their exhibit as their names do not appear in the official list. In class 41, I was successful in obtaining a Gold and two Silver Medals for the three Cinchona exhibits. I noticed after the official list of awards was published, that several awards have been given to "Collaborateurs" from Ceylon. I much regret that the possibility of obtaining rewards in this way was not brought to my notice. Had I been aware of it, I should have applied for special rewards for Mr. Webster, Miss Parkinson, and Messrs. Burnham and Dupre. The two former did much to lay out the Tea Exhibits, and get the Tea-house ready. The two latter who acted as salesman for Ceylon teas in the Court, are as much entitled to awards, as Mr. Hayward's salesman and saleswomen, to whom Bronze Medals have been awarded. Mr. Davidson has applied for and obtained Silver Medals for Mr. Webster and myself as "Collaborateurs." The application for Miss Parkinson was refused. I am much obliged to Mr. Davidson for interesting himself especially on our behalf, but I have never made any claim for any personal reward for work done in connection with the Exhibition, as I have all along understood that it was a rule of the Exhibition that members of the jury were *hors concours* even as "Collaborateurs."

D.—RESULTS.

Result of the Exhibition.—Sir William Mitchell has dealt with the trade in cocoa in his report.

I may add that I learn that most of the French chocolate manufacturers assert that the Ceylon variety does not suit them; but the leading import-houses here think that our cocoa has much improved. It was the importations of more than ten years ago that created a bad impression. At any rate the samples shown at the Exhibition were much admired, and a bigger trade ought to be done. At present all the imports are from Guayaquil, Venezuela and Trinidad.

India rubber.—I have had many enquiries for this article. I hope the day will come when it will enter largely into the list of exports from Ceylon.

Cinchona.—Quinine manufacturers would like to have Ceylon bark again, but at cheap rates. There is little hope of this wish being gratified.

There seems to be every prospect of an improvement in the price of quinine, and we may hope that the cultivation of Cinchona will be resumed in Ceylon to a moderate extent.

As regards Tea, we have made a good beginning and I am in hopes that Ceylon tea has come to stay. It is not the Exhibition only that has helped us it is known, but the extensive advertising, and in making personal canvassing of the trade, both wholesale and retail. This report deals only with the Exhibition. My full report on the work in France will follow at the end of the year; but I feel we have done more than awaken a mere passing interest in Ceylon

tea. Those people who have had it in cup, like it; and I trust the taste will grow. It must never be forgotten that France is not a tea-drinking country; and even if we oust China teas by degrees this will only mean a consumption of 1½ million lbs. What we must seek to aim at is to spread a taste for tea amongst the labouring classes and bourgeoisie. I have omitted to mention that, apart from the Ceylon Court and Tea-house, we had our tea on sale in cup in fifty-two restaurants and cafés in the Exhibition. I do not think that with the exception of Slater's Restaurant much tea has been sold at these cafés, but as all these restaurants displayed placards "Ask for Ceylon Tea" the advertisement was an excellent one.

CEYLON TEA ON THE CONTINENT OF EUROPE.

Up to 31st December, 1900, £7,000 have been remitted to London for Mr. J. H. Renton's operations on the Continent of Europe, while R11,202·50 have been disbursed in Ceylon at his request in payment of tea, etc., shipped to France for purposes of campaign. So far the only apportionment of these amounts is as follows:—

Account Commissioner for the Continent of Europe, £1,000 at 1/4	R15,000·00
Account Representative at Paris International Exhibition, 1900 . ... £500 at 1/4	R7,500·00
	R22,500·00

INDIAN AND CEYLON TEAS IN CANADA.

Indian and Ceylon teas—the latter especially—figure prominently on the advertisement sheets of the *Canadian Grocer*. The same contemporary gives an illustrated account of "Where Two Brands of Tea are packed," saying:—

In last week's issue of the *Canadian Grocer* mention was made of the amalgamation of two of the leading Canadian packet tea firms through the absorption of The Monsoon Tea Co., Toronto, by The Blue Ribbon Tea Co., Winnipeg and Toronto. The combined business will be conducted on the premises of The Blue Ribbon Tea Co., at 12, Front Street East, Toronto, under the management of Mr. Robert McKay. These premises, which consist of four storeys and a basement, were specially planned for the most economical and expeditious handling of a packet tea business. The accompanying cuts will give a fair idea of the method of work in several departments.

It is the intention of The Blue Ribbon Tea Co. to keep both "Monsoon" and "Blue Ribbon" on the market. Mr. McKay states that the quality of "Monsoon" will be greatly improved, but its general characteristics, *viz.*, that of a very flavory and delicate tea, will be retained, while "Blue Ribbon" will be packed precisely as before.

It is interesting to note the progress of the packet tea business in Canada. For many years it was a debatable question whether packet tea had come to stay, but the large and ever-increasing sales of such teas as "Blue Ribbon" and "Monsoon" show clearly that the tea trade of Canada, like that of Great Britain, is fast getting into the hands of the larger packet firms.

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

It is curious to note the revolution that has taken place in tea trade since the old days, when it was all shipped from Ch during a few months of the year. China Congou is now almos thing of the past, so far as Canada and England are concern nine-tenths of the black tea for these countries being impor from India and Ceylon.

Another great change in the tea trade has been brought ab by the almost universal practice of blending several teas togeth in order to produce what is known as a "perfect tea of its kind."

It is in this scientific tea-blending that the packet people cla to have such an advantage. It may take years to successfu study public taste and produce a perfect tea but once produced, can easily be kept up to the standard by means of blending.

The dealer in bulk tea says: "What is the use of paying packi and advertising charges? Cannot I give better value with bulk teas

The packet teaman replies: "You cannot please your custome with bulk tea because people have found out that the tea in so particular packets is always fresh and good and suits their taste.

"But," replies the grocer, "I can blend my own tea, or b blended tea from my wholesale house."

"Quite true," replies the vendor of packet tea, "but tea-blendi is a science and anyway you must first get your tea and this is ju what the ordinary merchant cannot do."

The teas, for instance, that go into "Blue Ribbon" are, Mr. M Kay informs us, imported fresh every month of the year fro Ceylon estates that are pledged not to sell a pound of their tea any other firm in Canada.

Until very recently, all green tea used in this country came fro China or Japan, but during the last year much attention has bee given to the production of green teas in Ceylon. It is qui possible that Ceylon and Indian green tea will, in the near futur displace a very large amount of Japan tea in both the Unite States and Canada.

All the leading packet firms are now putting up Ceylon gree tea and it is meeting with a very good reception by the te drinking public.

THE AGRICULTURAL CHEMIST TO THE GOVERNMENT OF MYSORE.

The following are Extracts from the Report of the Agricu tural Chemist to the Government of Mysore for the yea 1899-00:—

LABORATORY.

As a Chemical Laboratory is a matter of prime importance to a Agricultural Chemist, several plans for such a laboratory were pr pared by the Agricultural Chemist and State Geologist. The pla selected by the Government provides for the chemical work of th Geological Department being done in the same building as tha containing the laboratories and office of the Department of Agricu ture. In it the present "Geological Laboratory" is included. Th fixtures are being made similar to those of the laboratory of th Central Experimental Farm, Ottawa, Canada, and will, it is hope prove as eminently satisfactory as those from which they wer copied. Before building the necessary additions, the Departmen of Public Works are kindly undertaking to make all the change required in the present building to adapt it to the new require ments. This will give the Chemist some space in which he ca begin analytical work before the entire building is completed— kindness for which he is very grateful to Government and the Department of Public Works. The chemical apparatus has bee selected from various catalogues so as to get the best value. A always, a portion of it had to be made to order to meet speci requirements or to embody improvements which appeared desirabl A large portion of it has arrived.

SAMPLES.

Chemical.—Twenty-five samples taken in connection with th study of various problems of general interest to coffee planter

awaiting analysis. In addition to these, ten miscellaneous ples have been received. To dispose of this work only will uire at least three or four months, and numerous other samples waiting to be sent as soon as there is some prospect of r being taken in hand.

Mycological. -Eleven samples of plants affected with fungoid eases were received and disposed of as circumstances permitted. that could be done was to recommend the application of rdeaux mixture where practicable.

Entomological.—Three parcels of larvæ of injurious insects were eived during the year. For leaf-eating insects not protected by overing, an application of Paris green cannot be too strongly re- mmended, provided care is taken not to poison domestic animals men. Paris green is an arsenite of copper which has been gely used as a pigment; and is now one of the most popular in- ticides. It may be applied either as a spray when suspended in ter (about one ounce to ten gallons of water) or dusted on the nts in the dry condition when mixed with 100 times its weight perfectly dry fine flour or better still "land plaster" (Gypsum) if can be got. Since the close of the year, several samples of in- rious insects and plant diseases have been received. These made neccessary to visit several fields and have led to a practical de- nstration in applying Bordeaux mixture. Paris green could t, unfortunately, be obtained at the time. In the near future it ay be necessary to write a bulletin on the subject. When nding insects it is absolutely necessary to provide them th some of the leaves of the plants on which they are feeding Much more important than the correspondence, in the way of ving information, were the interviews in the office; and more portant still, the talks and lectures on the estates, the villages, the fields and gardens visited when on tour. But of these no cord is kept. In response to an invitation from the United anters' Association a general outline of plot experiments and me of the fundamental principles of manuring were discussed at eir meeting held in Bangalore.

TOURS.

The three principal tours undertaken during the year were—

1. To Bidadi and Closepet.
2. To Koppa
3. To Shimoga District and Mangalore.

A tour to Koppa was undertaken in July to become person- ly acquainted with the effect of the very heavy rains which sually occur during that season of the year in the Malnad istricts. But owing to the practical failure of the monsoon, not ven a moderately heavy shower of rain occurred during the stay f nearly two weeks. The time was occupied in noting what could e seen of the diseases of coffee and arecanut. These diseases are f a fungoid nature. The condition of the moisture, which largely nfluences the growth of the specific fungus, especially Koleroga, s doubtlessly one of the most important factors in the spread of he diseases mentioned. But as the vitality of the trees has oubtlessly something to do with resisting the attack of the disease, he task of finding a remedy is not absolutely hopeless.

The coffee works at Mangalore were visited to see the last step f the preparation of coffee for the European market.

NOTES FROM BRAZIL.

(From the *Brazilian Review.*)

São Paulo, 1st January, 1901.—The Secretary of Agriculturel has ddressed a letter to the Directors of the Dourado Railway Company nclosing a petition received by him, signed by 68 planters in the istricts of Boa Vista and Figueira, begging that the projected exten- ion of the abovenamed line to Boa Esperança be carried as near hose places as possible. Statistics accompany the latter communi- cation showing that there exist in that neighbourhood some 5,000,000 coffee trees whose produce has at present to be transported a dis- tance of from 20 to 25 kilometres to the stations of Dois Corregos nd Jahú; whereas the new extension might easily be constructed o as to pass within 3 to 8 kilometres of where they are. The Minister requests the Directors of the Dourado Line, to give the matter their favourable consideration and report to him the result of their deliberations.

Reports from S. Simão state that the plantations there have suffered great damage from rain and hailstones accompanied by violent gales of wind. Work at the Fazendas has been interrupted, not only from this cause, but also from scarcity of hands; the emigration of labourers being continuous, while there is no immigration to counterbalance it.

Floods have been causing damages in Penna de Franca lately.

The *Correio Paulistano* hears that a European Syndicate is about to undertake the exploration and colonisation of the rich and fertile zone of Ribeira de Iguape, to the south of this State. Snr. Enrico Boccolini, Engineer of S. Paulo, has been commissioned to send in the necessary report and surveys.

Planters in Pereiras and Faxina are trying experiments in the cultivation of rye, with results which are, so far, considered highly satisfactory.

The President of the Agricultural Municipal Commission of Faxina reports the following: Coffee planted in the Municipality in full production 300,000 trees. Cotton crop is estimated at 30,000 arrobas. Wine: production of three establishments with about 100,000 vines, 85 pipes. There are 20 farmers engaged in cattle and horse breeding. Dairy produce is plentiful and food stuffs are being produced in very large quantities.

The Sugar-Coffee War.—Arbuckles and Havemeyer at it again. Advices from New York state that the Sugar-Coffee war has broken out again with renewed virulence. On the 25th of November the Sugar Trust commenced the attack by cutting prices of their brand of coffee 1 cent. per lb., which was immediately met by a retaliatory cut by Arbuckles of 15 cents per 100 lbs. in sugar. This the Sugar Trust refused to follow as they say that at 5·45c profit in sugar ceases. They, however, profess to "be expecting further declines in raw coffee, in which case package coffee will be promptly reduced." As current quotations are already at 9 1/2c. for the Havemeyer Lion Brand, the prospects of coffee can scarcely be described as rosy, to say the least of it. At 9 1/2c. per lb. and 10d. exchange the price per kilo. of roasted coffee in the States is equivalent to precisely 1$003 per kilo., whilst in Rio de Janerio itself the retail price is Rs.1$280 per kilo. Either some one here must be making a pile or American packers be true philanthropists! All the same they are a damned nuisance with their cuts and countercuts and if the Government could introduce a clause into the Commercial Treaty stipulating that both Havemeyer and Arbuckles should have their heads cut off, there would be some sense in it. What earthly use a treaty is going to be so long as this little game is unchecked it is hard to say.

Certainly by continually cutting prices the field of consumption is enlarged, and, were the advantages of lower prices extended everywhere to real consumers as in the States, there would be no great objection, but in Europe it is not so, and every cut only puts so much more profit into intermediary pockets without stimulating consumption at all or very little. To get at the European consumer, what is necessary is to start great Roasting Houses on the American model, who shall import their own raw material.

In this way, at least, every considerable fall of prices would be followed by some expansion of consumption and be thus to a degree counteracted.

Exchange.—Extremes during the week ending January 4 were 9 3/4 —9 31/32 d. for 90 d/s Bank paper and 9 13/16—10 1/16 d. for private.

The average Bank 90 d/s counter drawing rate for the week comes out at 9 55/64 d. the corresponding sight rate being 9 51/64 d. against 9 7/8 d. the average sight rate of the *Camara Syndical.*

The average depreciation for the week, calculated on the basis of the Banks' sight rate, is 63·71% and the premium on gold 175·60% against 63·88% and 176·92% last week.

Rio, January 5th, 1901 Ninety days' rate on London opened on Monday, 31st December at 9 15/16d and closed this evening at 9 13/16d. steady. 1900 closed its disreputable career in a bullish humour with rates quoted at 9 31/32d. exactly 3d. higher on the 31st December, 1899. The closing rate of the last four years was as follows: 1897, 7 13/16; 1898, 7 11/16; 1899, 6 31/32, and 1900, 9 31/32d. Two years ago it was too much money and the fall of exchange that was sending the country headlong to perdition, now it is the other way about, no money and rising exchanges! Alas! men never are but ever too blessed; otherwise a rise of 4 11/32 in 2 1/2 years ought to suffice any one. Leaving detailed analysis of the causes for another occasion, there is no disputing the fact that there has been a notable improvement in the rate during the past year, an improvement that

there is every reason to expect will be continued during the current year if, perhaps, on a more modest scale. During 1900 there were many factors that contributed to raise exchange, amongst which may be enumerated the considerable rise of coffee in foreign markets, the shrinkage of imports and especially the tightness of money throughout the Union. The firm and rising tendency of rates during the last few days of the year somewhat unexpectedly weakened during the past week and, instead of the rising tendency expected after the liquidation, rates were last week decidedly flat. One of the banks was reported to be taking heavily and endeavouring to bear exchange. The market, however, is decidedly optimist for the moment and believes in a rise and so, plenty of bills being forthcoming, these mysterious manœuvres had but little effect and in spite of them the market closed steady with bills offering at $9\frac{7}{8}$d.

Compared with the two previous years the Statistical position of the Market on the opening of the year was as follows:—

		1899.	1900.	1901.
90 days' rate...		$7\ ^{11}/_{16}$	$6\ ^{13}/_{16}$	$9\ ^{7}/_{8}$
Cash in Rio Exchange Banks in Contos		65,031	42,634	45,962
Depositos in c/c	,, ,, .		—	45,272
Debit to Home offices	,, ,, .	7,846	—	—
Credit with	,, ,, ,, .	—	2,110	2,452
Paper money, in circulation	,, .	785,942	733,727	699,000
Bank of England rate ...	.	4 %	6 %	5 %
Price coffee London per cwt.	s .	$3\ ^{1}/_{6}$	$3\ ^{5}/_{6}$	$3\ ^{2}/_{6}$
,, ,, Rio per 10 kilos	rs .	7$900	9$200	6$700
Coffee shipped during year	bags £	10,153,543	8,776,359	
Value f o b	bags .	14,198,000	17,500,000	
Stocks at Rio and Santos	bags.	—	817,274	1,454,830

Roughly, the position is this: the local market has cleared off its indebtedness to London and accumulated a small credit; of 2,452 contos, which can be drawn if required.

On the other hand, the cash balances are particularly low, and only just cover sight deposits. This time last year the Banks, though their cash was even less, were in a stronger position, having a credit with Home offices and branches of over 20,000 contos. Paper money in circulation has diminished 34,000 contos since January, 1899 and 34,000 since 1900, but in addition to this the failure of the Banks has locked up vast sums of money, on the one hand, and intimidated possible depositors on the other. Consequently, the stringency of of money is greater than ever and, so long as it exist, any decided *bear* movement must be very precarious.

Looking abroad, though lower than last year, the 5 per cent. Bank rate is not reassuring and would be almost certain to provoke active remittances except for the tightness of money. As far, therefore, as the purely monetary factors are concerned, they appear to be of a neutral character, one neutralizing the other and tending to keep rates steady.

During the past year, the principal factor of improvement in exchange was undoubtedly coffee, which gave over £3,000,000 more than in 1898, and on it, again, the future of exchange must mostly depend. On the 2nd January, 1900, sterling prices were actually slightly over current rates, whilst their tendency was unmistakeably upwards, instead of downwards as it present. Considerable stress is being laid on this feature of the market, and, certainly, were this market ruled by purely sentimental considerations, a fall would be inevitable. That sterling coffee prices are likely to fall or at any rate to be considerably under those ruling last year, is possible, but it does not follow that the balance of foreign payments would, therefore, be equally affected. On the contrary, there seems every probability of the difference in price being made up by the increase of quantity and that, after all, the value furnished in bills during the first six months, at least, will be quite up to last year's.

Entries and shipments of rubber for the first half of the season show little alteration in volume compared with the two former years, and may be expected to give results similar to last year's for the second half. Prices, however, have fallen and the value of rubber exports during the next six months will in all probability fall about £1,000,000 short of that of the same period in 1900.

On the other side, 90 and 120 days' acceptances for imports now falling due cannot be on a heavy scale and, in fact, judging from the customs revenue, are less than in 1900. It is true that from the 1st January Government requirements will reduce available bills by the equivalent of the increase of the gold duty on imports, but at most this cannot exceed £600,000 per annum and will certainly not be heavier in the first half of the year. There are, in addition, several undertakings on the tapis that are sure to bring grist to the mill sooner or later, whilst the position that the Banco Republica is rapidly assuming may be reckoned on as a new and powerful element of stability.

In the present state of quasi equilibrium of foreign payments, the most powerful factor of stability is, after all, the scarcity of money which, whatever inclination may be, practically prevents any organised "bear" movement.

The burning of paper money, which will shortly be renewed, however its real effect may have been discounted by the money having been practically withdrawn for some time from circulation, must exercise a powerful moral effect which cannot fail to be wholesome and favourable to the rate as it was last year and the year before, when exchange commenced to rise immediately after burning was started.

It is not, however, high or even rising, but steady exchange that is required. A rate oscillating about 10d. as it has done for the last four months is infinitely to be preferred to a big rise that could only serve to disorganize commercial relations once more.

DECEMBER COFFEE MOVEMENT IN THE UNITED STATES.

The *American Grocer* remarks :—

Heavy receipts in Europe and the United States during the past six months; an increase in the world's visible supply of 1,719,7[illegible] bags, and receipts at Rio and Santos greater than ever recorded for the same period, except in 1897-98, are leading features of the coffee movement for the first half of the trade year, beginning July 1, 1900.

The total deliveries in the United States and Europe for six months ending December 31, 1900, were 6,920,399 bags, against 7,770,580 bags for the corresponding time in 1899-1900; 6,359,98[illegible] bags in 1898-99. The average deliveries for the first half of the past three seasons was 7,016,988 bags, so that the deliveries for the past six months fell 96,589 bags below the average, while those for the first half of the previous year were 753,592 bags greater—a fact which substantiates the claim that the increase in the deliveries of that year did not represent actual consumption, but the heavier stocks in second and third hands.

The December deliveries in Europe and the United States were 1,180,838 bags, of which 633,328 bags in the United States, and 547,510 bags in Europe. The deliveries in this country were the heaviest for any month since January, 1900.

The following statement shows the movement and general position of the article :

	Bags.	Bags.
Stocks, December 1, 1900—		
United States	995,867	
Europe	3,906,275—	4,902,142
Receipts during December -		
United States	669,071	
Europe ...	1,522,970—	1,192,041
Total supply, January 1 ...	...	6,094,183
Less stocks, January 1, 1901—		
United States	1,031,610	
Europe ...	3,881,735—	4,913,345
Deliveries, December		
United States	633,328	
Europe	547,510—	1,180,838
Deliveries, December, 1899—		
United States	419,679	
Europe ...	666,616—	1,086,295
Increase as compared with December, 1899 ...	...	94,543
Deliveries (United States and Europe) November	...	1,281,638
Do. (do. do.) October	...	1,340,059
Do. (do. do.) September	...	981,198
Do. (do. do.) August	...	917,608
Do. (do. do.) July	...	1,219,058
Total for six months, 1900	...	6,920,399
Do. do. 1899	...	7,770,580
Decrease as compared with 1899..	...	850,181

The December deliveries in the United States consisted of 568,9[illegible] bags of Brazil and 64,381 bags of all other sorts.

e visible supply of the world on January 1, 1901, was 7,560,345 , against 7,874,142 bags on December 1, 1900 (a decrease of 97 bags), and 7,036,093 bags on January 1, 1900.
ie visible supply on July 1, 1900, was 5,840,561 bags, so that in nonths it has been increased 1,719,784 bags.
he total receipts at Rio and Santos for the first six months ie trade year were 7,060,000 bags, against 6,710,000 bags for same time the previous year, and 5,579,000 in 1898-99.
ading on the New York Coffee Exchange was light, reaching al of 543,500. Spot coffee, No. 7 Rio, fluctuated between $7\frac{1}{2}$ $6\frac{7}{8}$ cents. The lowest price for options was 5·35 cents for uary and December; the highest, 6·80 cents for October.
ith a crop in Brazil of over 10,000,000 bags, and a visible sup- equal to six months' consumption, there is little chance for h higher prices.

OVER MY TEA CUP.

A grocer's tea canister has caused Charles J. Everett to ak out into verse, and with the aid of the pen of Frances Bowditch, to adorn the pages of the *American Grocer*. e sketches we cannot reproduce, but here are the verses :—

This homely can of painted tin
Is casket precious in my eyes;
Its withered fragrant leaves within,
Beyond all costly gems I prize.
For in those crumpled leaves of tea,
The sunbeams of long Summer days,
The song of bird, the hum of bee,
The cricket's evening hymn of praise.
The gorgeous colors of sunrise,
The joy that greets each new-born day,
The glowing tints of sunset's skies,
The calm that comes with evening grey.
The chatten of contented toil,
The merry laugh of childish glee,
The tonic virtues of the soil,
Were caught and gathered with the tea.
Lifeless those withered leaves may seem,
Locked fast in slumber deep as death,
But soon the kettle's boiling stream
May rouse to life their fragrant breath.
With sigh of deep content we breathe
The sweet mists rising lazily,
With eager, parted lips receive
The first ambrosial taste of tea.
For light and warmth and mood of men,
Whate'er the plant hath heard or seen,
Or felt, while fixed in field or fen,
And stored within its depths serene,
Are now transmuted into thrills
Of sense or feeling, echoes faint
From peaceful, perfumed tea-clad hills,
From placid Orientals quaint.
And fancies born in other lands,
Which dormant lie in magic tea,
Dream-castles fair not made with hands,
By some mysterious alchemy
Emerge from cloudland into sight,
Transform the sombre working-world,
The gloomy hours of day or night
From leaden hue to tint of gold,
Bring rest to wearied heart and brain,
Kind nature's soul to us reveal,
Enlarge the realm of Fancy's reign,
Renew the power to see and feel
The radiance of the rising sun,
The sunset's glow, the moon's pale light,
The promise of a day begun,
The rest from toil that comes with night
And as I sip my cup of tea,
Though not a friend may be in sight,
I know that a brave company
Is taking tea with me this night.

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION (LONDON).

The following is an Abstract of the Proceedings of a Meeting of the Committee held on January 22, 1901, when the following members were present:—Mr. D. Cruickshank (in the Chair) and Messrs. A Bryans, J. S Hulbert, C. C. McLeod, F. A. Roberts, J. N. Stuart, A. G. Stanton, and C. W. Wallace.

The minutes of the last meeting held on January 1 were read and confirmed.

Correspondence with Calcutta copies of which had been circulated was laid on the table.

Restriction of Output.—The question of restricting the output of tea was fully discussed and the Chairman submitted a draft of the resolution, proposed to be put before the meeting of members of the Indian and Ceylon Associations on the 23rd instant, the terms of which were agreed to.

Reduction of Duty—Agitation in the Press.—It was decided that the sub-Committee should act on the terms of the resolution adopted at the meeting of the General Committee on January 1, but that in view of the action intended to be taken by Sir H. Seymour King in the House of Commons, all communications proposed to be sent to the Press should be submitted to him for approval before being published.

Tea and Gunny-bags.—A letter received from the Tea Brokers' Association of London, dated 11th instant, condemning the practice of the placing tea in proximity to gunny-bags having been read it was noted that the Secretary had addressed the Conference Liners on the subject with a copy of the above letter, the receipt of which had been acknowledged by them. It was resolved to write to the representatives of the "City Line" also on the subject.

Importation of Rubbish Tea.—A letter, dated 9th instant, from Mr. J. S. Hulbert having been read, the question of what could be done to prevent the importation of low class and adulterated tea was discussed and it was decided that inquiries should be addressed to the Customs' House on the subject.

Imposed Imperial Fiscal Federation.—A reply was directed to be sent to Madras promising to take up the matter when favourable opportunity presented itself.

KANAN DEVAN.

Minutes of Quarterly General Meeting held at Munaar Reading Room, 9th February, 1901. PRESENT:—Messrs. T. W. Schmid, L. Davidson, J S. Sealy (*Honorary Member*), H. E. Tollemache, W. M. Taylor, S. L. Robertson, W. D. Martin, G. H. Danvers Davy, J. J. Murphy, G. R. Whitby (*visitor*), H. L. Pinches, A. Angus, A. J. Wright (*visitors*), F. G. Tallet H. R. Quartley, C. Brander, R. Harley, C. G. M. Plummer, Baron von Rosenberg (*President*), C. Burn Murdoch (*Honorary Secretary*).

Notice calling the meeting taken as read.

The Death of the Queen.—After a few well-chosen words had been spoken by the Chairman, the following resolution was unanimously carried:—

"This Association joins its voice in the grief of the Empire at the death of its beloved Queen and humbly expresses its sympathy with the bereaved Royal Family and H. I. M. King Edward VII."

Minutes of last Meeting were then read and passed.

French Tariff.—Proposed by Mr. T. W. Schmid that this meeting supports the action of the Committee as expressed in the Chairman's letter to Mr. Ormerod, of 24th December, 1900.

New Markets for Coffee Fund.—Proposed by Mr. Davidson "That this Association supports the scheme of Messrs. Shaw & Langdale for pushing sale of coffee in France, and is of opinion that contributions to the scheme should be raised by an acreage assessment on the coffee area of the district." Seconded by Mr. Murphy and carried.

Reduction of Tea Duty. Proposed by the Chairman "That this Association do cordially support any action taken for the abolition or reduction of this duty on the lines recommended by Mr. Acworth, but that they would impress upon all those interested in tea that such action is more likely to meet with success if taken up and vigorously agitated for by shareholders and owners in England than by Planting Associations in this country."

Bridge over Kundale River at Munaar.—Resolved "That this Association thank the Sirkar for the grant of Rs.1,000 now allowed for the above bridge."

Roads.—Read the Chairman's letter of 12th December, 1900, to Chief

Engineer, Trevandrum, and resolved "That, if necessary, this letter be published in the *Madras Mail* and that this Association deplores the delay in answering an important communication of this kind, and that another copy of the letter be sent to the Chief Engineer with a request that he will give this pressing matter his early attention."

Tea Cess.—Indian Tea Association, Circular No. 5. The Chairman read the above circular and strongly supported the resolution contained therein and put it to the meeting, whereupon Mr. Davidson put the following amendment which was seconded by Mr. Tollemache and carried:—"That, subject to the names of the Committee being disclosed and subject also to the Company's or certain proprietors' approval, the resolution has our support."

I. T. A., Circular No. 6. The replies to queries were as follows:—

A. No.
B. No.
C. Plucking in these hills is already fine enough.
D. Yes: subject to confirmation by certain proprietors.

Transport Contracts.—Proposed by Mr. T. W. Schmid "That agents be advised that in future the rates for cooly hire from Boday shall not exceed 6 pies per 50 lbs. load per mile" Seconded by Mr. A. Angus and carried.

Labour Rates.—Proposed by Mr. Murphy "That next year, when agreements are being made for 1902, they shall be made out with the rate for men at 4½ annas." Seconded by Mr. H. L. Pinches and carried.

Volunteer Movement.—Resolved "That this Association congratulate the Volunteer Committee on the success of its preliminary endeavours in this patriotic movement and wish it a long and successful career."

Retirement of Honorary Secretary.—The Chairman proposed a vote of thanks to Mr. Burn Murdoch for his zeal and good offices as Honorary Secretary and expressed the Association's regret this his resignation of the Honorary Secretaryship meant his leaving the district as well, where he would be missed and regretted by everybody. Carried unanimously.

The following papers were laid on the table:—

U. P. A. S. I. Circulars, 3/01, 4/01, 10/01, 80/00, 81/00, 79/00, 75/00, 76/00, 78/00, 71/00, 72/00, 73/00, 69/00, 83/00.

I. T. A. circulars.

Planting Opinion, February 2/01.

Indian Gardening and Planting, 5 and 6.

(Signed) C. BURN MURDOCH,
Honorary Secretary, K. D. P. A.
(,,) B. V. ROSENBERG, *President.*

"KANDY DISTRICTS P. A." MEETING.

KANDY, *February* 16.

A meeting of those interested in forming a Kandy District Planters' Association was held at 10-30 this morning at Victoria buildings. There were 16 present. Mr. Gordon Pyper was elected Chairman and Mr. W. O. Secker, Secretary. Mr. Huxley proposed that Mr. E. Webb be Chairman of the Association. Mr. C. Gibbon seconded and this was carried. It was decided that the annual subscription should be R12-50. The following were elected to serve on the Committee:—Messrs. E. F. Rowsell, H De Sanctis, W. F. Murray, T. C. Huxley, R. Anderson, C. M. Fernando, Herman, C. Gibbon, Major Pain, H. Wills, F. H. Shelley, G. J. Murray, H. Stevenson, G. Pyper, L. Carey, J. B. Coles, and Chairman and Secretary *ex-officio*. Messrs. Pain, Gibbon, the Chairman and Secretary were elected to serve on the Parent Committee. The Chairman, Mr. Huxley and the Secretary formed a Committee to draw up rules. The Chairman, Secretary, and Messrs. Carey and Coles, to serve on the Labour Federation Committee. The Chairman at this stage proposed that the Asssociation be called the Kandy Districts Association and that they apply to the Parent Association to be affiliated. Mr. Secker was confirmed as Secretary on the suggestion of Mr. Coles. It was agreed that the general meeting be held on the second Friday in March. Papers were then circulated for signatures of those willing to be members, with the result that about 25 names were taken.

MARKET REPORT.

[*Per Mail advices 1st February* 1901.]

COFFEE.

The London Commercial Record says:—There continues to be a dragging demand, both the home trade and export shewing little disposition to operate, and in most cases prices have again been in favour of buyers, Colory Costa Rica of the new c however, met with competition at firm to higher rates a small shipment of fine Plantation Ceylon brought full va Further moderate supplies of new crop Neilgherry have att ed little attention, the better qualities being fairly ste whilst less desirable descriptions were very dull of sale at a de of 1s to 2s per cwt. The market for "futures" has at a been further fall, but at the close there is a recovery of 6d to 9d per from the recent lowest prices, which are still, however, below t current a week ago; yesterday's business comprised, March at 9d to 30s 4½d, May at 30s 3d to 30s 10½d, July at 30s to 9d to September at 30s 10½d to 31s 6d, and December at 31s 6d to per cwt. We quote:

London ...	Santos ...	March delivery ...	30s 3d.
New York ...	No. 7 Rio...	,, ...	5·25 ce
Hamburg...	Santos ...	,, ...	30¼ pf.
Havre ...	Santos ...	,, ...	37 fra

Imports, Deliveries and Stock of Coffee in London, are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	19
Tons ..	14,444	13,037	1,807	1,
	Home Consumption.		Export.	
	1901.	1900	1901.	19
Tons ...	1,478	1,619	880	1,

The preceding figures exhibit—

In the Imports a decrease this year of
Home Consumption a decrease of ... ..
Export a decrease of ... ...
Stock an increase of 1,

Auctions this week have passed off as under:—

CEYLON.—*Plantation*—11 casks 1 tierce 4 barrels 2 bags mos sold, small 55s, bold to very bold 105s 6d to 110s.

EAST INDIA.—710 bags 37 cases partly sold as follows:—*Neilghe* smalls 44s to 47s 6d, middling 53s to 55s, bold 69s peaberry 53s to

NYASSALAND.— 226 bags sold, pickings 24s 6d to 38s 6d, sm 33s to 34s 6d, middling colory to dull blue 43s to 45s 6d, bold 48s to 49s 6d, pea-berry 52s to 56s.

LIBERIAN.—21 bags withdrawn.

JAMAICA.—3 casks 150 barrels 39 bags mostly sold - smalls good to fine ordinary greenish 40s to 43s, low middling to middl 45s to 56s, bold 61s 6d, peaberry 50s.

COSTA RICA.—3,007 bags partly sold, new crop, smalls 24s 6d 50s 6d, low middling to middling 49s to 57s 6d, good middling 6d to 65s 6d, bold 66s to 81s, fine blue bold 82s 6d to 91s, pea-be 40s 6d to 82s; old crop, good bold faded colory 69s to 70s, peabe 63s to 70s.

GUATEMALA.—Of 2,209 bags catalogued 1,250 bags sold, smalls to 46s 6d, low middling to middling 50s to 54s, bold 56s, fine b bold 68s 6d, pea-berry 58s to 64s.

VERA PAZ.—193 bags partly sold, smalls 44s, low middling 48s

NICARAGUA.—25 bags new crop sold, smalls 35s 6d, middling b 54s, fine bold 77s, pea-berry 60s.

COLOMBIAN.— Of 1,336 bags offered 500 bags sold, smalls 33s 6d 41s 6d, fine ordinary 40s. low middling to middling 44s 6d to 4 bold 50s to 61s, pea-berry 51s to 57s 6d.

MEXICAN.—Of 1,202 bags a small part sold, smalls 41s 6d, b 58s, pea-berry 58s.

ECUADOR.—125 bags partly sold, fine ordinary 34s to 34s 6d.

The following passed the hammer unsold:—146 ½-frazils Moc 142 bags Java Liberian, 281 bags Guatemala, 74 bags Salvad and 50 bags Central American.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-9 Bags
Rio ...	1,818,000	2,363,000	2,121,000	3,022,0
Santos ...	5,887,000	4,934,000	4,224,000	4,860,0
Total...	7,705,000	7,297,000	6,345,000	7,882,0
Crop...	—	8,971,000	8,772,000	10,461,0

Rio Exchange 10 5/32d, previous day 10⅛d.

HAVRE, *Jan.* 31.—Good average Santos January opened stea at 36½f. and closed steady at 37f., March opened at 36¾f. a closed at 37f., May opened at 36¾f. and closed at 37¼f., Septemb opened at 37¼f. and closed at 37¾f., December opened at 47¾f. a closed at 38¼f.

HAMBURG, *Jan.* 31.—Good average Santos January opened steady 29½pf. and closed steady at 29¾pf., March opened at 29¾pf. and osed at 30¼pf., May opened at 30½pf. and closed at 30¾pf., Septem- r opened at 31pf. and closed at 31½pf., December opened at 31½pf., d closed at 32pf.

NEW YORK, *Jan.* 31.—Closing prices of No. 7 Rio were as follow:—

	Jan.	Feb.	Mar.	April.	May.
nuary 30...	5·20	5·20	5·25	5·30	5·35
nuary 31...	5·20	5·20	5·25	5·30	5·35

Chief marks of East India sold in Public Auction.

Mark.	Ship.	1st Size.	2nd Size.	3rd Size.	P. B.	Triage.	District.
lmer (new crop).	C/ Ranald.	6@55/	54 bot. in.	57@44/6	10@54/	15@40/	Neilgherry.
onoorali ,,	,,	7@55/	25 bot. in.	9@44/	5@58/	2@35/	
anaar ,,	,,	1 bot. in.	15 bot. in.	10@47/	3 bot. in.	2@38/	
ttapollium ,,	,,	1@53/	11 bot. in.	6@47/6 22 bot. in.	5@53/	2@35/6	
otagherry ,,	,,	5 bot. in.	18 bot. in.	7 bot. in.	6 bot. in.	4@39/6	
F. C. udor Valley ,,	,,	7 bot. in.	28 bot. in.	15 bot. in.	8 bot. in.	5@42/6	
otagherry ,,	,,	3@69/	17@54/	8@46/	5@54/	2@40/	
D. C. enhope ,,	,,	1 bot. in.	16 bot. in.	29 bot. in.	4@53/6	4@37/6	
J. H. illoor ,,	,,	10 bot. in.	54 bot. in.	35 bot. in.	9 bot. in.	13@40/6	
lyffe ,,	C/ Graham.	6 bot. in.	21 bot. in.	16 bot. in.	4 bot. in.	2 bot. in.	

TEA.

INDIAN.—Auctions were larger, including 59,800 packages against 1,300 packages previously, and 41,800 for the corresponding eriod of 1900.

Notwithstanding these full supplies prices were fairly maintained xcept in the case of common grades and parcels with plain nfusions which were generally easier. Quotations for the better escriptions, however, varied particularly for medium Broken 'ekoes, some selling well while others were neglected. Several lesirable invoices with a little cold weather flavour met strong ompetition, and higher rates were secured for them.

Duty payments have been on an increased scale for fear of a urther addition to the import on Tea. This unfortunately involves he temporary locking up of a good deal of money at a time when he sums to be found for deposits are considerable, and is having a rejudicial effect on the market.

For 50,000 packages on estate account 6⅝d per lb. was realised, compared with 7¾d per lb. for 39,400 packages, and 9½d per lb. for 38,500 packages in the two preceding seasons.

From the 1st to 31st ultimo, the following have been printed on Importers' account:—

1901.	1900.	1899.
239.400 pkgs.	244,000 pkgs.	221,100 pkgs.

making 1,115.000 packages of the 1900 crop disposed of to date against 1,146,000 packages in the same portion of 1899-1900.

CEYLON.—Public Sales were heavier, totalling 39,400 packages, (spread over two days) contrasted with 27,000 packages on the foregoing Tuesday and 24,100 packages in the twelve months before. Dealers were somewhat disinclined to add to their stocks for the reasons alluded to above, and much irregularity was noticeable in the bidding. Both leafy and brokens under 6d per lb ruled in favour of buyers, Pekoe Souchongs and Pekoes with poor cup often shewing a decline of ½d per lb. Medium to fine Pekoes and Orange Pekoes did not mark much change, being in many instances supported by outside orders, but Broken Pekoes from 8d to 1s per lb. were in less demand and the unattractive lots went easier. The proportion of finest and choice lines was again small.

The average has fallen to 6½d per lb. On the 24th instant it stood at 7d per lb., and rather over 7¼d per lb. in 190 0.

Quantity catalogued in January:—

1901.	1900.	1899.
146,000 pkgs.	137,800 pkgs.	110,000 pkgs.
(Avge. 6⅝d per lb.)	(Avge. 7⅝d per lb.)	(Avge. 8⅛d per lb.)

JAVA.—About 1,780 packages of direct import were submitted to the trade, which passed without spirit, and withdrawals were frequent in consequence of limits not being obtained.

For the 7th and 14th instant 2,000 packages have been declared. Offerings aggregated:—

1901.	1900.	1899.
8,800 pkgs.	7,700 pkgs.	3,900 pkgs.
(Avge. 5¾d per lb.)	(Avge. 6¾d per lb.	(Avge. 6¾d per lb.

Deliveries—The clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 29th January, 1901 ... ... 27,006,699 lbs.
Do. do. 1900 ... ... *33,270,376 „

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India ...	49,696	10,129	59,825
Ceylon ...	34,204	5,162	39,366
Java ...	724	1,061	1,785
Total ..	84,624	16,352	100.976

Also 232 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated February 1st, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1900-1901	1,150,176	865,536	38,669
1899-1900	1,216,076	826,660	40,989

60,328 *pkgs.* INDIAN
39,703 „ CEYLON
1.785 „ JAVA
} Total 101,816 packages were offered in public auction this week.

The Indian and Ceylon Associations are still engaged in endeavouring to promote joint action amongst growers with the object of restricting the output of Tea. At a Committee Meeting of the Ceylon Association held on Wednesday, the Report of the joint Committee restricting the output for the current season was approved and adopted, and a resolution passed asking them to give effect to the same.

The total exports from Ceylon during 1900 exceeded those of 1899 by nearly 19 million pounds, this heavy increase being accounted for by the extraordinarily favourable weather for Tea flushing, together with the copious manuring of some estates. The direct exports to markets outside the United Kingdom showed a very satisfactory increase, viz.:—

	1900.	1899.	1898.	1897.	1896.	1895.
Lbs. ...	34,671,446	25,946,032	23,635,238	17,124,508	14,205,051	12,186,532

A remarkable expansion took place in the Russian market, probably in part due to the trouble in China and partly to the unusually low prices. Australia also showed a satisfactory increase, while several of the less important countries have taken larger quantities

The uncertainty as to whether any alteration is likely to take place in the rate of duty is occasioning heavy duty payments at the present time, and buyers are on this account ready purchasers at the current low prices.

INDIAN.—60,328 packages were brought forward which, with the exception of 60,656 packages in January, 1900, was the heaviest quantity ever offered in London in one week. Quotations in Monday's sale were fairly well maintained for all except low priced descriptions, which sold irregularly and showed a decline of about ¼d per lb. In the later sales a somewhat easier tone was generally apparent.

Week's average of Tea sold on Garden Account 1901, 49,905 pkgs., av. 6·59d. 1900, 38,550 pkgs., av 7·71d.

Total Tea sold on Garden Account 1st June 1900 to date, 947,733 pkgs. av. 7·43d. 1900, 943, 878 pkgs., av. 8·39d.

CEYLON.—The heavy auction of 39,703 packages was only exceeded one week in August, 1899, which was after the refusal of buyers to purchase Tea on account of the draft dispute. The large quantity of Indian and Ceylon brought forward, aggregating together 100,031 packages, proved rather a strain upon the market, and prices for medium and common grades were easier to the extent of about a farthing per lb.

Average for week 6·40d, against 7·25d in 1900.

Ceylon Tea sold on Garden Account 1st January to date, 124,660 pkgs., av. 6·65d. 1900, 135,009 pkgs., av. 7·62d.

* This embraced one large payment in advance.

JAVA.—Sold slowly with poor competition, a considerable proportion of the offerings being withdrawn owing to bids not reaching the limits fixed.

Bank Rate 5 per cent. Exchange on London three months sight:—Calcutta 1/4¼. Colombo 1 4 9/32.

COCOA.

Large supplies were brought to the hammer on Tuesday, the total aggregating 8,989 bags; there was again a desire shewn on the part of importers to sell, and about 5,000 bags were placed at irregular prices. Of 1,051 bags Trinadad catalogued 720 bags sold at fairly steady values—superior red 84s, fine to very fine 70s to 72s 6d, middling to good 67s 6d to 69s 6d. Grenada, of which 4,039 bags were offered, declined 1s to 1s 6d, 3,000 bags selling at 67s to 67s 6d for fine, 65s to 66s for common to good. 91 bags Dominica mostly found buyers at 64s to 66s 6d for common to fine. 15 bags common Jamaica partly sold at 64s, whilst 32 bags St. Lucia half sold at 64s to 66s for common to fine. Of 808 bags Guayaquil only a few bags of Esmeraldas sold at 64s 6d. Of 371 bags Samana 170 bags brought 63s 6d to 64s. Ceylon was represented by 2,032 bags; Estate grown experienced active competition at very full to higher rates, but Native ruled in buyers' favour: 950 bags sold at 95s to 103s 6d for fine bold red, 83s to 90s for good medium and bold, 78s for middling ditto, 55s 6d to 66s 6d for small, and 63s per cwt. for Native.

COCOA POWDER.

At public sale on the 29th ultimo 9 cases English sold at 9d to 9½d, and 48 cases Dutch at 11d to 12½d per lb.

PEPPER.

BLACK.—The market was very quiet early in the week and values declined, but at the close the tone is steadier. On the spot about 1,000 bags Singapore have been sold at 6d to 6 1/16d for grayish and at 6⅛d for fair. To arrive 300 tons Singapore sold—January-March at 6¼d to 6 3/16d, February-April 6¼d to 6 3/16d, March-May 6 9/32d to 6 7/32d, and April-June 6¼d per lb.

At public sale on Wednesday 577 bags Singapore were brought forward and 494 bags sold—greyish and dusty 6d to 6⅛d; of 525 bags Tellicherry one lot good heavy realised 6 3/16d. 260 bags Alleppy, 32 bags Lampong, and 119 bags Trang all passed t hammer unsold.

WHITE.—Quiet, but steady. Fair Singapore on the spot sold 9¼d. and Penang at 8½d per lb. To arrive no sales reporte Singapore offers at 9 3/16d and Penang at 8 1/16d.

At auctions on the 30th ultimo 165 bags 14 cases Singapore we offered and 9 cases fine bold sold at 10½d per lb.

GINGER.

COCHIN.—Offerings were limited to 39 cases medium and sma rough cut slightly limed and 59 bags small to bold dullish roug partly shrivelled, which passed the hammer unsold at 47s and 3 respectively.

JAMAICA.—31 barrels were offered and 2 barrels lean medium a small brown washed sold at 32s per cwt.

CINCHONA.

A parcel of Crown bark offered and sold at 7d per lb. fo Huanoco quill (11 bales) and 1s 7d to 1s 8d for Loxa (11 bales), th latter figure showing an advance of 2d. Ten bales of yellow fla Calisaya were bought in at 2s, the limit being 1s 6d. The auctio to be held at Amsterdam on February 21 will consist of 5,426 bale of Ledgeriana and Hybrid, and 412 cases and 1,133 bales Succirubr The stock in first hands at Amsterdam on January 30 consisted 2,809 packages Government bark and 11,109 packages private bar including the quantity to be offered in the above-mentioned auctio The exports from Ceylon for the past five years have been—

	1900.	1899.	1898.	1897.	1896.
Lbs. ...	510,462	618,921	975,784	653,346	1,309,56

In 1900 the United Kingdom received 498,168 lbs., the remainde being divided between China, Italy, and Singapore. The shipment of bark from Java for January amount to 1,100,000 Amst. lbs.

QUININE.

QUININE has slightly improved its position in second-hands sinc last week, but the tone throughout has been quiet. Best Germa brands have been sold for March delivery at from 1s 1d to 1s 1¼d and on Wednesday there were still sellers at the outside figur May delivery has also sold at 1s 1½d, and June at 1s 1⅝d per o To-day business has been done at 1s 1d, spot, but the market close with buyers at this figure, but no sellers.

(AVERAGE FOR ALL INDIA 6·59d., FEBRUARY 1ST).

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.
Neilgherry ...	**535**	**5·87**												
Culloocoray ...	19	5½	9	7½	..	...	...	..		...	...	...	10	3¾
Kairbetta ...	66½c	3¾	...	...	66½c	3¾	...	...		...	...	...	...	...
New Hope ...	220 p	5½	102 p	7 7¾	68	4½ 4¾	...	...	50	4	...	.	.	...
Prospect ...	162	6¼	73	7 7½	89	5 6½	...	...	...	..	..	...	...	...
Seaforth ...	68	7	35	6¼ 8¾	20	5½	13	9¼	...	...	.	...		..
Travancore ...	**1922**	**4·91**												
Arienkow ...	56 p	3½	...	....	37	3¾	...	...	19	2¾	...	...	...	...
Arnakal ...	181 p	5¼	73	5 5¼	31	4¾	44	6½	17	4¼	...	...	16½c	3 4¾
Bonaccord	187 p	4¾	...	...	58	4½ 4¾	69	5¼ 5½	36	4	9	3¾	15 p	3 5¾
Braemore	...	4¾	19	5	31	4½	20	5¾	8	4	4	3½	5¼c	3½
Cherian Mallay ...	324 p	3½	198	3½/4	94 p	3¼ 3½	...	...	...	..	...	...	32 c	3½
CMR ...	24	3¾	...	...	14	3¼	10	4¼	...	...	...	...	...	...
Invercauld ...	54 p	4½	13	5¼	20	4¼	...	..	9	3¾	...	...	12½c	3¼ 5¼
Kan Dev H Co M ...	132 p	6¼	22	7¼	32	5½	28½c	9	...	...	..	...	50½c	4¾ 6½
Merchiston ...	56	4	...	...	33	4¼ 4½	...	...	..	..	23	3½ 4	...	...
Poonmudi ...	66 p	5	20	6	26	5	...	...	11	4	5	3¼	4½c	3¼
SIT Co Kuduwa K.	174 p	5½	50	5/5½	...	...	47	6¾	21	4½	...		56 p	3¼ 6¼
Stagbrook ...	231 p	5¼	102 p	7½ 7¾	48	4¾	...	...	58	4 4¼	20	3¾ 4	3½c	3¼
Sth Trav Co Ven ..	159 p	6	...	...	64	5½ 5¾	58	6¼ 7	24	4½	..		13½c	3½
Vembenard ..	132	5½	34	5¾	25	4½	41	6¾	...	...	20	4	12	4¼
White Hills ...	59	4¾	...	...	34	4¼	25	5½		...	...	...	...	...
Wynaad ...	**508**	**5·33**												
Chulika ...	112 p	6¼	54½c	8¼	38	5¾	...	...	20	4½	...	...	...	...
Kanambyle & Cher.	122	5¼	26	7½	33	4½	31	5¾	32	4	...	...	...	...
Pootoomulla ...	87 p	5	3½c	1 1½	21	4¾	15	5¾	23	4¼	25	4¾	...	...
Wynaad T Co Per...	187 p	5	68	4⅓ 4¾	...	...	64½c	7	34	4¼	21	3¾	...	..

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 8th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad.

Weather.—Blossom showers fell on Tuesday the 19th, and also on the 21st and 22nd, totalling altogether about an inch; they are very premature. Few estates are pruned out as yet, and could have waited for rain three weeks or so with advantage. *Works*—Pruning, manure and weeding. Prospects for next year are encouraging.

Coorg.

Polli Betta, 26*th February*. —*Weather*—continued cloudy till Sunday last with thunder showers in some parts of the country. It has since been clear with high East wind in the afternoons. *Crops*—Gleaning going on. The rain reported last week is bringing out a blossom on the Western side; over an inch was gauged. Where crops have been heavy this season, they will, of course, be short next season. *Labour*—sufficient. *General Health*—small-pox is still prevalent.

CEYLON AND THE TEA CRISIS.

Our last and present issues contain lengthy reports of the proceedings of the Annual Meeting of the Planters' Association of Ceylon. The chief subjects dealt with are of such great importance that we need not apologise for devoting considerable space to them. Yet we cannot but feel that much of that space may be regarded as wasted. The Ceylon planters have not dealt with the Tea Crisis as they might reasonably have been expected to deal with it. They have added nothing new to the arguments for or against over-production, and the only new statement we have observed with reference to the desirability of increasing consumption is a mis-statement. They have suggested co-operation with India while making remarks calculated to alienate the sympathies of Indian planters. They have advocated as

the only practicable course one that appears to us to be ridiculously impracticable. Perhaps, like ourselves, they have found that a multitude of counsels conduces to confusion and bewilderment, rather than to wisdom. At any rate, their decision leads us to suppose that wisdom has not presided at their Council meeting. Mr. Rosling, the Chairman, put forward an eminently "safe" resolution, *viz.* :—"That action be taken by this Association with a view to form a combination amongst Indian and Ceylon planters to cope with the present unsatisfactory condition of the tea market consequent on over-production." We allude to this as "safe" because, despite arguments to the contrary, we hold that present supplies of British-grown teas are in excess of demand. Unfortunately, Mr. Rosling attached to his resolution a rider that gives it an entirely wrong direction, *viz.*, the substance of the recommendations of a sub-Committee—"That action be taken by this Association with a view to form a combination amongst Indian and Ceylon planters to cope with the present unsatisfactory condition of the tea market consequent on over-production. That the sub-Committee considers that a combination with India having for its object the reduction of tea output is desirable. The sub-Committee considers that the only practicable scheme is an all-round reduction of the plucking area by 10 per cent. conditional on 80 per cent. of the cultivated tea acreage joining in the combination and on India joining on the same terms. If any proprietor prefers to make 10 per cent. of his tea crop into green tea, this shall be accepted in lieu of reduction of his plucking area by 10 per cent. That a sub-Committee be appointed to obtain adherence to the scheme above described."

It appears very unlikely that the required 80 per cent. will come to an agreement. If they do, it is still more unlikely that their agreement will produce benefit to anyone except some of the remaining 20 per cent. When Mr. Rosling remarked "My own personal view is that increasing the consumption is only a minor help to the reduction of production," he talked nonsense, while probably meaning sense. The most charitable view we can take is that he intended to say something like this : that efforts to increase the consumption would be only a minor help as compared with efforts to reduce production. How increase of consumption could help to bring about reduction of consumption, we fail to see. Then, again, the seconder, Mr. Sholto Skrine, scarcely took a business-like view of the situation when he remarked "We are, gentlemen, practically pushed into a corner. We ought to have the satisfaction, however, of knowing that our great rival, India, is pushed into an even closer corner than we are." The statement was neither just nor generous. Mr. Jas. Ryan was humorous, but scarcely discreet, when he said, "We have been treated very kindly in this matter by India. I am sorry to say that I regard this exceptionally friendly attitude of India with a very great deal of suspicion, and I regard it very much from the point of view of the school-boy, who, having received a large hamper from home, suddenly finds the 'bully' of the school wishing to lend him his knife to cut the string. When we were down, India treated us with a very considerable measure of contempt ; when we were beginning to develop a pretty little business by advertising and by taxing ourselves in a way that no other community in the world has ever done, India stood aloof, or made a sort of half-hearted attempt to compete with us and then retired from the business. Gentlemen, if we were to treat India as she deserves to be treated we should throw away scabbard, and fight them on their own ground, letting weaker go to the wall." This is exactly what we should l to see Ceylon do, for we hold that the interests of Ceyl and Indian tea-planters were *not* identical But if we w advocating co-operation between the island and the contine we should hardly do so in terms so well calculated to provo dissension.

With one remark of Mr. Rosling we were in full accor "if the time for combination is not ripe, it never will b It is not, it never will be. The time can never be ripe so gross an interference with the liberty of the individ planter as Mr. Rosling has advocated. The time can nev be ripe when tea-planters can defeat the real or suppos tious machinations of tea-dealers in England by reduci supplies. The time can never be ripe when tea can popularised by an increase of price to the consumer, or reduction of profit to the middleman. Tea-planters ha tried a fall with tea-dealers already, and have had the wor of it. This is certainly no reason why the former, seei that they are Britons, should not try again ; but it certain increases the odds against them. What planters have consider is cost and quantity of production ; price and exte of consumption ; cost and efficiency of means of distributio If they hope to improve the last by reducing the quanti produced, they will be disappointed. We believe that th view will commend itself to but few at present ; but, late it will be recognised that neither individual planters n collective bodies of planters can set economic laws at defian without incurring a very expensive lesson.

CHARITY !

"C. M. B. W." writes to the Ceylon papers :—How woul it do if all our planters would agree to send Russia this yea —not only as a discount on their last year's big order some 9,000,000 lbs., but as an advertisement as well—say 1 per cent. of our current year's crop, provided Governmen will carry it free to Colombo and ship it free of Cess, to b carried free in Russian steamer and handed over to th starving people of that country, duty free ? Don't you thin this would be a very good idea at this juncture, and help u by keeping a matter of, say, 1,300,000 lbs. tea off the Londo market, if all joined ? I cannot help thinking it would b the best and cheapest advertisement we could possibly go i for in that great tea-drinking country, as each estate's te would have its name on the packages. The tea should, think, be sent through the Russian Consul, Colombo, and b consigned to the British Consul, St. Petersburg, for distribu tion to the poor starving Russians. I'm quite willing t head a list and give 1 per cent. of my little crop, both estat and bought leaf." This correspondent's initials must hav suffered at the hands of the P. D. At any rate, "C. M. P. W —Charity Might Pay Well—would be more appropriate. Th idea of helping starving people by means of presents of te is a peculiar one, but it has been taken up seriously by ou

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nicho son's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf peopl unable to procure the Ear Drums, may have them free.

Address—No. 989 D, The Nicholson Institute, Longcott, Gunnersbury, *Londo*

[w. 26-5-00—26-5-1901.]

ombo contemporaries, and is even stated to have "attract-he attention" of the Russian Vice-Consulate in Colombo. e tea would be useless without "free freight" and "free ." A Colombo contemporary naïvely remarks:—"Tea is a good substitute for bread, but if used in the right way ld be a welcome addition to it." But—if there be *no d!* Free samples to richer people than Russian starving sants would be wise from an advertising point of view. m the standpoint of Charity, tea, alone, would scarcely egarded as very satisfying. Why try to blend "charity" "business" when, as is well known, Ceylon planters averse to blends?

BOARD OF TRADE RETUNS.

JANUARY, 1901.

mports, Consumption, and Exports of various articles ing the month of January are shown in the tables ow:—

Coffee.—The figures are discouraging, the accumulation of k being very marked.

—		1899	1900.	1901.
orted ...	cwts.	36,171	39,131	33,283
ne Consumption	,,	24,593	40,195	33,978
ort ...	,,	40,382	50,676	28,214
k ...	,,	282,000	264,000	300,000

Cocoa (Raw).—Stock has increased here also, but not in portion to the expansion of trade.

—		1899.	1900.	1901.
orted ...	lbs.	3,047,239	4,500,181	5,827,524
ne Consumption	,,	3,231,623	4,099,944	5,645,742
ort ...	,,	1,100,784	916,316	713,200
ck ...	,,	15,159,000	12,627,000	16,762,000

Cocoa (Prepared).—Home consumption steadily in-ases:—

—		1899.	1900.	1901.
orted ...	lbs.	433,437	515,109	687,585
ne Consumption	,,	517,323	513,413	584,411
ort ...	,,	105,685	73,730	52,210
ck ...	,,	1,123,000	236,000	372,000

Tea.—These figures are very unsatisfactory. A large rease in imports is but partially met by an increase in orts, while home consumption compares badly with nuary, 1900. There are, however, special reasons for this, d in fact the January 1901 figures are abnormally high her than abnormally low, in consequence of fears of a fur-er enhancement of duty. Stock is very heavy.

—		1899.	1900.	1901.
ported ...	lbs.	23,576,340	34,891,302	37,428,674
me Consumption	,,	19,956,732	39,904,928	32,486,134
port ...	,,	2,651,650	2,409,920	3,852,505
ck ...	,,	99,795,000	104,081,000	124,215,000

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

The General Committee of the Indian Tea Association, Calcutta has issued the following Monthly Return of Sailings and Daily Customs Entries of Tea from Calcutta, and also a Return of Exports of Ceylon Tea for four years up to 4th February 1901.

Exports of Indian Tea from Calcutta.

	1901. Lbs.	1900. Lbs.	1899 Lbs.
Sailings to Great Britain in January.	12,489,357	14,379,354	9,215,701
Sailings to Great Britain from 1st April to 31st January	152,900,616	145,586.041	129,390,939
Sailings to Australia and New Zealand in January	159,126	501,703	781,854
Sailings to Australia and New Zealand from 1st April to 31st January	9,119,674	8,224,290	6,026,341
Sailings to America in January	341,637	411,380	378,912
Sailings to America from 1st April to 31st January	3,841,202	6,124,631	3,157,306
Sailings to other places in January.	1,072,896	447,650	597,768
Sailings to other places from 1st April to 31st January	9,875,639	7,558,553	8,522,184
Total Sailings from 1st April to 31st January	175,737,131	167.493,515	147,096,770

				Lbs
Daily Customs Entries for Export to Great Britain from 1st April to 31st January...			1901 ...	156,064,213
Do.	do.	do.	1900 ...	146,151,500

Exports of Tea from Ceylon.

Total Exports from 1st January to 4th February,			1901 ...	12,456,415
Do.	do.	do.	1900 ...	11,479,961
Do.	do.	do.	1899 ...	8,062,816
Do.	do.	do.	1898 ...	10,051,898

Statement showing the Exports of Tea to Sundry Ports during the month of January, 1901.

FOREIGN PORTS.

	Lbs.		
Trieste	9,518		
Marseilles	90		
Bremerhaven	25.364		
Hamburg	21,613		
Copenhagen	1,270		
Naples	450		
Odessa	27,647		
Constantinople	25,705		
Cape Town	3 690		
Mombassa	1.800		
Port Said	110		
Suez	880		
Natal	568		
Berbera	1,080		
Zanzibar	2,670		
Aden	25,763		
Hong-Kong	130,251*		
Shanghai	500		
Bunder Abbas	17,851		
Bushire	38.202		
Singapore	9,000		
Alexandretta	606		
Beyrouth	2,374		
Bussora	13,764		
Smyrna	3,070		
Bagdad	8,464		
Trebizonde	271,374		
			643,674 lbs.
Bombay	400,733		
Kurrachee	2,320		
Other Indian Ports	26,169		
			429,222 ,,
		Total... ...	1,072,896 ,,
*	*	*	

* It is understood that the bulk of this tea consists of transhipments for the United States and Canada.

Differential Duties.

Introducing the U. P. A. S. I. circular on this subject, the *British North Borneo Herald* remarks :—We ourselves do not, being uninterested in either tea or coffee, feel inclined to venture an opinion on such a very important subject, but we earnestly entreat those of our readers who, whether from experience gained in the cultivation of coffee or from a mature knowledge of planting in general, to be good enough to submit their views on the action that the Association has taken in the hope of bringing the matter, an eminently momentous one, under discussion.

* * *

The *Jamaica Daily Telegraph* says :—The action taken by the United Planters' Association of Southern India in consulting the leading Colonial newspapers, and the principal Chambers of Commerce throughout the Empire, will, we trust, lead to results beneficial to other interests besides the tea and coffee industries of India. Indeed, the covering letter of the Secretary of the Association to the *Daily Telegraph*, the resolution passed at the annual meeting of the Association, and the explanatory communication which we have received from the Chairman of the Association furnish pleasing evidence of an earnest desire for co-operation in a movement having for its object the combination of Great Britain and her Colonies and India against the world by means of a system of differential or preferential duties. The *Daily Telegraph* has been asked to give its opinion on the action that has been taken by the Association in bringing such a very important subject under discussion. We need hardly say that the course adopted by the United Planters' Association of India has our hearty approval. We have repeatedly and consistently maintained that if Great Britain and her Colonies and Dependencies are to hold their own in the fierce conflict with hostile foreign tariffs, a more or less uniform system of preferential tariffs must be adopted within the Empire, while a policy of free trade or judicious protection might be pursued towards foreign countries. Many months ago, we wrote : "The first practical step towards Imperial Federation must be a thorough re-adjustment of Imperial and Colonial tariffs. The arrangement would be as nearly as possible of the nature of a Zollverein, based upon principles of the free exchange of commodities within the Empire, but with the power to levy duty for revenue purposes and sometimes for protective purposes against foreign goods."

It is very gratifying to find that the opinions which we expressed some time ago were endorsed or echoed in the rectorial address which Lord Strathcona delivered to the students of Aberdeen University on the 18th of last month. The main subject of His Lordship's address was "The growth of Imperialism, and the efforts that are being made to bring about the consolidation of the Empire." After discussing the various plans or methods suggested for solving the problem of Imperial consolidation, Lord Strathcona said:—"The time might be not yet, but he felt sure it would come when Canada would trade with Australasia, with South Africa, and the United Kingdom on different terms than at present, when their commercial relations would be placed on a more friendly, or should he say, family footing. What the United Kingdom looked for was a predominance in the markets of the Empire; what the Colonies desired was the market of the mother-country and of Greater Britain for their products, which they hoped to see favourably regar —all other things, such as price and quality, being eq Such a policy could not fail to be beneficial to the Emp and his Lordship could not see any international reason militate against our regarding from a more favourable p of view our international trade as distinct from the exte trade ; or, our domestic trade as distinct from our fore trade."

Though there is all but perfect unanimity as to the d ability of the establishment of closer commercial relati between the United Kingdom and the Colonies and Dep dencies, no attempt has as yet been made to formulate a p whereby the object could be accomplished on a basis of p ferential tariffs. We need hardly say that an objection been raised to the proposed system of preferential tariffs the ground that it is a violation of the principles of f trade. It can be urged, however, on the part of the ad cates of the system that they do not wish to infringe principles of free trade but to improve free trade. It m also be contended that free trade is after all merely a pa cular fiscal system and not an infallible cult whose dogm stand in the way of commercial advancement and financ reform.

Among, the more serious difficulties to be overcome, w be the formation of a uniform system of the freest exchan of commodities within the Empire that will press fairly the United Kingdom and the numerous Colonies. In ma of the Colonies, nearly the whole of the revenue is deriv from taxation on British goods. The task that these Colon will have to face is such a re-arrangement of their fis system as will enable them to remit a considerable portion their import duties by substituting some scheme of interr taxation. The question on the English side that will have be answered is, will the manufacturers and consumers of t United Kingdom be prepared to place duties on the impo of foreign raw materials and foreign food? Despite t grave apprehensions of difficulty and trouble, we believe th the great fiscal problem will be successfully solved if t mother-country and the Colonies are prepared "to give a take." It is only by generous compromise and enlighten mutual concession that a grand intra-Imperial fiscal syste can be formulated and established.

We believe that the man who, above all others, is qualifi to accomplish this arduous task is the Right Hon. Jose Chamberlain, Secretary of State for the Colonies. While condemn the violation or infringement of the political cons tution of this Colony with which he is chargeable, we ha faith in his consummate ability and in his claim to be r garded as the best exponent of the grand idea of Imperi Federation and unity. We beg respectfully to remind hi of what he said, some four years ago, when presiding at t banquet held to celebrate the 29th anniversary of the foun ation of the Royal Colonial Institute. In advocating t promotion of a broad Imperial sentiment and the cultivati of a closer Colonial relationship. Mr. Chamberlain said th the Empire's rule over the Colonies was "*justified only their content.*" This is a broad, liberal recognition of Col nial freedom; but we fear that in the case of these We Indian Colonies we possess this freedom merely in name, n in reality. We do not believe that the Queen has in h globe-encircling dominions more loyal subjects than the i habitants of the British West Indies, or any that are mo ready to promote "the sentiment in support of the glorio

ditions of the country and flag." But surely it cannot be ected that any very strong feeling of content will be dis-yed by loyal subjects who do not get fair play in the rkets of the mother-country, and who are at the same e deprived of a portion of their political rights and erties. While we claim for these West India Colonies ter treatment, we need not say we are all in favour of a eme of Imperial Federation based on commercial recipro- and closer political union.

* * *

The Indian Tea Crop.

In their Circular of 8th September last the General Com-ttee of the Indian Tea Association, Calcutta, gave an imate of the outturn of the present Season's Crop of Indian a based upon the following figures :—

	Manufactured to 15th August, 1900.	Balance to be made to end of Season, 1900.	Total
	lbs.	lbs.	lbs
am	31,194,240	35,156,456	66,350,696
char	13,025,338	14,343,489	27,368,827
het	14,607,380	18,473,260	33 080,640
rjeeling	4.758,269	3,084,690	7,842,959
rai	1,392,028	1,150,720	2,542,748
oars	10,491,623	12,448,690	22,940.313
ota Nagpore ...	76,960	80,000	156,960
ittagong	391.041	483,345	874,386
ngra Valley ...	1,600,000	1,300,000	2,900,000
hra Dun	886,845	732,500	1,619,345
maon (estimate) ...	...	...	300,000
rdens from which no returns have been received, including Private and Native Gardens		...	16,168,000
		Total ...	182.144,874

The Committee have now given the following figures owing the actual outturn of the Crop as returned to them members of the Association.

Actual outturn of Crop of 1900.

	lbs.
ssam	67,928.770
achar	27,299,230
lhet	33,854,808
arjeeling	7.474.098
erai	3,378,075
ooars	29,997,065
hittagong	1,065,300
hota Nagpore	185.089
angra Valley...	3,000,000
ehra Dun	1,785,000
umaon (estimate)	300,000
ardens from which no returns have been received, including Private and Native Gardens (estimate)	11,260,000
Total ...	187,527,435

It will be noticed that the outturn from the Dooars District hows an excess of rather more than 7,000,000 lbs. over the stimate of September last. This excess is, to a large extent, n apparent one only. Owing to incomplete returns it was ecessary, when framing the estimate, to include about ,000,000 lbs. of Dooars Tea under the general heading of Gardens from which no returns have been received." This uantity has now been accounted for by the final returns rom Dooars Gardens, and is deducted from the estimate of 6,168,000 lbs. for "Gardens from which no returns have been received."

* * *

The Paris Exhibition.

SUMMARY OF QUANTITY OF TEA IN PACKETS SOLD AT THE EXHIBITION AND AT DEPÔT, 3, RUE D'ALGER, PARIS.

		Kilos.	Frs.
From 17th to 30th April.	At Depôt	13·125	90·40
For May	,, ...	114·890	737·60
,, June	At Exhibition and Depôt ...	388·010	2704·60
,, July	,, ,, ...	483·600	3354·10
,, August	,, ,, ..	492·375	3208·60
,, September	,, ,, ..	673·750	4642·85
,, October	,, ,, ..	1021·575	7117·25
,, November (approximately)	,, ...	1000·000	6600·00
		4187·325	28455·40

(Equals 8.364 English lbs.)

NOTES.

Coffee Leaf Disease. Regulations for North-Eastern Rhodesia, to prevent the introduction of diseased seeds, are published in African papers.

German Quinine. The export of quinine preparations, etc., from Germany during the eleven months ended November were :—

	1900.	1899.	1898.
Kilos.	170,600	195,600	180,000

Speculative Duty Clearances. A London telegram, dated 19th ultimo, says :—26,000,000 lbs. of tea have been removed from bond in London during the past ten days, in the expectation of increased taxes. A similar rush has been made on tobacco and spirits.

Colombo Tea Sales. The sale on the 20th ultimo passed off with a steady tone and with more active competition than has been experienced lately. It is satisfactory to note that the grading of many estate teas shows improvement, there being an absence of too dusty and flaky broken pekoes.

The Tea Crisis. The Indian Tea Association is forwarding to members of the House of Commons copies of a petition to Sir Michael Hicks-Beach, in which they state that the crisis in the industry is more acute and the output of Indian and Ceylon tea will possibly be reduced by 10 per cent.

Java Quinine. The exports from Java in September were 428 cases, of which 250 cases were shipped to the U K., and the remainder to New York. The shipments from July 1 to September 30 have been :—

	1900.	1899	1998.
Cases	825	562	396

Poor Teas. London advices, dated 8th ultimo, says :—Of Indian tea the public sales were again heavy, but there was a reduction in the quantity brought forward of Ceylon. Owing to the large supply of inferior tea prices were easier, but the best descriptions obtained full rates. The trade are said to be busily engaged in paying duty.

The Tea Industry. A public meeting of all interested in the Indian Tea Industry was held at the Bengal Chamber of Commerce on the 21st ultimo, at

3 P.M., to re-affirm the protest entered by the Indian Tea Association last year against the inclusion in the Assam Labour and Immigration Bill, now before the Imperial Council, of any provision for the enhancement of the wages of tea garden labourers.

Coffee in London.

London advices, dated 8th ultimo, state that coffee continues dull, the demand from the trade being limited—"Futures" have had a sharp rise this last day or two. Large purchases have been made of Santos by a New York speculator and quotations this morning were as follows, *viz.*, February 31s. 3d., March 31s. 6d., May 32s., July 32s. 3d., September 32s. 6d., and December 33s. per cwt., being about 1s. 9d. per cwt. above the lowest of the week.

Indian Tea Exports.

The following figures of tea exports, taken from the Calcutta Customs daily entries, are issued by the Indian Tea Association :—Quantity of tea entered for export to the United Kingdom for the first half of February, 1901, 3,311,246 lbs. ; quantity entered during the corresponding period of last year 2,175,289 lbs. Total from 1st April, 1900, to 15th February, 1901, 159,375,459 lbs. Total from 1st April, 1899, to 15th February, 1900, 148,326,789 lbs.

Ceylon Green Teas in Canada.

The *Canadian Grocer* remarks :—The "Salada" Tea Co. is in receipt of the following from H. Richardson, Grocer, under date of Carleton Place, January 22 :—

Sirs, I have sold out trial order of "Salada" Ceylon green tea, and all my customers speak well of it. Some of them say they will have no other if they can get "Salada" Ceylon green tea. It is this tea that will please Japan tea drinkers. Please send me as soon as convenient, 60 lb. brown label Ceylon green tea, and oblige.

Mr. Richardson got his first shipment on January 7.

Ceylon Tea for Russia.

It is asserted that the export of Ceylon tea to Russia this year is not going to be very large, this being accounted for by the fact that a great deal of inferior tea is being shipped, and many complaints as regards quality were received last year. The export of Ceylon tea to Russia last year amounted to 7,390,000 lbs. odd ; and this year there is expected to be an increase but not an appreciable one, and it is believed the total will be eight million or nine million lbs. at most and nothing over that.

The British Tea Duty.

A London telegram, dated 21st ultimo, states that the Indian and Ceylon tea-growers and distributors have petitioned Sir Michael Hicks-Beach to remove the additional tax of 2d. that was imposed on tea in consequence of the war in South Africa, and to equalise the scale of taxation on tea, coffee, and cocoa. Another telegram states that the speech of the Chancellor of the Exchequer has been taken in the city to mean that an increase of duty is improbable. Reuter's cabled version is misleading. The market is better.

Mexican Vanilla and Sarsaparilla.

Mr. Biorklund, the British Consul at Mexico, reports that an article which helps to confirm the opinion of the increase in agriculture in Mexico is vanilla. This bean, which in some parts of Mexico grows almost wild, is cultivated in the Southern States of the Republic, especially the State of Vera Cruz. The exports of vanilla in 1899 [illegible] 133,676 lbs., valued at £181,547, as against 59,034 lbs 1898, valued at £6[illegible],011. He goes on to say that the ex of honey and sarsaparilla is much larger than formerly, as neither require very much attention it is quite prob that they will become much more important.

Tea for Future Delivery.

The *New York Journal of C merce* says : "Trading in tea for fu delivery was inaugurated Monday morning. Comparati few members of the tea trade were in attendance at the op ing, and the business transacted was small. On the open call a sale was made by Mr. Max Meyer to Mr. H. Montgomery of 15,000 lbs. for February delivery at 13·3 in bond. Immediately after the opening call a second was made by Mr. R. C. Stewart to Mr Lester, of 15,000 l for February delivery at 13·50c., in bond. Shortly bef the close a third lot was traded in, Mr. Stewart selling to Meyer 15,000 lbs., for February delivery at 13·40c., in bo Total sales for the day were 45,000 lbs."

British-grown Tea in Vancouver.

The *Vancouver World* of a rec issue has the following : "J. Roberts, manager in British Colum for Messrs. G. F. & J. Galt, announces that they are n packing their own "Blue Ribbon" tea in this city, fr which western customers of the firm are hereafter to supplied. This is another industry which will greatly h Vancouver. As the Messrs. Galt control the output o number of the best gardens in India and Ceylon they en exceptional facilities for doing a tea business. Their hea quarters are in Toronto, but they have branches in Vancouv Calgary, Edmonton, Prince Albert, Brandon, Lond Hamilton, Ottawa, Montreal, Quebec, and St. John."

Tea-sweepings and Caffeine.

By a recent decision of the Unit States Treasury Department t sweepings (for the manufacture caffeine), when mixed with asafœtida, can now be import duty free. For a long time the Treasury Department declin to permit the importation of tea-sweepings under any class cation, holding that the Pure Tea Act excluded such m chandise, even though not designed for consumption as t Finally, a concession was made to the importers upon con tion that sufficient asafœtida should be mixed with the swe ings. The question then arose as to whether such a mixtu could be imported as a crude drug. The Courts have n upheld that it can, and refunds to a considerable amou will be made.

The Ceylon Tea Plantations Company.

The *Times of Ceylon* writes :—W learn on most reliable authority th the directors of our premier tea esta Company have by this week's mail sent out instructions lay fallow certain portions of their low-country estates. T has been decided upon quite irrespective of any joint acti that may be taken by growers generally to restrict output this way ; but it is an example which, it is hoped, will largely followed. It should certainly have an import beneficial effect in the right direction. The same Compan too, has already adopted more careful plucking on its pla generally. Example is better than precept ; and Mr. Ruth ford's advice to others has been followed up by prompt acti for the orders were despatched from London a fortni

fore it could be known whether planters generally would pport the proposed means of reducing the output.

e London Tea Market.

Messrs. Gow, Wilson & Stanton's cable, of 21st ultimo, to Colombo rerts that the market generally is steady, that for medium uoring Pekoes and Broken Pekoes showing a fractional vance ; while the market for Common pekoes and Broken koes is also steady. The price of fair liquoring Ceylon koe Souchong is 4¾d. (a farthing up) and the average ice of Ceylon tea sold on garden account this week was d. (three-eighths of a penny up)—as against 6½d. and 7⅝d. spectively in the corresponding week last year. Reuter ports that good to fine Ceylon teas are firm, and others iet. Pekoe Souchongs are quoted at 3⅝d. (three-eighths of penny down) and the average for the week at 6⅜d. (threeghths of a penny up) as against 6¾d. quoted for Indian tea. ,000 packages of Ceylon tea were offered for sale, of which ,000 were disposed of ; while of the 27,000 packages of dian tea offered only 21,000 found purchasers.

dian Tea in London.

A large business continues to be transacted in all grades, and with the ception of the common teas a steady but firm tone prevails, ys the *Produce Markets' Review*, of the 2nd ultimo. A rge and good assortment of the medium descriptions has en offered, several of the teas showing better quality, and there is an active demand prices are well maintained. ith every probability of a further increased business it is no means unlikely that a decidedly firmer market will evail later on, as the supply of these teas is not expected be in excess of requirements. Some of the finer teas, pecially from the Assam and Darjeeling districts, with utumnal flavour, were well bid for, and fetched high prices, hile these grades generally brought firmer values. On the her hand, although transactions have been considerable, the arket for the common qualities has been weak, and prices ave had a downward tendency, the quantity brought forward eing in excess of the improved requirements. At the public les 60,328 packages were catalogued, and only the comaratively small proportion of 9,450 withdrawn, most of which as since been disposed of by private contract.

he Patiagama Cinchona Co., Ld.

We are informed, says the *Times of Ceylon*, that Mr. H. M. Rowbotham, the well-known tea buyer of Melourne, Colombo, and Calcutta, has become the lessee of atiagama estate in Lower Hewaheta, the property of the atiagama Cinchona Co., Ld. The estate is not far distant om the once famed Loolcondura estate, the tea from which the earliest days of Ceylon tea had such a great reputation. here are 900 acres in all on Patiagama, and 223 acres of tea, ith no cinchona whatsoever. For the past ten years Mr. owbotham has spent as much time on board ship and in otels in circulating between Australia, Ceylon, and India as ny man alive, and he has at length wearied of the constant hange, and has purchased Patiagama with the intention of siding there a good part of the year. Mr. Rowbotham has ad much experience in planting, and in the early days of imbula did much hard work in opening virgin forest. It not now his intention to work the estate himself which will under separate supervision, but he will bring his good siness capacity to bear upon it, and intends to put money to it, and we fancy will make the place pay very fairly.

The London Coffee Market.

A continuance of receipts far in excess of anything expected caused further weakness in the terminal market, says the *Produce Markets' Review*, and prices declined about 1s. 6d., but an advance in some of the Continental markets led to more buying here, and the close is only 6d. under last week. As a consequence of this the demand, which had shown some improvement, fell off again, and the auctions towards the end of the week have been flat. A better supply of new crop Costa Rica, containing some of the finest marks, has been offered, and in most instances good prices were obtained, though establishing a drop of fully 20s. compared with the opening prices of last year The quality is, however, still below much of the last crop which is still offering, and holders of the latter are, therefore, not so anxious to sell as they were a month or so ago East India continues to come to hand slowly, and is of very poor quality ; there is little disposition to buy, and only part was disposed of.

Ceylon "Tea!"

A correspondent writes to the *Ceylon Observer* :—Just a line enclosing some extracts from the last local tea sale : 25,384 lbs. which ought to have been chucked away. Why do not Agents in Colombo give orders to Brokers to chuck away tea under 10 cts ? The most amusing in the whole sale list is the lot Tallegallakande red leaf packed in paper fetching *3 cts.* This will, I suppose, go to Europe and be sold as pure Ceylon tea !

		ct.	lbs.
Green tea dust	at	8	210
Pekoe Souchong and Souchong	„	9	2,575
Do.	„	8	6,387
Do.	„	7	285
Do.	„	6	830
Do.	„	5	100
Do.	„	4	100
Congou	„	8	1,800
Do.	„	5	320
Broken mixed	„	9	1,577
Do.	„	8	616
Do.	„	7	427
Do.	„	5	4,845
Do.	„	4	358
Fans and Dust	„	9	280
Do.	„	8	585
Do	„	7	3,644
Do.	„	5	200
Red Leaf	„	6	85
Do.	„	3	85
Paper Lined	„	3	95
Total lbs. ...			25,384

Over-production.

We are afraid, observes the *London Commercial Record*, that the over-production and excessive buying have not been confined to Germany only, but the whole world has sinned in this respect. Let us point to coffee and tea alone. Brazil is literally swamping the markets with its production, and according to the phenomenally large receipts the crop shows no signs of exhaustion. As soon as the present yield has been gathered another enormous crop awaits picking and marketing. Stocks everywhere are very heavy ; no wonder, therefore, if prices incessantly decline, giving way under the overwhelming weight of Brazil sorts, and reaching a basis which not long ago seemed absolutely impossible. The coffee question is we all agree a very grave one, not alone to unlucky bulls or, holders

of spot stuff, they have their remedy, but also to the unfortunate planters. What is to become of the cultivator of fine coloury East Indian, for instance, if we continue to pay him starvation prices? How can he exist if our trade refuses to purchase his crop of decent coffee at over 45s. average, landed terms? Many of these planters, we are afraid, are not very rich people, and many, owing to a succession of poor crops, have nothing to fall back upon. Their estates will cease to exist, and fine coloury East Indian sorts, which we admire so much, will be a thing of the past. Unless consumers realise the danger and make up their mind to concede a fancy price for a fancy article, we shall have to educate our taste to a coarser coffee from which the delicious flavour of East Indian is absent. These pretty sorts have to a great extent, replaced the fine high-grown Ceylon coffees, which disappeared to make room for the all-powerful tea craze which expected to raise fabulous sums out of the old-fashioned coffee plantations. Tea gardens sprang into existence in Ceylon like the proverbial mushroom, with the result that tea was overdone, and, to-day, those that are interested in this commodity are trying to move heaven and earth to devise some means to put a stop to the ever-increasing cultivation of the article. Meetings have been held recently for this purpose, but from all we can hear nothing of any movement has been decided upon.

LETTERS TO THE EDITOR.

PRUNING.

Sir,—Would one of your readers favour us with an account of the best way pruning should be done after blossom showers?

Enquirer.

THE TEA CRISIS.

Dear Sir,—I have read with much interest the letters from the Hon'ble Mr. G. L. Acworth and Messrs. Thomson and Cooke in *Indian Gardening and Planting* of 14th February. While agreeing with much that they write, I cannot help thinking that something more practical is necessary for the complete combination of Tea Growers in Southern India.

Any scheme that will take from the London Market the large surplus of teas not wanted is acceptable.

There can be no good reason in Southern India for resting 10 per cent. of the Garden areas which is likely to be adopted in Ceylon when we have a market at our doors among the native population of the Madras Presidency. This market has never been properly exploited. Natives for many years have been regular drinkers of coffee, but of late the price of coffee has been prohibitive to the poorer classes and many have therefore turned their attention to tea, and I feel confident that there should be no difficulty in getting rid of 10 per cent. of our production, if properly worked.

I think therefore that this is a scheme that is worthy of attention, though I do not assert that it would be very remunerative at first, but would dispose of our lower grades without a loss and might eventually lead to profitable business when the taste for Tea is acquired and when the natives ha found out the relative cheapness of tea to coffee. In the ev of this scheme being tried and failing to take 10 per ce of the yield then the balance to be sold in Colombo Russia only. I am of opinson we should advocate—

(1) Compulsory cess on Tea shipped out of India

(2) Finer plucking (never more than two leaves unopened bud) going over the fields always within ei days, and April and May oftener.

(3) Exploit India with not less than 10 per cent. of yields or ship to Colombo to be sold for "Russia" only.

This, if properly carried out, would bring the desired res and improve the quality of our Teas

H. M. Knight.

GENERAL ARTICLES.

THE CEYLON CHAMBER OF COMMERCE ON THE TEA CRISIS.

The following remarks were made at a recent meeting the Ceylon Chamber of Commerce :—

THE OVER-PRODUCTION PROBLEM.

MR. ROSLING'S VIEWS.

The Chairman :—Gentlemen, I have now to ask Mr. Rosling kindly favour us with his views on the subject of which we ha heard so much lately.

Mr. Rosling, who, on rising, was cordially received, said :—M Chairman and gentlemen, I have to thank your Chairman ve much for his kind consideration in asking me to be present at yo meeting to-day. At the annual general meeting of the Planter Association, held on Saturday last, it was resolved :—"That acti be taken by this Association with a view to form a combinati amongst Indian and Ceylon planters. to cope with the prese unsatisfactory condition of the Tea Market, consequent on over-p duction;" and they added as a rider the report of the sub-Co mittee that had been appointed to enquire into the question. T report was :—(1) "That a combination with India, having for object the reduction of output, is desirable"; (2) "the sub-Co mittee considers that the only scheme practicable is an all-rou reduction of the plucking area by ten per cent., conditional eighty per cent. of the cultivated tea acreage joining in the comb nation and upon India joining on the same terms. If any propr tor prefers to make ten per cent. of his tea crop into green tea, th shall be accepted in lieu of reduction of his plucking area by t per cent."; (3) "That a sub-Committee be appointed to obtain a herence to the scheme." I do not propose to enter into the meri or demerits of the scheme, gentlemen. The object we have now view is to devise the best means of making that scheme an acco plished fact, and the first effort will be to approach the agen houses in Colombo. I understand that in the majority of cases t agency houses must refer the matter home, and I would sugge sending the following telegram, after this meeting, to the Chai man of the Ceylon Association in London :—"Rosling very anx ous to have Planters' resolution carried out. Colombo agen unable to act, waiting instructions principals. Steps must taken immediately. Ascertain at once and telegraph." If a gentleman is willing to come into the scheme and can contr acreage without referring to London, I shall be very glad receive his support; and if any Managing Directors or Chairm of local Companies can see their way to advise the shareholde that they propose asking for their support and consent to th scheme, I think that also will further the matter. I think th practically embodies what I wish to ask you, gentleme (Applause.)

A LOYAL ADHERENT TO ANY PRACTICAL SCHEME.

The Hon. Mr. W. H. Figg :—I am sure, Mr. Chairman and gentl men, I am speaking the mind of all present when I say that we a exceedingly pleased to meet Mr. Rosling, the Chairman of t Planters' Association, here this afternoon. (Applause.) This is t first occasion on which we have been addressed by the prese

airman of that important body and as for some years past we ve worked very harmoniously and have co-operated whenever could, it is an additional pleasure to see the Chairman of that dy down here in person. The matter about which he has spoken us is one which touches us all, more or less I do not think that I n rightly say that anybody is free from it, and whenever prosper- attends the tea enterprise we all share that success. I am sure at, if we have to face a reverse in the tea industry, that reverse ust affect us all, no matter what occupation we are engaged the island of Ceylon (Hear, hear.) That being the case, I am re we are all ready to give every consideration and support to any ractical scheme which may be brought forward for the ameliora- on of the present situation. I think we are taking a wise and ry proper step in telegraphing to London in order to obtain the -operation of the principals. For my part I am not prepared to y that I honestly agree with any particular scheme. It may be y misfortune, or that I cannot see so far as others. However, I n say that, so far as my personal interests are concerned and those hich I may be able to advise, I will loyally and gladly adhere to ny practical scheme which will commend itself to the majority of ne people interested in the tea industry. (Applause.) If we all act that principle, we shall, I think, in the end do some good. Of ourse, it is understood, and I believe Mr. Rosling will bear me ut, that the carrying out of the scheme proposed is absolutely on ne condition that India acts with us. I can only suppose that as ndia is in the same plight as regards the question of over-produc- on as we are, that she will be only too pleased to join in any cheme which is likely to do practical good to those concerned in ne tea industry. (Applause.)

VIEWS OF THE MANAGING DIRECTOR OF THE KANDAPOLA ESTATES COMPANY.

Mr. G. F. Traill:—Mr. Chairman and gentlemen, it appears to ne that we are face to face with a crisis, and that crisis has been rought about by the over-production of our staple tea. A scheme as been propounded and was carried unanimously at a meeting f the Planters' Association in Kandy, with the object of limiting he output of our staple. Without such a limitatien I believe that hat crisis will overtake not only many of us, but, possibly, the vhole country. I, personally, am very anxious that a scheme hould be settled upon. Never mind its merits or demerits. That can always be threshed out. Provided scheme can be unanimously decided upon, it can be threshed out and licked into shape by sub-Committees, Committees, and at General Meetings. If we unanimously agree to limit our output by 10 per cent., we shall be going a long way towards the removal of this crisis. So ong as we have 5 lbs. more than is wanted by the trade, the market will be extremely "wobbly." The moment we have 5 lbs. less than he trade requires, we shall have immediately a stiffened market. The moment we have a stiffened market, we have a panic amongst he buyers. The moment they are seized with panic, I take it, up go the prices. Supposing I send home 90,000 lbs. of tea at 7d., I take it, having worked it out most carefully, that I am very much better off than if I send home 100,000 lbs. at 6d. I slightly increase the cost of production, but that increase is certainly not more than 2 cents, and even then there would be a very considerabe increase in my income. And, if it would mean a considerable increase on 100,000 lbs., how much more would it be on 120,0 0,000 lbs.? I hope, therefore, that we shall combine in arriving at a condition of mind that will enable us to carry unanimously some scheme which may be licked into shape in the manner I have already suggested. (Applause.) As the Managing Director of the Kandapola Estates Company I undertake not only to rest 10 per cent. of my plucking area, but I will undertake to ship 10 per cent. less of black tea this year than I did last. (Applause.) And I will use my utmost endeav- ours with my principals at home to induce them to adopt the same line of action. Some people say at once with regard to any scheme brought forward that it is open to this objection and to that objection. A man may say that he cannot afford to throw away a single lb. of tea. My view is—throw away one lb. or two lbs., if it is necessary, and you immediately raise the tea enterprise out of the mud and put it back on its former prosperous basis. (Applause).

NO DISSENTIENT VOICE.

The Chairman called for any further remarks and re-read the telegram which it was proposed to send to London. He thought that the telegram conveyed the feelings of most of them, and he had no doubt it would receive the immediate attention of the Ceylon Association in London.

THE TEA-GROWING INDUSTRY.

The joint meeting of members of the Indian and Ceylon Tea Associations on January 23 was painfully blunt in its proceedings. For once in a way the members of the tea-growing industry divested themselves of the various phrases under which they had long concealed their thoughts, and frankly confessed that the problem of over-production in its worst form had to be faced. Ever since 1896 we, in this journal, have been dinning this unpleasant fact into the ears of tea-growers and directors of tea companies, but all to no purpose. When they might have stayed their hands they refused, and turning a deaf ear to caution, proceeded to lay out enormous areas in tea shrubs, to build huge factories, and to borrow heavily from bankers and agents in order to carry out these adventurous undertakings. Not content with that, Sir John Muir and his friends induced a large body of the British public to give them practically a blank cheque on the future by allowing a large amount of capital to remain uncalled upon the shares of the two big tea companies of the group.

The wild business done when every one went extending and inflating has produced its natural result, and in spite of the huge success in the way of increased consumption of British-grown tea in foreign countries, the home market is so congested with the larger supplies poured out from India and Ceylon that prices of tea are now at points quite unremunerative for the majority of growers. In the presence of this problem, to talk about the value of the rupee, the cost of home charges, and the recently raised duty is to play with puerilities, and it is well that the industry has ceased to deceeive itself in this way. All the same, we are not hopeful of the remedy suggested at the meeting, which is that growers by a self-denying ordinance, shall undertake to reduce the plucking area of mature tea by 10 per cent. provided producers agree to reduce their output by not less than 10 million lbs. for India and 8 million lbs. for Ceylon. In the first place there is something strange about this suggestion, as 10 per cent. of the tea output of India would represent at least 18 million lbs., and for Ceylon some 12 million lbs. Consequently a great number of growers will naturally consider that the figures aimed at will be obtained without reduction of their particular output. and, once it is recognised that growers can remain outside the ring with impunity, we are afraid few will be found inside that mystic enclosure. Then to attempt restriction in this fashion is only to draw together the edges of an unprobed festering wound. Years ago, in the palmy days of Colonel North, the nitrate trade of Chili was faced with a difficulty similar to that in front of tea-planters. There was at that time an excess supply of nitrate occasioned by the extravagant creation of joint stock producers. Restriction of output was at once proposed, and in that industry it was easier arranged than in many, as nitrate can only be obtained in the desert of Atacama. Accordingly, since 1889, there have been two, if not three, combinations with a view to the restriction of the production of soda in Chili, but the industry, as a whole, has not benefited by the arrangement. A few astute individuals and companies managed to reap profits from the self-denial practised by their neighbours, but the arrangements brought no prosperity to the over-capitalised companies. They have remained in an almost dividendless condition the whole time. seldom earning, one year with another, more than enough to pay working expenses, directors' fees, and office charges, so that their shares can now be purchased for a mere fraction of their nominal value.

This is the result of voluntary restriction of output in an industry particularly suited for such an experiment, and the difficulties in the way of a reduction in the output of tea must be much greater. The matter, in fact, requires a great deal more consideration than was devoted to it at the meeting last Wednesday week. For one thing, the Chairman, Mr. H. K. Rutherford, entirely ignored, so far as we can learn, the enormous area of young tea coming into bearing. According to the official figures issued by Mr. J. E. O'Conor, the immature acreage under tea in India at the end of 1899 was 82,082 acres, and if allowance is made, for the acreage which came into bearing last year, there must surely be an immature area of at least 60,000 acres still to come into full bearing. This, upon a low basis, represents 24 million lbs. of tea per annum for India alone, and one naturally feels inclined to say—What is the use of putting forth any manner of plausible scheme to compass a reduction of 10 million lbs. in the output when this young acreage is steadily coming into bearing?

No, the problem will not be solved that way. The difficulty has arisen through financiers, and we ought to allow it to be solved by financiers. Thanks to the efforts of people like Sir John Muir, an inordinate amount of capital has been attracted to tea-growing, and the only true remedy is to drive some of that capital away. Mr. Rutherford said at the meeting that restriction of output would bring back the confidence of financiers and bankers in the industry. Such an outcome is at the moment exactly the reverse of what ought to be desired. Those 60,000 acres of immature tea will never come into full bearing in their entirety, unless bankers and financiers lend money to weak companies, and it is precisely the weak companies that have the largest immature areas. Once let the banking loans and overdrafts to such concerns be withdrawn, and the area under tea in India will contract to an amazing extent. One need not be afraid that private enterprise will keep these plantations going, for numbers of them were only produced for company-working, in which shareholders should continue to provide money in one form or another without any regard to the profit that might be produced. Accordingly, we are not hopeful about the proposed policy of restriction, but it is a great point to find the industry confess that it has extended beyond the margin of prudence, and there may be more in the proposal than we imagine. For this reason we should like to hear the views of representatives of some of the stronger companies. It is they who will suffer most should the policy of restriction be put into force and prove a failure, and no doubt the answer to the question whether it shall be put in force or not lies with them. Many weak companies possibly will have to reduce their output in any case, from the simple inability to provide the money to pluck and cure the leaf; but the strong companies have resources and credit that will enable them to still carry out their operations. The question, however, must naturally arise with them. Why should we, who exercised prudence and moderation in the days of prosperity, make this sacrifice in order to save these weak, greedy companies from destruction? Surely some reason ought to be given in order to induce the strong companies to thus martyrize themselves, and, so far, we have utterly failed to find a forcible argument in favour of their adopting such a course.—*The Investors' Review.*

NOTES FROM BRAZIL.

(From the *Brazilian Review.*)

São Paolo.—The coming coffee crop in Lorena is estimated by the Municipal Agricultural commission at 11,725 bags.

At a meeting of *fazendeiros* in S. Paulo dos Agudos, a committee was appointed for the purpose of representing to the directors of the Sorocabana Company the urgent necessity of extending its lines to that place; the nearest point of the said railway being at present two leagues distant.

In Campos Novos de Paranapanema the coffee Crop for this year is expected to be well over 100,000 *arrobas*, owing to the large numbers of young trees that will come into bearing and which are flowering splendidly.

From Bebedouro come complaints regarding scarcity of labour which is becoming more and more noticeable. The ripening of the coffee is expected to commence very early this year, and gathering should begin in April. Thus the difficulties of planters will be greatly increased, and it is thought much of the coffee must be lost for want of hands. The writer advocates the introduction of Spanish immigrants not withstanding their being a little more expensive than Italians.

Exchange.—Extremes during the week ending January 11 were 9 3/4 9 29/32 d. for 90 d/s Bank paper and 9 25/32—9 15/16 d. for private.

The average Bank 90 d/s counter drawing rate for the week comes out at 9 51/64 d. corresponding sight rate being 9 47/64 d, against 9 13/16 d. the average sight rate of the *Camara Syndical.*

The average depreciation for the week, calculated on the basis of the Banks' sight rate, is 63.94% and the premium on gold 177.36% against 63.71% and 175.60% last week. At these rates.

Coffee.—Coffee prices though slightly under those of last year's are fairly maintained abroad, and the value of shipments during the past week, in spite of all, £16,100 in excess of the value for the corresponding week last year. The total f. o. b, value of coffee shipped to foreign countries from 1 July to 11 January 1901 is £12,589,336 as against £9,526,979 for the same period ending Jan. 11th, 1900.

A meeting of Coffee Commissarios has been called at the Cen Commercial to consider the interest of the class. We are inform that one of the subjects for debate is how to prevent exporting hou from buying direct from producers and thus intercepting their co missions. It is certainly rather hard on Commissarios who ha advanced money to planters on the crop, to witness with patie the crop passing into other hands without any settlement with the selves, but that only proves the necessity of altering the metho dealing with such dishonest clients. A radical change in the l that will prevent such things for future, would be far better. A how there are too many intermediaries in the coffee trade, and n that profits are coming down to bed-rock one or other of them bound to go. It will certainly not be the Exporters, so the choic limited to Commissarios or Ensaccadores. Probably the latter.

As regards the coming crop there is nothing new to add exc that everything tends to show that estimates of eleven million ba upwards will not prove exaggerated, the constant rain and m weather now ruling being favourable to the development of t berry, though it is possible some may fall off and be washed aw

NITROGEN-FIXING BACTERIA.

Besides the nitrifying bacteria which are able to transfer amm nium salts found naturally in soil, or have been added thereto in other nitrogenous compounds, a number of related organisms a met with in many fields which have the power of utilising the fr nitrogen of the atmosphere and drawing from this vast store of a most inert gas considerable quantities for plant-food. These a the nitrogen-fixing bacteria.

On the rootlets of many higher plants, more especially on tho of the *Leguminosæ*, small nodules in varying numbers are fou produced by and filled with bacteria. It is supposed that by t *symbiosis* (a living together) of these lowest forms of plant-life wi the higher plants, the latter derive the nitrogenous food which it proved cannot have been derived from the soil, and, therefore, mu have been obtained from the atmosphere. The process is not y properly understood, but the general opinion tends towards the a sumption that the bacteria fix the free nitrogen within the nodul and that the resulting nitrogenous compounds are assimilated b the host-plant.

By some also it is thought that through the peculiar conditio of "living together" the plant is enabled to fix free nitrogen its foliage.

Whatever may be the correct theory, the effect of this remarkab interaction between the low forms and the higher plants is ve striking and very variable in extent. Even amongst the *Leg minosæ*. the plants deriving the greatest advantage from th *Phenomenon*, extremes are met with; some deriving apparently b little benefit from it, whilst on the other hand, many may ve largely depend upon it. Amongst the Lupines, for instance, th yellow flowering variety is able to entirely dispense with nitrog nous substances in the soil.

Through the exhaustive investigations made first by Professo Hallriegel and Wilfarth, and later by Lawes, Gilbert, and others, o nearly all the cultivated leguminous plants, no doubt has been le that the nodules found on the roots are formed through bacteria a that these are able to fix free nitrogen for the use of the pla they attach themselves to. Until Hallriegel proved that th presence of bacteria is necessary to enable plants to utilise th nitrogen of the atmosphere, and that, for this reason, *Legumino* may almost entirely dispense with nitrogenous manuring of th soil they grow upon, and, in many instances, even enrich the la with nitrogen, these observed facts were not properly understoo

It was well known in practice that clover and lucerne would gro vigorously for a period of years without being manured, and wh flagging, could often be invigorated by a dressing with gypsu This tends to prove that these crops did not sicken for the want nitrogenous food, but on account of other elements becoming e hausted or unobtainable for some reason from the soil.

A palpable proof that the help of bacteria is almost absolute necessary to enable plants to assimilate atmospheric nitrogen, afforded by the fact that seedlings, say, of peas, will not thri

less the soil contains at least some traces of nitrogenous compounds; but as soon as they have made a start and have sent out otlets upon which the bacteria can form colonies, they prosper dependently of the presence of this food in the soil.

During the experiments carried on in several German agricultul establishments it was discovered that every species of legume as associated with a specially sympathetic bacterium which would ot perform the office of fixing nitrogen for other species. Based on the acquisition of this knowledge, Professor Nobbe, of Thard, in Saxony, is now preparing a number of pure cultures of ese specific bacteria for the purpose of sowing them together ith their respective culture plants. These cultures are placed on e market under the name of *Nitragin*, and for some time have een undergoing and still undergo practical tests regarding their ficacy of promoting the growth of plants.

It has not been definitely ascertained how long these artificial ltures can retain their vitality unimpaired; and besides, in some stances, adverse seasons have prevented a definite judgment eing arrived at as yet, whether the results obtained in trial plots an be maintained on a larger scale in the field. Considerble attention is being paid to this question at the agricultural ations in Germany, as well as in the United States, and elsewhere.

THE DENITRIFYING BACTERIA.

In addition to the organisms hitherto referred to, all of which re pre-eminently friendly to plant-life, and thus indirectly to man, here are a host of other bacteria met with in soil and water which lay an important part in connection with agriculture.

Their action is to reduce the compound organic substances into ss complex combinations, or into simple elements, and in this anner make them again available for plants to which otherwise ey would be lost, as these can utilise nothing but elements or mple compounds for their nutrition.

It is manifest that were it not for the decomposition of the many mplex substances taken from the earth in the shape of plants and nimals, after these have changed from the active state called life, o that of inactivity or death, and by this process are re-dissolved eriodically, these substances would be entirely lost to succeeding enerations of plants and animals, and this constant drain from the esources now found on the surface of the globe would ultimately xhaust their supply and make life impossible.

That putrefaction and other processes of decomposition are proced by bacteria was suspected for a considerable time, but this as not definitely proved till 1875 by Menzel and subsequently erified by others. The action of these organisms is so variable hat in the decomposition of any given substance probably a dozen pecies participate.

From this indisputable achievement of scientific research it will e seen that it is in the first instance entirely due to the activity of he minutest organisms that what is of earth goes back to it again y the dissolution into simpler substances of the complex and ntricate combinations. Chemical action, no doubt, has also much o do with the re-dissolution; but it is now accepted that this ctivity in the generality of instances is secondary to the bacterial, nd takes place after these have broken up the compounds.

Without the one process the other would not take place, and rom this it is evident that micro-organisms are more closely onnected with the productiveness of the soil than was dreamt of ess than thirty years ago, and that not only in medicine and ndustrial pursuits, but also from an agrinomic point of view bacteriology is becoming daily of greater importance.

The organisms intimately connected with the fertility of the soil hay conveniently be divided into two groups, namely, assimilatng and destructive bacteria.

Under the first group we would classify the nutrifying and the itrogen-fixing bacteria; and in the second all species which cause utrefaction and decomposition may be included

The first group, as previously stated, includes nothing but eneficial species which are occupied either in building up nitrogeous compounds in the soil, the nitrifying species, or in fixing itrogen, from the atmosphere the nitrogen-fixing bacteria the atter of which, besides assisting plants to use this element, frequently also enrich the soil itself. Important as is the numerous econd group on account of the reducing power of its species, it ncludes several that act disadvantageously in regard to agriculture.

These objectionable species are the denitrifying organisms. By denitrification is understood the deoxidation of nitrates and nitrites, which in each case involves a loss by either nitrogen or ammonia being given off. Their activity is perceptible by the pungent smell of ammonia rising from fresh stable manure, particularly from that of horses. Nitrogen being odourless, its loss cannot be perceived by the senses; it nevertheless takes place to some extant during every process of decomposition where nitrogenous compounds are present.

THE AIMS OF SOIL BACTERIOLOGY.

It now remains to indicate the aims of bacteriology in connection with agriculture. These are shortly as follows:—

1. To encourage a definite multiplication of the nitrifying organisms found already in the fields, by adding substances that will enable them to retain their vitality and vigour after their activity ceases for the want of nitrogenous material; and in case of their absence from a soil to transplant them thereto, if this can conveniently be done, by adding soil impregnated with the desired bacteria;
2. To secure by the growth of plants favourable to nitrogen-fixing organisms an enrichment of the soil by nitrogenous compounds; and
3. To counteract the sudden and excessive development of the denitrifying organisms, in order to prevent loss of fertilising substances by means of these latter.

THE DISPLACEMENT OF CHINA TEA.

In his book, entitled "The Englishman in China during the Victorian Era, as illustrated in the career of Sir Rutherford Alcock, K.C.B., D.C.L., many years Consul and Minister in China and Japan," Mr. Alexander Michie, author of "The Siberian Overland Route," Missionaries in China," &c., refers to "Flavoury Ceylon leaf" in contrast with "the rougher qualities which come from India," and remarks :—

The Indian and Ceylon Planters have made a personal study of all the conditions of tea culture, have selected their plants, invented machinery to do all that the Chinese have done for centuries by manipulation, have put ample capital into the enterprise, and used the utmost skill in adapting their product to the taste of their customers. Moreover, they have by dint of advertising all over the world, attending exhibitions, and many other devices, forced their commodity into markets which would never have come to them There was, on the other hand, no one interested in the success of Chinese tea growers, whose plantations are in the interior of the country, subdivided into garden-plots, with no cohesion among their owners for aggressive purposes. For though the Chinese can and do combine, it is usually in a negative sense, to obstruct and not to promote action, whereas the tea-growers of India have shown examples of intelligent co-operation of the aggressive and productive kind, not wasting power in seeking to impede rivals, but devoting their whole energies to the prosecution of their own business. And they have their reward.

The short-sightedness of the Government has no doubt contributed to the decline of the Chinese tea trade, through the excessive duties of one kind and another which they have continued to levy on the article from the place of growth to the port of shipment. It is fair to remember, however, that their exactions bear most heavily on the low grades, which, notwithstanding, continue to be shipped in quite as large quantities as is desirable in the interest of consumers; while the superior qualities, which are not quite able to bear the taxes, have almost ceased to be imported into Great Britain, the whole supply finding its way to Russia. That country has long been celebrated, and justly so, for the excellence of its tea, for which fantastical reasons are wont to be given. The true reason is very simple. Russian merchants purchase the fine Chinese teas for which no market can now be found in England, the public taste having run so exclusively on the product of India and Ceylon that a cup of good Chinese tea has become a luxury reserved for those who have facilities for obtaining the article outside the ordinary channels of trade.

SUPPOSED DEFRAUDING OF A PLANTER.

A correspondent of the *Times of Ceylon* writes :—

A case of considerable interest to the planting community has been instituted in the Police Court of Hatton by Mr. R. H. S. Scott, of Ottery estate, Dakoya. It appears that one "Ramasamy" describing himself as a kangany of Mathurapaestate, Kadugannawa, came to Mr. Scott and asked for an advance, promising to give him a number of coolies who were said to be under him on Mathurapa. Mr Scott accordingly wrote to the proprietor and sent him a cheque for R905·25, requesting him to send the coolies, but Mr. Scott has neither received the coolies nor a refund of the cheque. Below is the statement of Mr. Scott, the further hearing of the case having been postponed till the 28th February :—

Mr. R. H. Scott, sworn said :—I charge Ponnasamy Pulle, of Mathurapa estate, and Ramasamy kangany, who describes himself as being on that estate, but who is not on that estate. Ramasamy kangany came to Ottery from Kadugannawa some time prior to 19th January, and with him came Sinnaiya, one of my kanganies. Sinnaiya handed me two *tundus* which I produce, signed by R. M. Ponnasamy Pulle. On seeing these *tundus*, I wrote to Ponnasamy Pulle asking if it was convenient for him to pay the coolies off, and whether he would allow my kangany to go and inspect them. He sent me a reply saying he had allowed my headkangany to see the coolies. I think I sent the letter by my kangany. Two of my kanganies went, they returned and reported that they had seen one gang of twenty-four coolies and one kangany, and another gang of seven coolies. I thereon gave a cheque, probably to my kangany, for R905·25, being the total of the two *tundus*. They went to Kadugannawa on the 20th ultimo with the cheque. They did not return till 26th ultimo. They brought no no letter or coolies. On my questioning them they said Ponnasamy Pulle had said that the cheque I had given was wrongly dated and he could not cash it. I turned up my pass-book, which I had received from Colombo that night, and I found my cheque for R905·25 had been cashed on the 21st in Colombo. My kanganies said they had been pushed off the estate, and no coolies had been delivered to them. I sent my conductor down to Ponnasamy Pulle with a letter about 27th ultimo, requesting him to refund the money or to send the coolies. The conductor brought back a pencilled note from Ponnasamy Pulle saying that he had paid off the coolies, and knew nothing about the matter. The cheque was made out in the name of Ponnasamy Pulle.

THE PLANTERS' ASSOCIATION OF CEYLON.

We give below comprehensive summaries of the chief speeches delivered at the Annual Meeting of the Planters' Association of Ceylon. Some of them deal with subjects of very great interest to South Indian tea-planters.

CHAIRMAN'S OPENING REMARKS.

After the annual report had been laid on the table the Chairman said :—Gentlemen, the past year has been one of anxiety and trouble for many and the present position is one that demands our closest attention. Partly owing to over-production and partly to the increase in the British Import duty on tea, the price paid for our product has fallen to a lower level than hitherto known, and unless relief is afforded at a reasonably early date proprietors of the poorer classes of tea property must be ruined. As regards the estimates for the current year the Committee feels that with the probable reduction in the output through fine plucking and other causes it is better to get the present estimates revised before publishing them and this we hope to do by next month. I may say, however, that everything points to reduced shipment to the United Kingdom as compared with last year (Applause.) The result of the 1-lb. draft dispute, *viz.*, taring to the ½ lb. came into force from the 1st June, and I think gentlemen we reasonably congratulate ourselves on the result of the practical working of this compromise. All the evidence goes to show a reduction in loss in weight of ½ per cent or a clean saving of at least a quarter of a million rupees per annum to the Tea Industry. A small reduction has also been effected in warehouse charges, but they still amount on an average to over 2/ per package or m than it costs at present to send Tea from Colombo to Lond During the year the Association approached Government with view to obtain a reduction of railway rates by having tea pla from the fourth-class, into the sixth-class, but this, Governme was unable to agree to and Mr. Campbell has a motion on t subject to bring forward to-day bearing on this subject Labo appears to have been plentiful throughout the year in almost the planting districts and the Labour Federation would appear have worked satisfactorily. In July Government wrote renewi their offer of R22,000 for the removal of the Tea Kiosk and t Association having come to terms with their tenants, the Ceyl Tea Co. decided to accept the offer. In another month or two t Kiosk, in its present position at any rate, will be a thing of t past. The Benevolent Fund continues to receive the well-merit support of a certain number of our community, but I would li to see that support largely extended. During the year we receiv R3,400 subscriptions and donations and R1,056 interest on inves ments, our disbursements being R1,420. The capitalised fund the present moment amounted to R35,000, the interest from whi is utterly inadequate really to perform any useful work. Th fund came in for a good deal of criticism in the early part of t year and in December a general meeting of the subscribers w held to see if it were possible to increase its usefulness. The criti and conscientious objectors who asked for this meeting we singularly conspicuous by their absence (Laughter). Gentlemen would ask your continued and increased support to this Fund a also to the institution, somewhat allied to it, the Hat on Nursi Home. It is only some 13 months ago since we despatched o Contingent to the war in South Africa, some alas never to retu while all have suffered privation, sickness, and hardship in eve conceivable form. Our Contingent you may say has been co tinually at the front and has borne the heat and burden of the da as part of the finest fighting force in the world, and I think we ca well feel proud of our Contingent. (Loud applause.) I fear w gentlemen, now the war has dragged on so wearily and the novelt and glamour have worn off that we are too apt. I will not say forget, but not to remember so vividly our brothers at the fron And if it is possible to send a Relief Contingent down to allo those men to come back, I think if the men can see their way to d it, we should do it. (Applause.) A year ago I was able to announc the formation of a Rifle Corps with a promise of 235 member To-day, gentlemen, there are nine new ranges in existence, tw projected ranges, and 372 enrolled men or including the Colomb and Nawalapitiya Rifle Corps and the Ceylon Mounted Infantry total force of 600 men with a working knowledge of the rifle. think the events of the past year show how necessary it is tha every able-bodied man should possess that knowledge. (Hea hear.) Before leaving the question of the Rifle Corps I should lik to say that the success of this movement is entirely due to th energy and zeal with which Mr. Campbell has approached tha work. (Hear, hear, and loud applause.) I do not want to detai you long for we have a big agenda to get through, but I should lik to refer to a subject which is of the greatest importance to us all- the work of the Thirty Committee. In America our work durin the last year has been very up hill. Anticipating a shortage supplies from China owing to the troubles there, American deale indented for double their requirements and unfortunately the orders were executed in full; this, together with the war duty 5d. per lb. has had a bad effect on our teas; but I still maintai that the American market for our Black and Green tea is the o we must look to for further relief. On the Continent you hav been kept fully advised through the Press as to the work o Commissioner was undertaking there. The Ceylon Tea House the Paris Exhibition was an immense success, and I am glad to b able to say that a Tea House has been opened by private enterpri in a fashionable part of Paris to continue the good work com menced. In July last the Thirty Committee voted R120,000 as bonus on the manufacture of 2,000,000 of Green teas to come int force when the original vote of R30,000 was exhausted We a at present shipping about 150,000 lbs. a month, but with the Gree Tea market like all new markets for products it required time develop, and I do not think that we can look for immediate reli either from Green tea or from the present market. Roughl speaking we are spending £8,000 this year in America, £8,000 the Continent, and £8,000 on Green teas. I think, gentlemen, th that practically sums up the amount of work that we have g

rough during the past year, and I now formally move the doption of the report.

Mr. J. P. Ryan:—May I ask if we are spending £8.000 on Green a this year?

The Chairman:—The bonus required is £8,000.

THE OVER-PRODUCTION QUESTION.

The Chairman:—The next business on the agenda is the resolu-on which stands in my name; "That action be taken by this ssociation with a view to form a combination amongst Indian and eylon planters to cope with the present unsatisfactory condition the tea market, consequent on over-production." In framing is resolution I purposely left it indefinite as the matter was being onsidered by a sub-Committee that had not been able to meet before hat sub-Committee met on Thursday and issued its report. That eport was accepted by the General Committee this morning and ith your permission I will add that report as a rider to my original esolution. The resolution would then read as follows:—"That ction be taken by this Association with a view to form a combina-ion amongst Indian and Ceylon planters to cope with the present nsatisfactory condition of the tea market consequent on over-pro-uction. That the sub-Committee considers that a combination ith India, having for its object the reduction of tea out-put, is esirable. The sub-Committee considers that the only practicable cheme is an all-round reduction of the plucking area by ten per ent, conditional on 80 per cent. of the cultivated tea acreage joining n the combination, and in India joining on the same terms. If ny proprietor prefers to make ten per cent. of his tea crop into green ea this shall be accepted in lieu of reduction of his plucking area y ten per cent. That a sub Committee be appointed to obtain ad-erence to the scheme above described. With your permission I ill add that as a rider to my resolution in order to give it definite hape, and any gentlemen will be at liberty to move an amendment o that resolution. In dealing with the present position of over-pro-uction there appear to be two roads open for working a cure:—one y reducing the production, and the other by increasing the consump-ion, and either scheme must have one or other of those views in it. My own personal view is that increasing the consumption is only a minor help to the reduction of production. From the experience f past years in the "Thirty Committee" those who have served on hat Committee know how hard it is to force tea into new markets. When India first began to try to push Indian teas in America it did so y sending tea for shipment that could be sold at anything they could et. They thought that if the Americans could get tea cheap enough hey would take it. The result was that the tea was bought, shipped, ack to London, and did not get into consumption. Working on hose lines we have always met with the same experience. First of all ou have to get the taste for the tea, and at the same time have nachinery for getting that taste supplied. I fail to see any im-nediate relief from any increase of consumption either on the Continent or America or from making green teas. We shall doubt-ess have relief in the future and if we continue to develop the markets in the way that we have been developing them in the past, I fully believe that we shall get appreciable relief at the same date. But, gentlemen, we want relief to-day. Bearing on the subject I nave received by the courtesy of the "Times of Ceylon" a copy-right press message:—"Market demoralised. Trade money locked up in speculative duty clearances." In other words, gentlemen, that class of man who has come to our assistance, the buying-over broker who brought speculatively if filled up. In other words up to the present moment, so far as we can see, we have absolutely no outlet for that 25 millions of stock which we carry more to-day than we had two years ago, and so long as that 25 millions remains as an incubus on the London market I fail to see how we can look for any real material relief of the present disastrous position. The objections that have been raised to the resting, I won't say abandoning, of 10 per cent. of the cultivated acreage, comes, I think, chiefly from men who at the present moment are working still at a profit. I believe that many men would prefer to have a small certain profit than a possible larger one if it entailed no form of new departure. Well, gentlemen, we have got to-day to decline one thing or the other—we have to sit still and allow ruin to come upon many of the poorer proprietors or else we have to live up to our motto and combine with the view of reducing the growing pro-duction. We know that the London dealers, the buyers, and the whole trade, are watching this movement with the keenest eye, and we know that if we fail to combine to-day they will use that know-edge to depress prices still further. We also know that we have the London proprietors at our back and that India is anxious to go in for any feasible practicable scheme. (Applause) I think that if the time for combination is not now ripe it never will be. (Applause.) Gentlemen, I move my resolution in the form pub-lished, *plus* what I stated at the outset.

MR. SHOLTO SKRINE'S VIEWS.

Mr Sholto G. D. Skrine, who was received with applause, said:—Mr. Chairman and gentlemen, I thank you for the kind way in which you have received me after my absence from Ceylon. I come here to-day, at one of the most critical periods in the tea industry, to second a motion in which I have absolute faith. (Applause.) And a motion which I believe in my own mind is the only practi-cal way in which we planters can save our industry from some-thing that looks very much like ruin. It is, gentlemen, an un-doubted fact that unless we do something now when the opportu-nity is afforded us we shall never get this opportunity again. We are, gentlemen, practically pushed into a corner. We also have the satisfaction, however, of knowing that our great rival, India, is pushed into an even closer corner than we are. (Applause.) That being the case we have an opportunity of, at all events, forming a combination on the lines that have been carried out by

THE COAL OWNERS IN ENGLAND,

who not very long ago found themselves in quite as tight a corner as the Ceylon tea industry does to-day. They did not sit still and do nothing. They did not sit still and allow the trade to take their coal for nothing They combined as we are endeav-ouring to combine to day, and by that combination they succeeded in putting their product in a reasonable position in the markets of the world. Gentlemen, all we have to do is to follow that example. The difficulties, no doubt, are great, but it is the duty of Englishmen and still more the duty of planters, to meet difficulties and overcome them. (Applause.) In my opinion there are not wanting signs that the whole of the community has grasped the position of affairs and that the output of tea will naturally be reduced very largely by our own action, but in my opinion that action will not be sufficient to have any material and lasting effect on the market unless we, show that we who represent capital in the East, are prepared to put shoulder to shoulder and do something practical which shall restrict our output and take away from the middleman the exorbitant profit that he has been raking in. (Hear, hear, and laughter.) It is perfectly well-known in London and everywhere else that for the tea for which they are giving us 5d. to 4d. to-day they could very well afford to give us 8d. and still make a material profit on it. It stands to reason that they are not going to give us more than they can possibly help, and it is our duty to try and make them give us a legitimate price for a really good article. The estimates which have been sent in to the Association, have, I consider, and the Com-mittee considers, been based on practically the yield of last year, and I feel that, very prudently, we have decided, before pub-lishing these estimates to the world, to have them revised so as to be able to give a reliable estimate and one which the London markets may look upon as having been derived from reliable data. In a question such as this, I think, we all ought to sink our minor differences and do our utmost to unite, even though we may not be all agreed. There are, I am perfectly aware, a large number of estates which, even at the present moment, are showing considerable profits, and the proprietors of which will turn round and say, "Because at the present moment it is paying us, we do not see why we should be mulcted in order that men who, in our opinion, opened land which they had no right to open, should be allowed to profit." That, gentlemen, in my opinion, is a false argument. It is an un-sound argument. It is not a fact that they are going to continue to rate their profits. There are heaps and heaps of estates which up to now have been plucking coarsely, encouraged by the price given for coarse teas. These estates may not produce quite so good an article as those which are now so flourishing, but by plucking fine kinds, going in for making fine teas, there is very little question that before very long they will compete closely with those high-grown teas and reduce the profits of those estates very materially. For that reason, gentlemen, I consider that high estates ought not to adopt a dog-in-the manger policy, or leave their brother-planter alone and go simply for the survival of the fittest. (Applause.) I hope that at this meeting we shall be unanimous and that we shall be prepared to carry this motion, which has been so ably proposed by the Chairman and which is based on conditions which ought to make it, in my opinion, acceptable to

all. It is not proposed to carry out this motion unless 80 per cent. of the Ceylon area and also 80 per cent. of the area in India will combine and help us. If this is done there will be no doubt that it will bea material combination which will awaken the London market to the fact that planters can unite, and I maintain that it is for the benefit of us all that this motion should be carried unanimously. (Applause.)

Mr. J. A. Martin:—Mr. Chairman and gentlemen, with regard to the motion before us, I should like to ask two questions: (1) Does the proposal to rest 10 per cent. of the acreage of mature tea prohibit the application of manure to the balance of an estate? And (2) Does it prohibit the opening of new clearing? So far as I can understand, it does neither and if it does neither, I cannot see how it can possibly be contended to the carrying out of that motion will ever curtail the output of tea. If it does not curtail the output of tea it cannot by any possibility affect the market. (Hear, hear.) Take my own case. I happen to be in charge of an estate of 530 acres of mature tea, out of which I am called upon to abandon 53 acres. And what is the result? I shall set for a certain proportion of my older tea which will enable me if I wish to more heavily manure and cultivate balance of my acreage and the result would not be a reduction of my crop at all, but probably an increase. I do not at all say I intend manuring more heavily, but provided I wished to do so I should increase my crop at the same time as I reduced my acreage. Although I do not wish to raise any objections to any scheme which had been proposed for the general benefit of the community, I cannot see how the simple reduction of the plucking area can in any way benefit us. The estates of Udapussellawa, and Dimbula cannot, I know abandon any of their tea without reducing the out-put, but the owners of estates in the low-country cannot afford to tel their land act as a nursery for weeds. I came into this room to-day with the intention of moving an amendment, but I do not want to do so now. I do not see that any scheme which does not go directly to the root of the question—that is, output and not acreage—can be effective. I had intended to propose the appointment of a strong Committee, consisting of an equal number of planters and mercantile men, and including the Chairman of this Association and the Chairman of the Chamber of Commerce, to formulate the scheme. I did not know that such a Committee had met and I do not wish now to move such an amendment. I cannot see how the present scheme is going to benefit us in any way. If anyone can propose a scheme which will affect the output and not the acreage, it shall have my support. (Hear, hear.)

Mr. A. H. Thomas:—Mr. Chairman and gentlemen, after the very able remarks which have been made by Mr. Martin, a great deal of what I was going to say has been taken out of my mouth. I was very glad that the Chairman in his opening remarks, left out of sight the words he used in his first letter to the newspapers and those used by Mr. Rutherford suggesting that it might be necessary that their profits on the tea enterprise should be directed by a Legislative enactment I am glad to see that that has been knocked on the head. Regarding the 10 per cent. question, I think Mr. Martin has shown clearly that it will increase the production. I will take Mr Rutherford's own figures. A property of 5,000 acres would have to knock off 500 acres, supposing the estate gave 450 lbs. per acre, this would amount to 2,250,000 lbs. of made tea for the year. A little pinch of snuff to each tree would easily make up the 10 per cent. of this quantity. With regard to big companies, I think they are going to ruin this country and India. We are now trying to do something which will decrease the output, but I think I am right in saying that half the railway waggons which come up here are full of manure. What is that manure for, gentlemen? Why are we placing one ounce of manure in the soil if it is not to keep the tree alive? Good soil systematically attended to will give us a fair crop. Cultivate and prune the trees carefully and they will give us a fair crop without manure. I beg of you, gentlemen, to leave manuring alone and not to manure your trees for two years. If you will do this I think you will find that you will have a fairly paying crop. You manure your trees, and by manuring think you better the value of your tea. I will refer you to Mr. Joseph Fraser if I am wrong.

Mr. Fraser:—You are wrong, absolutely, Sir. (Laughter.)

Mr. Thomas:—Mr. Fraser will excuse me for singling him out, but he is a very important individual He has put before us statistics very neatly and carefully printed in the papers, and has shown us how manuring will pay, but I am afraid he thinks very differently now. (Laughter.)

Mr. Fraser:—No, I do not. (Renewed laughter.)

Mr. Thomas:—A very large quantity of his teas are going in t Colombo market for not more than 18 cents, and I think I will ch lenge Mr. Fraser to say that that tea does not cost 20 cents to p it on the market

Mr. Fraser:—No, it did not. (Laughter.)

Mr. Thomas:—Gentlemen, this is a very serious matter. Nu rous properties have had manure piled into them and the res has been quantity but very inferior quality. With regard to 10 per cent. question, I think I have proved that those who ma that deduction will put a little pinch of manure to their trees a the result will be a larger production than there is at the pres moment. With these few remarks I support the first part of t Chairman's motion, but I am opposed to the second portion. Bef sitting down I would move (1) "That this Association is of o nion that the large increase in the yield of tea during the past ye has been caused by the application of artificial manures, and urg owners of tea properties to cease manuring their estates, say f a period of two years. (2) That the cess be increased at once one-half, and that advertising and employing of agents for the s of teas be carried out on a much larger and more systematic sc than heretofore; that agents to canvass be secured from the cl of people used to that work, travellers for wholesale houses, e grocers. and either trades people."

The Chairman:—As I understand you to move this as amendment?

Mr. Thomas:—Yes, sir. as regards the cess, I think this should increased so as to enable us to advertise more and have agents over the world. Take a shop-keeper who has a large quantity goods which he cannot sell. What does he do? He advertis Now we must get a certain class of men to do this work for I am a tea planter myself, but I do not think the tea-planter i good agent to send around the world to create a market for o teas. I think we should go direct to grocers' assistants a travellers for tea and other products in England. We might p advertisements in the newspapers inviting these men to apply, a then pay them well. Gentlemen, we have taken the wrong si the wrong edge. What I contend is that we regulate the dema by the supply; we must not regulate the supply by the dema We are trying now to regulate our supply by the present dema We are trying to reduce the quantity.

Mr. James Sinclair:—Mr. Chairman, I may be allowed to ma a few remarks.

The Chairman:—Has Mr. Thomas's amendment a seconder?

Mr. Sinclair:—I am not going to second that. (Laughter.)

The Chairman:—Mr. Thomas's amendment is practically a commendation to increase the cess by one-half. The rest is a n of advice to people manuring. (Laughter.)

No seconder, however, was forthcoming, and Mr. Thoma amendment fell to the ground.

Mr. Sinclair:—Mr. Chairman and gentlemen, I came here to-d prepared to say a good deal on the Chairman's motion and chief I may say, I desired to point out the difficulties attendant on car ing out a practicable scheme. But I have detected a note in t motion and the Chairman's speech, and more especially in t seconder's speech, which indicates that an attempt is to be made form a combination between the planters of Ceylon and the plant of India. If that is the case, I expect that whatever is don Committee will be appointed to confer with India and work ou scheme. For myself I have every confidence with the planters Ceylon working out a scheme which will be acceptable to Compan in London and have a practical effect. I am one of those w hold that

COMBINATION WOULD EFFECT A CURE ALMOST IMMEDIATELY.

(Applause.) We are being most unfairly treated by the dealers home. They are a very small body of men and can very read put into force any course they choose to adopt. I do not kn that there is any cut-and-dried scheme for ruining us, but there i tacit understanding and they have certainly been working that w for many years. On account, therefore, Mr. Chairman, of the ne for combination which I detect in the speeches the less said ab the difficulties of carrying out any scheme just now the bet (Applause.)

Mr. James Ryan:—Mr. Chairman and gentlemen, with rega to this matter—a matter which we must all admit to be serious cannot help thinking that a good deal of the correspondence wh has appeared in the newspapers has been just a little bit hysteri

t has also been to my mind a wee bit un-British. It used to be he idea that he never bawled out before he was hit, and when he as hit he made as little noise as possible and damaged the other an as much as he could without uttering a sound. (Applause.) ow in this case we have had letters upon letters. We have had tters of praise and letters of abuse. We have had the man who as improvident and forgot to manure abusing the man who did anure; we have had the humourist who tries to rub it in one ay and next day to rub it in again, and it does not seem to matter him whether it concerns his own friend so long as he can be unny on two sheets of foolscap. But the matter, as I have said, is very serious one. We have had some thirty schemes put before s. Each one of us has had an objection to somebody else's scheme nd we have not been, as a general rule, able to see any flaws in our wn. We have been treated very kindly in this matter by India. am sorry to say that I regard this exceptionally friendly attitude f India with a very great deal of suspicion, and I regard it very uch from the point of view of the school-boy, who, having received large hamper from home suddenly finds the bully of the school ishing to lend him his knife to cut the string. (Hear, hear.) When we were down, India treated us with a very considerable easure of contempt; when we were beginning to develop a pretty ttle business by advertising and by taxing ourselves in a way that o other community in the world has ever done, India stood aloof, r made a sort of half-hearted attempt to compete with us and then etired from the business. Gentlemen, if we were to treat India as he deserves to be treated, we should throw away the scabbard, and ght them on their own ground, letting the weaker go to the wall. Well, gentlemen, that might be regarded as un-British and very ossibly a little undiplomatic. (Laughter.) Therefore let us accept ndia in the spirit in which she has come—as the prodigal son eturning to banquet on the weal which we have saved up. So let s waive all previous weaknesses of India and take her into our osom. On the other hand, gentlemen, we have our planter-rethren here who behaved very much as India did. They were aaking a very nice thing of it in the low-country and I do not emember any low-country planter coming and helping me in the lack years between 1887 and 1890. Mr. Wm. Saunders came to me ne day and said "I suppose, Ryan, you are not getting very much ea on your estate and that it is beginning not to pay." (Laughter.) Well we will take these gentlemen to our bosom too. I am perfectly villing, with the consent of my partners, to meet the Chairman of he Ceylon Planters' Association, the Indian planters, and the ow-country planters, to abandon 10 per cent. of my acreage or a period of twelve months. And I reckon this, gentlemen, as very noble thing for me to do. (Laughter.) But he knew certain of his neighbours who were making very large profits er acre and I do not think they will go quite as far as I can. t would be quite possible. therefore, for the planters of Dimbula, Dikoya, Udapussellawa, and the higher districts to refrain rom backing up this scheme, yet we might still have 80 per cent. f the tea acreage of Ceylon adhering to the scheme. Many emedies have been suggested for the reckless form of generosity which would sooner spend somebody else's money than their own. (Laughter.) They have even suggested for example that the unfortunate cooly who has done nothing whatever to bring about this tate of affairs, should be mulcted in 10 per cent. of his pay. (Laughter.) Well, gentlemen, no doubt he will be mulcted in 10 per ent. of his pay and perhaps, even more, and the place where he will be mulcted will be where he had not manured enough and very robably, gentlemen, he will have to go somewhere else. (Laughter.) But he will leave off going if you do not mind, and try and consider his matter a little seriously. Now the point is this. we must educe the output. Very well, we are going to follow the Chairman nd stop plucking 10 per cent. of our acreage, provided at least 80 er cent. will agree to this. We must exercise extreme care in lucking and manufacture We must not pluck closely, but it is

PERFECTLY EASY TO PLUCK FINELY.

We must manufacture that tea in the best possible way, and if we ave insufficient withering accommodation, we must borrow the money to increase our withering area. We must restrict the out-ut of rubbishy teas. There is not the slightest use of our trying o keep up the good name of Ceylon if the 20 per cent. who will not oin in this scheme go behind our backs and produce stuff to feed ur friends, the London dealer and the buyer of rubbishy teas in olombo. (Hear, hear) We have all of us from time to time got a ery good price for tea which we knew in our heart of hearts to be very poor tea. It is quite possible to restrict the output of that tea by the formation of a Committee who shall determine whether such a liquor be so much below the standard that it would be inadvisable to put it on the market. I would ask you, gentlemen, to consider seriously the necessity of appointing five trusted men—two planters, two merchants, and a broker—with a view to ensuring that no tea leaves this island of Ceylon which is not a credit to the island. (Applause.) The other remedy I would propose is one which had already been brought forward with much greater skill and by much better men than myself. It is perfectly evident that if we are to open up new markets we must have more money to do it with. I asked the Chairman just now whether it was true that we were going to spend £8,000 in America this year, £8,000 in the Continent, and £8,000 to bolster up green tea. That amounts to £24,000. I am sorry to say, gentlemen, that the income of the "Thirty Committee" will not exceed R3,00,000, which is the Chamber of Commerce estimate. Our own estimate is a little less, and at the most liberal exchange, say of 1s. 4d.—which has been one of the things that has ruined us—it will not exceed £20,000. If we are going to spend £8,000 to bolster up green teas, we shall have to borrow £4,000, or raise it by increasing the cess. Therefore, my remedies reduced to a nut-shell, are:—Sit tight, say little, make as good tea as you can and not too much of it, prevent your tea-maker, and everybody else's tea-maker from sending away from the estate any tea which would be a discredit to Ceylon, and give the "Thirty Committee" more money to work with. (Applause.)

Mr. Labouchere-Hillyer also offered some remarks. He said he felt he was following a person not only of Ceylon eloquence but of continental eloquence—(Laughter)—and his only apology for attempting to follow him was that he would be extremely brief. He thought from the speeches that that had been made and from the telegrams that had been received from London and Calcutta that something would be done to save them from the difficulty in which they found themselves. He strongly deprecated the idea of the survival of the fittest, and hoped that they would stand together and make one united body of Ceylon proprietors and superintendants. The Chairman had proposed a scheme, and, therefore, was above those who simply criticised all the schemes brought forward. (Laughter.) He thought they should support the Chairman's scheme, and he also thought the suggestion put forward by Mr. R. V. Webster with regard to the Government marking of all Ceylon tea was good. The export of poor tea would do the colony harm. With regard to the 10 per cent. proposal, he thought it was a very valuable one and strongly supported it, as it seemed to him the only possible solution of the question. Did it not strike the Chairman that the London men knew something more about the matter than those in Ceylon? He (the speaker) knew absolutely nothing except that which concerned plucking, weeding, pruning, and so on. He grew tea; he did not sell it. Mr. Skrine, who, he believed, had just returned fron London, brought forward his remarks in exactly the tone expected from England and not in the tone that might be found in letters dated from Abbotsford. With regard to the letters which had appeared in the newspapers, barring Mr. Webster's, what were they except letters of criticism and abuse? Could they anywhere find a perfect scheme? Could they have a perfect Government, a perfect law, a perfect Land Act, or a perfect School Board tax? They could never get a perfect scheme and it therefore behoved them to take the best that had been put forward.

After a few further remarks of a jocular character, the speaker was loudly applauded and said he was not quite sure whether the applause meant "sit down" or "go on." (Laughter.) He would, therefore, be really serious in the matter. There was one quality which he really rose to advocate more than any other and that was the policy of sweet reasonableness. Surely in this matter sweet reasonableness was what they wanted to effect and carry out. They did not want to "go" for each other, but to join together and carry out some practicable scheme. (Applause.)

No further comments were offered, and the Chairman, in reply, said:—Gentlemen, the chief criticism of Mr. Martin, who was the first to speak more or less against the motion, was on the subject of manure, but I do not propose to enter into the manuring policy, because where doctors disagree it is not for me to give out advice and point out whether you should or should not manure. The mere fact of resting 10 per cent is not likely to make a man go in for manuring more than he would otherwise. (Hear, hear.) I join issue entirely with Mr. Thomas when he says that no estates manure to live. I firmly believe that 25 per cent. of the estates are manured

to live, and for no other reason It has been a very great pleasure indeed to hear Mr. Sinclair's advice and Mr. Thos. Labouchère-Hillyer's advice after the amount of criticism we have seen in the Press. I trust that more or less it is irresponsible criticism, and that is why I say "Do not criticise any scheme too closely." It is a moral impossibility to get a scheme anything like perfect. I would like to refer to the telegraphed proposals of the London Association. The special sub-Committee considered them very closely indeed and their opinion as practical planters is that the scheme is impracticable. The scheme was that estates averaging 11d. should be exempt, and estates averaging 9d. should rest five per cent., and so on. I am not sure to be crying out about the immorality of my neighbour. Personally, I believe he is as moral as myself. (Laughter.) If he writes and says he will rest ten per cent., I believe he will do so. I do not believe you cannot trust his morality. I say it is a libel on the community. (Applause.) At the same time you must have a certain amount of policing. In the opinion of the Committee the whole scheme suggested by the London Association is impracticable. They think we should choose what appeared to be the simplest scheme, and the chief virtue of resting ten per cent. is its simplicity. Even supposing you have an immoral neighbour when he rests ten per cent. of his acreage he practically put up a flag, and all his neighbours can see that ten per cent. growing. If he plucks that 10 per cent. it will be seen. There is no single scheme which is really efficient. A great number of men who write to the newspapers seem to think that the resting of ten per cent. of the acreage is to be the only thing that the "Thirty Committee" will do, but the Committee will also push Ceylon tea with energy and zeal in a foreign markets. At the same time they strongly recommend all men who can make a profit by fine plucking to do so; if they cannot make a profit by plucking fine, then they will not do so. I do not think there is any need to keep you any longer, and I now formally put the motion to the meeting.

Mr. MacGregor:—Do I understand that you will take the areas of every individual estate?

The Chairman:—It has not actually been defined. I take it that if the motion is carried, it will be left to the sub-Committee Personally, I think it is absolutely immaterial whether we take every individual estate or whether we take each Company. It is nothing to us whether an estate pays. What we want to do is to take the weight of tea off the market.

The motion was then put to the meeting and carried almost unanimously.

Mr. T. C. Huxley:—I propose that the result of this discussion be wired home to the London Association.

The Chairman:—I propose wiring it to London and to the Indian Tea Association in Calcutta.

THE IMPORT DUTY ON TEA.

Mr. Edgar Turner had the following motion in his name:—"That, in the opinion of this Association, the time has arrived to approach the Government of Ceylon asking for (1) the abolition of the import duty on tea in Ceylon, and (2) the application of inspectors to guard against the export and import of rubbishy teas." He said that having, as they hoped, satisfactorily settled the question of over-production they now wanted to find new markets for their teas. With the permission of the meeting he would like to alter his motion. Instead of saying "to guard against the export and import of rubbishy teas" he should like the motion to read "to prevent the import and export of tea below a fixed standard." Permission having been given to alter the motion he contended that what they wanted to do was to find an outlet for their teas. They had heard the cry of "starve London," but they could not starve London because they had got the stuff, and the only way was to create new markets. By the abolition of the import duty on tea in Ceylon he took it that in time Colombo would become the distributing centre for the East. At the present moment no blending could be done in Colombo. Ceylon originally made its way through blending and they must continue that, and the only way he could see of doing that was by removing the import duty on tea in the island. To his mind the result would be that the Colombo market would gradually increase. People would not send down say ten thousand chests of China tea here if it was going to be sold at a loss. The same with India; they were not going to send down tea here if they were not going to get better prices. As he had said he hoped that Colombo would gradually become the distributing centre for the East. The Colombo market was quite satisfactory if they got the teas that suited it. At the present mome they knew that their teas were blended in Australia and Londo and if they were blended in Ceylon they would have better contr If they agreed that the abolition of the import duty was desirab they must have safe-guards and these safe-guards would be I spectors. At the present moment Ceylon was undoubtedly sufferi from a minority who were sending away teas that were not fit f consumption. This destroyed their good name and in the interes of the majority they ought to take some steps to prevent it. Son people said that they must not interfere. They asked Governme to interfere and collect the tea cess. That was a step taken *nolen volens* in the interests of the island. It was compulsory, and no on would say that the tea cess had not done good. If the impo duty were abolished and Inspectors appointed, in all probabili they would see the Colombo market gradually increased.

Mr. Martin:—Mr. Chairman and gentlemen, I have muc pleasure in seconding Mr. Turner's motion, though I am not pr pared to make a speech on the subject, because I did not come her prepared to do so. At the same time I think that any schem propounded by a man who believes that it will tend to the gener advancement of the community is worthy of discussion. and, there fore, I have much pleasure in seconding the motion. (Hear, hear I foresee considerable difficulty in carrying out the scheme. On is that Government will require to have some sort of pecuniar advantage accruing to them from the appointment of these Inspect ors. But I do not think it would necessitate any very larg increase in such a tax as the tea cess to enable Government to pu through some such scheme as Mr. Turner proposes As regards th second part of Mr. Turner's motion, I think it would be a eminently desirable thing to prevent the export from Ceylon of a such teas as are calculated to do harm to the good name of the te industry of this island. (Applause.) There have been teas sold i London, Australia, and I have no doubt elsewhere, which hav caused a great deal of discussion in the public Press, and I thin that any scheme, which can be devised to prevent the export fro this island of teas such as those I have referred to, is deserving all the support we can give it. (Applause.)

THE ARGUMENTS AGAINST.

Mr. A. H. Thomas:—Mr. Chairman and gentlemen, I rise t oppose very strongly the first part of Mr. Turner's motion, bu I support the second portion. I believe that it would be a ver serious day for Ceylon if we were to do away with the impor duty on tea. (Hear, hear.) China tea will be brought into Colomb by millions of lbs. and will be blended with our tea to the propor tion perhaps of 5 lbs. of China to 1 lb. of Ceylon tea. This will b sent to the West. Ceylon will never be the distributing centr to the East. We do not distribute it in the East; we distribute i all in the West. I heartily support, however, the second part o the motion.

Mr. Sholto Skrine:—Mr. Chairman and gentlemen, I also rise t oppose Mr. Turner's motion. The proposal if carried into effec would be likely to do Ceylon an infinity of damage. I would poin out that Mr. Turner has given us no practical scheme by which w should be benefited by abolishing the import duty on tea. Ther is no doubt that the arguments against it are overwhelming (Hear, hear.) To start with, it would open this market, which is very neat little market, specially inaugurated for the good of Cey lon, to the Russian buyer who would have the opportunity of buy ing anything he liked. It would give the Indian man the oppo tunity of swamping this market without any possible benefit to u We had an object lesson in which it has been shown that we, th planters of Ceylon, can, without the slightest difficulty, swamp thi market. I think that that lesson ought to be enough to show u that it would be dangerous to let anybody else into the Ceylo market. (Hear, hear.) It is not calculated to do us any goo whatever. India, I am sure, would welcome a market in Colombo and India, although she is holding out the right hand of friend ship just now, has not, as many speakers have pointed out, bee particularly friendly to us in the past. And even their friendl overtures may be viewed with suspicion. There is no doubt tha were Indian tea allowed to come into Ceylon, our market, for a practical purposes, would be of very little use to us. I, therefor think that we should be doing

A MOST IMPRUDENT ACT

if we gave the slightest support to this motion, and I hope the will be found very few people willing to support it. (Applaus I am glad that the motion has been seconded, so that the opini

the Association may be clearly expressed. Had the motion not en seconded, we should not have had an opportunity of saying at we think about it. It is just as well that the world should ow that we have no intention of opening up this market to as. (Applause.)

Mr. C. Gibbon:—Mr. Chairman and gentlemen, I think there is other very good reason why we should not open our market to ner countries. We must not forget that Travancore will shortly sending out large quantities of tea, and we do not want the lombo market swamped by four or five millions of Travancore as. (Applause.) If the reason is that of blending with China as, it must be remembered that this could be done in bonded arehouses

The Hon. J N. Campbell:—Mr. Chairman and gentlemen, I was Colombo last week and asked a broker there if he could give me s opinion on the suggestion that was going to be made by Mr. rner. He said he had seen one or two of the Russian buyers d other large buyers in Colombo, and, so far as he could make t, there was no demand whatever for the abolition of this duty. here was no desire on the part of the purchasers he had met to in for tea blending in Colombo. The Russian buyers, as a rule, end their teas in Moscow, and it is unnecessary for them to bring eir teas from China or India to Colombo for blending purposes. have had a letter from the same broker to-day, saying he has seen o more Russian buyers, and one of them is in favour of the pro-sal in case he wishes to make brick tea from China and Ceylon ist. And he is absolutely the only man in Colombo who is in vour of this proposal. I am myself opposed to it. In my opinion e time has not yet come when we should open the Colombo arket in that way. (Applause.) If any one wishes to carry out ending, as already mentioned, it can be done in bond. There is thing to prevent that being done. I do not agree with Mr. rner that we should ask Government to appoint Inspectors. I ink that rubbishy tea is a thing that will cure itself. When ople find they cannot sell it, they will cease to make it. I do not ink that there is anything like a large quantity of tea exported om Ceylon which should not go into consumption. There is, I ink, very much more tea exported from India of that kind, and we go on putting restrictions upon ourselves, we shall still leave open to India to export as much rubbishy tea as she likes. I ink it would be extremely irksome to us to have all our best and mmon teas passed by an Inspector, and I am as much opposed that proposal as I am to the other. (Applause.)

REJECTION OF THE MOTION.

Mr. Turner, in reply, said:—I am afraid it is not much use ying anything in reply. I may, however, refer to one or two ints. Mr. Skrine asks what advantage we are going to gain if double the size of the Colombo market. I think it would be a stinct advantage. Mr. Campbell says that it is unnecessary for e Russian buyers to blend their teas here. If they could blend em here, I think it would be a great advantage. They have a ry big trade in Siberia, and it is brick tea that I want to see ade. With regard to the blending of tea in bond, I believe that at matter was brought forward and that this Association would t listen to it. Had they listened it would have been the thin ge of the wedge, and had the making of brick and blended teas Colombo been started there would have been no need for my tion. But this Association threw it out and would not have it.

The Chairman:—Well, gentlemen, you have heard both sides of e question and I now ask you to vote upon it.

The motion was lost by a large majority.

THE TEA CESS FUND.

MR. WESTLAND'S PROPOSAL CARRIED.

Mr. Jas. Westland rose to move "That Government be asked to ntribute from surplus revenue to the Tea Cess Fund a similar m to the amount collected last year." He said: My task, r. Chairman and gentlemen, has been made easier by the eeches which have been made to-day. With regard to Mr. omas's remarks, I will let you into a secret Before bring-g this motion before the meeting I was seriously consider-g the question of asking the community to agree to the tax ing raised by themselves. I asked some of my friends in Colombo, d they said "You surely know that we are too poor to tax our-ves. You will lose your motion." Mr. Ryan has said that the mmittee really want funds. Our member in Council has said at the Government have a very large surplus. From this large plus they had to pay in the space of six years for a policy in-augurated by Government. But instead of taking six years to pay it off, it is going to be paid off almost at once. Now I want a little of this surplus and I have good grounds for asking for it. We know that the Governor has refused to reduce the Railway rates, because, he said, once the rates are reduced, it is a difficult matter to increase them again, and the sum that we shall lose will be a very serious one. Now, gentlemen, I have clearly stated in my motion that the sum I ask for is only to equal the amount that will be lost to the revenue by one year's reduction of the rates. (Hear, hear.) I ask it only for one year. I was told, before I came to Kandy, and since, that it was no use moving this proposal—that Government would never grant the request I made. I asked "why?" The paltry excuse given me was that I dare not do it at this meeting. We have the Governor's word that he sympathises with us deeply and he said that he would help us as soon as we could show him in what way, or words to that effect. What better can we have than

THE PROPAGATION OF THE GOSPEL OF TEA

throughout the world. Preach tea; advertise it. What did Lipton do? What did Pears do? What did "Monkey Brand" do? (Laughter.) They advertised their goods throughout the whole world. We want our teas advertised not only in North America but in South America. I know, as a member of the "Thirty Committee," that our hands have been tied for want of money. We have been spending money lavishly. We have a precedent for asking for this help. Planters have, before now, gone to the Government when they desired to open a road and asked for a grant-in-aid. They have offered to contribute so much, say R50,000, if Government would contribute a like sum. This has been done for years. There is another precedent in Government spending money largely in irrigation works. Why? To benefit the native community; and rightly so. (Hear, hear.) I believe, from my soul, that the money I ask for will benefit not only the planting community, but the whole of Ceylon—(applause)—if it is well spent by the "Thirty" Committee". You have had the names of the members of this Committee which would be responsible for the spending of this money. If you have confidence in them, I ask you to urge Government to give us this money. It is only R3,00,000. (Applause.)

MR. SKRINE SECONDS.

Mr. Sholto Skrine said:—Mr. Chairman and gentlemen, I rise with some diffidence, after the report that has been made on my oratorical powers—(laughter)—to support this motion; and I feel rather nervous, after the remarks that have been made, in making a speech in support of it; I am also nervous from the fact that you have heard so much of Mr. Skrine that you are quite tired of him. I support this motion because it is the only practical way, so far as I can see at the present moment, of raising sufficient funds to exploit successfully the different markets of the world. There is no doubt we are suffering at this moment from over-production. We are already showing our willingness to be taxed, by passing a resolution to the effect that we will cut off one-tenth of our acreage in order to reduce our production. But there is something more necessary after reducing production, and that is to open other markets. The low market has made the whole of us poor, and it is quite impossible to propose further taxation. I think, therefore, that Mr. Westland has made out a very good case. We have, as he said, the sympathy of the Government, and I honestly believe that the Government is anxious to see this industry out of its difficulty—(hear, hear)—not only out of selfish motives, but because it feels that the Ceylon planter deserves something of Government—that he has made the brightest jewel in the British Crown. (Applause.) If it were not for the Ceylon planter, Ceylon, instead of being the brightest jewel in the British Crown would be another Madagascar. We have, too, an infinite number of precedents why Government should help us, and Government would not be straining a point by holding out to us a helping hand. When Mauritius and Jamaica were in considerable financial difficulties, we saw the Colonial Secretary willingly come forward and help them in their difficulty. Shall it be said that the Ceylon Government, when we are in difficulties and ask for so paltry an aid, will withdraw its hand? I do not believe it, gentlemen. I believe the Governor and the Colonial Secretary will be only too glad to do what they can and prove in a practical way that they absolutely sympathise with the planter in his difficulties. For that reason, gentlemen, I support this motion in the confident hope that Government will come forward and help—in the confident hope that Government will realise what the planter has done and is

willing to do for his country. (Applause.) Every planter this year has given of his blood and his treasure to help the Empire, and it is not a great thing we are asking for to-day—that Government should give us back some of the surplus tax which has been taken out of our pockets in order to aid us in our difficulties. (Applause.)

SUBSIDISING ONE PRODUCT.

Mr. Thomas:—Mr. Chairman and gentlemen, does this motion not clash with Mr. Campbell's motion? We ask Government in the latter motion to release us from taxation, and had we not better go with that resolution with clean hands? Another thing is that we are now asking for a donation from Government of something like R300,000 on one product only. The Government may turn round and say "Why should the tea industry get this money more than the cocoanut, cocoa, cardamom, or any other industry in the Colony?" I am very doubtful if Government will accept the motion. From our own pockets we must strive to get a market all over the world. Mr. Westland supported everything I said in my amendment, with a difference that I wanted the money to come out of our pockets. If it was the only product in the country, it would be a different thing. But there are half-a-dozen products, and we cannot expect Government to give us alone this large sum of money.

GRANT-IN-AID.

Mr. W. D. Gibbon:—Mr. Chairman and gentlemen, I am very sorry that Mr. Thomas has not been able to follow up the arguments that had been used by the various speakers. I thought they had been very simple and explicit in putting the matter before us. I should have thought that by this time Mr. Thomas would have been able to comprehend the fact that there are certain occasions on which the Government is prepared to grant such help as Mr. Westland has proposed. Mr. Westland very clearly pointed out one, *viz*, the grant-in-aid scheme, by which Government, out of its revenue, contributes half the expense of a road in a certain district. It is a scheme in which I have been interested as a Committee-man for the past ten or fifteen years. The Government has never talked about any inequality in that. Even the newspapers belonging to our friends the native community have never found any fault with the policy, and I cannot see that there is any inconsistency in Government giving us this help which we now so sadly need. (Hear, hear.) Going upon the principle laid down by Mr. Thomas, England made a great mistake in taxing one particular class of product. They had no hesitation in putting the increased tax of 2d. on our teas. Did the other communities find fault with Government for putting on that tax? Not at all. I believe, therefore, that the request is one which Government will think twice before refusing. (Hear, hear.)

PROTECTION FOR CEYLON'S GOOD NAME.

Mr. R. V. Webster:—Mr. Chairman and gentlemen, I have great pleasure in supporting Mr. Westland's proposal. At the same time I think there would be no harm in bringing to your notice a very valuable asset which we have overlooked. That asset has been obtained with much care and with the expenditure of much money. The asset is simply "Ceylon Tea." Very large sums have been spent during the past few years, say ten years, in bringing the words "Ceylon Tea" before the public. Now I can talk with a little experience. During the past ten years I have completed thirteen trips round the world. I have visited, with the exception of China, Japan, and South America, every country in the world When I first began my travels it was quite an exception to find "Ceylon Tea" in any shop windows. Now it is everywhere. You find Ceylon tea in at least 90 per cent. of the shops if you go to Australia, New Zealand, Canada, and even the United States of America, with the exception of the Southern States, which have not been exploited. We have brought Ceylon tea before the world. We have created a demand for it, and the public ask for it, but I am sorry to say that the unscrupulous merchants of the world buy our teas and blend them with cheap Chinas, Javas, and various other teas. To-day we are receiving more benefit from it because we are producing teas at such a low price; but should you reduce your output you will very soon find that the merchant will again resort to blending with a large proportion of China, Java, and other teas to bring down the cost. Now we have to devise some scheme to protect the name of Ceylon tea, and so reap the benefit of it. It is a difficult thing, but we must not stop because it is difficult; we must tackle it. (Hear, hear.) There is no reason why we should not devise some scheme whereby we shall reap a benefit from the valuable asset to which I have referred. In Queensland, only last year, I was walking down a street, and saw in a shop window "Ceylon Planters' Association, Colombo." I visited the shop and bo teas there, but I am sorry to say that Ceylon tea was conspic by its absence. No attempt, I think, has been made so far to tect our interests. It is a difficult thing to formulate a sch but I think we could devise some means whereby we can pro ourselves from these frauds.

NATIVE TESTIMONY.

Mr. D. Joseph:—Mr. Chairman and gentlemen, I rise to sup the motion I merely came to hear the proceedings, but after statements that have been made with regard to the good which planting enterprise has rendered to Ceylon, I rise, as a nativ support those statements. (Hear, hear.) We all know that w coffee, for instance, was paying, the country was prosperous. W coffee failed, we all know what happened. Around Kandy alon value of land went down, and, in fact, people were actually on brink of starvation. Through the enterprise of the tea-plan however, prosperity returned. H. E. the Governor once sai think, that the planting community and he rowed in the same I do not exactly remember his words, but I believe the illustra intended was that the island depended largely on the prospe and enterprise of the planting community. I think no truer w were ever spoken by the Governor. The price of land may be h and the people prosperous, but immediately there is a drop in price of tea, the land becomes less valuable. I may instanc case in which an owner refused R4,000 for his property, but l on sold it for R2,000. I think, therefore, that it would be v foolish policy on the part of Government—something like kil the goose that lays the golden eggs—if they do not grant the v small concession asked for. I have very great pleasure in supp ing the motion. (Applause.)

Mr. Westland:—Mr. Chairman and gentlemen, I do not thin necessary to say anything in reply.

The Chairman then put the motion, which was carried *nem. c*

OVER-PRODUCTION OF TEA.

The following remarks of Mr. J. E. Aird, in a lette the *Englishman*, deserve more than passing attention:—

There are at present several schemes before tea producers inte ed to remedy the so-called over-production which is clogg industry. If we assume that it is necessary for tea producer sacrifice a certain proportion of their income for a year or two order that profits may be greater in the following years, it wo be well to make as sure as possible that there will be a return for sacrifice. It is not my intention here to point out the execu difficulties attending any particular scheme for the reductio crop, but rather to consider, by comparison with the alterna method of relieving an overstocked market, the advantages and advantages of the two methods. Ignoring the almost insuper difficulties of combining the multitudinous interests involved in reduction of output, let us suppose that the combination is poss and that Ceylon and India are, as an experiment to manufact ten per cent. less tea than the amount already estimated for, I and Ceylon together supply, let us say, eighty per cent. of the wor consumption; so that the ten per cent. reduction would mean e eight per cent. on the total output, and as only the lower grade would be taken off the market, it is not too much to suppose t other tea producing countries would increase their outturn ten cent. to supply demand for low grade teas. It will be seen then a ten per cent. reduction of output by India and Ceylon means six per cent. on the total output of the world. It is questionab prices will rise proportionately to the reduction of supply, but if be admitted, it must also be allowed that prices will fall again w outturn becomes normal. Supposing that the proportionate crease in price takes place, Indian and Ceylon gardens, then long as the experiment lasts, will have a 6-1/3 per cent. rise in pr on a ninety per cent. crop, but as an eleven per cent. rise is require make a ninety per cent. crop pan out equal to a normal one, we h here a dead loss of 4-2/3 per cent. on our present prices. This may appear much of a sacrifice for a year or two, but as neither the num of consumers nor amounts consumed per head will have increase the meantime, with all respect to the men who have devised the sche I would ask to be shown wherein we will be benefited when pr and our turn become normal at the conclusion of the experimen

Let us now consider the alternative scheme for relieving over-oduction by increasing consumption. To increase the number of nsumers or amount consumed per head there must be no curtail-ent of crop, nor enhancement of prices, but at the same time it ands to reason that if all the surplus tea over present consump-on can be taken off the market by fresh consumers, there will be drop in prices. Still assuming that it is necessary for tea oducers to sacrifice a portion of their incomes, and ignoring as fore the difficulties of combination and collecting, let us consider iat would be the probable effect of an amount in hard cash equi-lent to the loss on ten per cent. reduction of output were applied increase consumption. This sacrifice, as I have pointed out, ll amount to about five per cent. on present income or in other ords allowing twenty per cent. of the fund for expenses of ad-inistration and distribution, it will admit of four per cent. average ass tea of the Indian and Ceylon crops being taken off the mar-t and distributed gratis, as an advertisement, among people who present do not drink tea. As the taste increases a price could demanded and a proportionately larger percentage of crop taken f the market; and there would be small chance of other tea oducing countries underselling us, for with such a lever of control our hands, a demand for any particular class of tea could be mediately supplied at a price which no competitor could look at. ne of the many advantages of this scheme is that, once the rate levy is fixed, proprietors and share-holders would be better able calculate how they will stand during the experiment. There n be no doubt that, the numbers of consumers being increased, e final results will be more beneficial and permanent than any at can be looked for from the artificial expedient of reducing itturn.

ONE TASTE IS ENOUGH.

The writer never had a taste of rheumatism but once—about ur years ag- it was—and it laid me up and made me groan for x weeks. And I am not praying for any more. I can get a art-load now, just by thinking how it felt. But, oh, what a lot folk catch it worse than I did.

Here is Mrs. Annie Hill, she is one of them. Or rather she *was;* e is right enough in these days. Her idea of talking of it is to eer some other sufferer, and show him the way out. And we ank her for that. It's the proper feeling to have towards our llow-travellers through this vale of tears—and pains.

"Some eight or ten years ago," says Mrs. Hill, "I was a perfect artyr to rheumatism and indigestion. As if they were not enough r one poor woman to bear, I often had frightful pains in the chest, th weakness all over my body. It was awful, and I didn't know iat the end of it was going to be. Now and then I was completely ostrate.

"We hunted everywhere for a cure, and I tried medicines, until e empty bottles in the house rattled wherever you put your hand t; all to no earthly good. We spent money and spoiled hopes, d that's the story.

"At last I saw an advertisement of how Mother Seigel's Syrup d cured a man of rheumatism and other ailments—just like mine. told the tale himself, as I am telling this. I will try it—so I id to myself.

"It acted splendidly, and I kept on with it until I was entirely ll. It cured my rheumatism, my indigestion, and my liver mplaint—all in a bunch. Sometimes I bought the Syrup by the lf dozen in order to get it a little cheaper.

"I am an old resident of this district, having lived here for the t fifty years. I am now seventy-five and in good health, I am own far and wide, my husband and sons being in the farming d dairy industries on a fairly large scale. I am never without ottle of Mother Seigel's Syrup in the house. There are plenty medicines in Australia, goodness knows; almost as thick as the bbits used to be, but none, so far as I know, to compare with ther Seigel's Syrup."—Mrs. Annie Hill, Kayuga, near Muswell-ook, N. S. W., Sept. 21st., 1899. Witness, A. Halpin.

"I have known Mrs. Hill for eight years. Her testimony to the tues of Mother Seigel's Syrup can be implicitly relied upon. e is altogether incapable of making any statement that will not nd the closest investigation." C. J. Spratt, Auctioneer for the rmers' Association.

MARKET REPORT.

[*Per Mail advices of 8th February* 1901.]

COFFEE.

The London Commercial Record says:—There is no improvement to report in the general tone of this market, and with the few exceptions of fine colory lots of Costa Rica the tendency has again been to easier prices, especially with regard to the limited supply of new East India, the quality of which is still open to much improvement. A feature of the week was the offering of 580 bags Hawaii the largest consignment yet received from there, but there was very little demand for them, and not only a few lots sold. The market for "futures" was very flat for some days, and March Santos fell to 29s 9d, then a better feeling prevailed, which subsequently gave way to depression on large receipts, but at the close, on a rise in Exchange, values have improved; yesterday March Santos sold at 30s 4½d to 31s, May at 30s 10½d to 31s 6d, July at 31s to 31s 9d, September at 31s 4½d to 32s, and December at 31s 9d to 32s, closing with buyers at the best points.

London	Santos	March delivery	31s 0d.
New York	No. 7 Rio	,,	5 75 cents.
Hamburg	Santos	,,	30¾ pf.
Havre	Santos	,,	37¾ francs.

At the Dutch Trading Co's public sale, held on 5th instant in Rotterdam, 29,260 bags 90 cases were offered; good odinary Java realised 30½c against 32c valuation, and 35c in October, 1900.

Imports, Deliveries and Stock of Coffee in London, are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons	13,988	12,559	2,214	2,330
	Home Consumption.		Export.	
	1901.	1900	1901.	1900.
Tons	1,857	2,183	1,356	2,342

The preceding figures exhibit—	Tons.
In the Imports a decrease this year of	116
Home Consumption a decrease of	326
Export a decrease of	986
Stock an increase of	1,429

Auctions this week have passed off as follows:—

East India. 210 bags offered and 175 bags sold—*Wynaad* smalls 42s, low middling 13s 6d, pea-berry 55s.

Jamaica. 8 barrels 46 bags sold. good ordinary 37s 6d, peaberry 52s 6d.

Costa Rica.—2,315 bags catalogued and 2,100 bags sold, smalls 33s to 47s 6d, low middling greenish to colory 45s 6d to 50s 6d, middling 51s to 58s, good middling 59s to 64s, bold 60s 6d to 75s 6d fine bold 77s to 90s 6d, peaberry 53s to 83s.

Vera Paz.—286 bags mostly sold. smalls, 39s, 6d, low middling 46s, bold 54s 6d. peaberry 55s.

Salvador.—63 bags partly sold, smalls 32s, low middling 46s, peaberry 52s.

Colombian.—Of 749 bags offered 670 bags sold, smalls 29s to 34s 6d, fine ordinary 37s 6d to 41s, low middling dull greenish to middling brownish 42s to 48s 6d, peaberry 47s to 55s 6d.

Mexican.—Of 970 bags offered 125 bags sold, peaberry 48s to 50s.

Hawaii.—580 bags offered but only 36 bags peaberry sold at 32s to 50s.

Venezuelan.—50 bags bought in.

Guatemala.—305 bags partly sold, low middling 46s to 47s.

Brazil.—Of 297 bags washed Santos 30 bags peaberry sold at 52s.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	1,880,000	2,430,000	2,180,000	3,117,000
Santos ...	6,003,000	4,978,000	4,323,000	4,952,000
Total...	7,883,000	7,408,000	6,503,000	8,069,000
Crop ...	—	8,971,000	8,772,000	10,461,000

Rio Exchange $10\frac{7}{16}$d, previous day $10\frac{9}{32}$d.

Havre, *Feb.* 7.—Good average Santos February opened steady at 37½f. and closed steady at 37¾f., March opened at 37½f. and closed at 37⅝f., May opened at 37¾pf. and closed at 38f., September opened at 38¼f. and closed at 38½f., December opened at 38¾f. and closed at 39f.

Hamburg. *Feb.* 7.—Good average Santos February opened steady at 30pf., and closed steady at 30¼pf., March opened at 30½pf, and closed at 30¾pf., May opened at 31pf., and closed at 31¼pf., September opened at 32pf., and closed at 32¼pf., December opened at 32½pf., and closed at 32¾pf.

New York, *Feb.* 7.—Closing prices of No. 7 Rio were as follow:—

	Feb.	Mar.	April.	May.	June.
February 7 ...	5·70	5·75	5·80	5·80	5·80
February 6 ...	5·55	5·55	5·60	5·65	5·70

TEA.

China.—Congous continue to meet a very poor market, and at public auction this week only a small part of the 2,515 packages presented for competition sold, although prices were lower. Souchong realised 3½d to 3⅝d, Oolong 3½d to 3¾d, Scented Caper 4d to 6d, Shiftings 4⅛d.

Indian.—Sales were slightly lighter than in the week before, *viz.*, 57,500 packages, compared with 59,800 packages and 33,400 packages in 1900.

Dealers did not seem able to cope with the large quantity brought forward following on the heavy supplies previously offered, and an easier tone was apparent for most descriptions. Common to fair leafy kinds were further depressed, Pekoe Souchongs touching 3½d per lb. Medium grades, unless possessing autumn flavour or some special characteristic, met a languid demand, and reduced prices often had to be accepted in order to close them. Fine and finest were comparatively scarce, and on the whole realised steady prices.

As was the case at this time last year, the statistical position is again being interfered with, and figures are misleading owing to the excessive payments made in anticipation of a possible rise in Duty.

January deliveries were:—

1901—18,256,000 lbs. 1900—17,490,000 lbs.

For 49,900 packages on estate account 6½d per lb. was obtained, against 7¾d per lb. for 30,000 packages, and 9¼d per lb. for 32,300 packages in the two preceding seasons.

Ceylon.—Auctions totalled 27,900 packages versus 39,400 packages on the previous Tuesday, and 23,500 packages a twelvemonth since.

A great deal of irregularity was noticeable in the ideas of buyers, and there was less competition for Pekoe Souchongs and Pekoes under 6d per lb., the former selling down to 3½d per lb. Medium descriptions ruled about steady, there being a few more export orders in the room than of late for those suitable to the Continental trade. The best liquoring Broken Pekoes attracted attention, and together with the few choice lines, went off well.

The average has declined to 6¼d per lb., which point has not been recorded hitherto. On the 31st ultimo it was 6½d per lb. and 7½d per lb. in 1900.

Deliveries in the past month were:—

1901—10,065,000 lbs. 1900—9,020,000 lbs.

Java.—Only 960 packages of direct import passed the hammer, with a weaker tendency for the majority of the invoices brought forward. and many lots were withdrawn in consequence of bids being under valuations. Nearly 1,800 packages are advertised for the 14th instant.

Deliveries—The clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 5th February,	1901	...	...	6,986,037 lbs.
Do. do.	1900	...	...	2,946,672 „

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India ...	... 44,232	13,267	57,499
Ceylon ...	... 22,668	5,195	27,863
Java ...	... 453	508	961
Total	... 67,353	18,970	86,323

Also 285 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and J... Tea Report, dated February 8th, 1901, says:—

Quantity brought to Auction in London from 1st June to D...

	Indian. Pkgs.	Ceylon. Pkgs.	J...
1900-1901	1,208,676	894,515	3...
1899-1900	... 1,250,275	85...,232	4...

58,500 *pkgs.* Indian
28,979 „ Ceylon
961 „ Java
} Total 88,440 packages were offered in public au... this week.

The details of the scheme for restricting the output of Indian Ceylon Tea are now being worked out by the special Committe... the Indian and Ceylon Tea Associations. It is probable tha... Circular will soon be issued inviting proprietors to give t... formal assent to the proposal.

The manufacture of Green Tea would materially relieve ... gloom of the present situation, and might lead to a large expan... in the markets for British grown Tea, not only in North Ame... but also in Asia, Africa and South America.

Indian.—The market showed a further decline in prices fo... except Teas of specially desirable character. Last of the sea... Invoices are now beginning to appear.

The Official Wire gives exports to U. K. for second hal... January as 5,100,000 lbs, against 4.700,000 lbs. same period 19... making total from 1st April to 31st January 156,000,000 ... against 145,892,000 lbs. last year.

Week's average of Tea sold on Garden Account 1901, 49,035 pk... av. 6·34d. 1900, 29,994 pkgs., av 7·60d.

Total Tea sold on Garden Account 1st June 1900 to date, 996... pkgs. av. 7·38d. 1900, 973,872 pkgs., av. 8·36d.

Ceylon.—Buyers operated with considerable caution and allo... prices still further to droop, quotations this week ruling even lo... than those recorded last week. The Teas least affected by ... general depression were the best liquoring kinds. This we... average price is the lowest ever recorded in London, viz.: 6·... against 7·55d. in 1900.

The Official Telegram gives exports to U K. during Januar... 12,500,000 lbs., against 10,500,000 lbs. in same month 1900, ... estimates the quantity for February as 8½ to 9 millions.

Ceylon Tea sold on Garden Account 1st Jan. to date, 148,... pkgs., av. 6·59d. 1900, 156,953 pkgs., av. 7·61d.

Java.—The Teas sold slowly at somewhat lower rates, the ... pression in the Indian and Ceylon growths being to some ext... reflected in Java kinds.

Bank Rate 4½ per cent. Exchange on London three months sight... Calcutta 1/4 7/32. Colombo 1 4¼.

COCOA.

Importers are still desirous to quit, and at auction on Tues... when 6,362 bags were catalogued, about 4,000 bags sold. Pri... were somewhat irregular. West India, with the exception of Tr... dad, declining from 6d to 1s 6d, whilst fine Ceylon again advan... and other growths showed no material change. Of 830 bags Trini... 440 bags sold at about valuations middling to good 67s to 69s... The further large supply of 2,740 bags Grenada practically all s... at an irregular decline of 6d to 1s 6d, good to fine selling at 65s... 66s and common to fair 63s to 64s. 10 bags fair St. Lucia brou... 63s 6d, while 36 bags Jamaica partly found buyers at 63s 6d. b... these being 6d to 1s down. 59 bags Costa Rica realised 65s to ... 6d, and 5 bags Surinam 65s 643 bags of Guayaquil and 23 b... Venezuelan retired unsold. 33 bags African sold at 63s to 64s... Again higher prices were obtained for stand-out lots of Ceylon, ... the medium and common qualities are not much wanted and pr... slow of sale; 1,604 bags were catalogued and 560 bags sold—fin... very fine bold bright red 99s to 108s, fair to good bold and medi... 80s to 90s, middling ditto 76s 6d to 78s, and smalls 59s 6d... 78s per cwt.

PEPPER.

Black.—The market has ruled firm and for arrival higher pri... have been paid, but the tone at the close is dull. About 200 t... Singapore have changed hands, *viz.*, January-March and Febru... April shipment at 6¼d to 6 9/32d, March-May at 6¼d to 6 11/32d, Ap... June at 6 11/32d, and June-August at 6⅜d to 6 13/32d. On the spot s... of fair Singapore have been made at 6 1/16d to 6 3/32d.

Nothing offered at auction on Wednesday.

WHITE.—Has been much neglected and sales are unimportant. Only 10 bags Ceylon were brought to the hammer on the 6th tant; they retired at 9d per lb.

GINGER.

COCHIN.—was not represented at the weekly auctions, but vately an active demand has sprung up, 2,000 bags selling at her prices—good fair medium and small washed rough at 33s to , and rough Calicut Sorts at 33s 6d to 35s per cwt., with yers at the close at the top point.

JAMAICA.—28 barrels partly sold—small thin washed, part dark, 6d per cwt.

CINCHONA.

The exports from Java (according to the N. V. Nederl. Veem.) Europe during January amounted to 1,000,000 Amst. lbs. against 5,000 in 1900, 509,800 in 1899, 956,000 in 1898, 390,000 in 1897, d 970,000 in 1896. The total weight of the 8,837 packages to be ered at Amsterdam on February 21 is 780,825 kilos. consisting 391,760 kilos. Ledgeriana. 114,294 kilos. Succirubra, and 105,675 os. Hybrid. The exports from British India for *seven* months ded October were:—

	1900.	1899.	1898.
Lbs....	1,683,488	1,458,730	852,128

QUININE.

The English and German makers of sulphate advanced their quotations on Monday by ½d per oz., and now quote 1,000-oz. lots in 100-oz. tins at 1s 2d per oz. Messrs. Howards & Sons' price for this quantity is now 1s 3½d. This advance has been due to a better consumption demand both on United States and home-trade account Makers have sold small parcels at 1s 2½d for forward delivery. A corresponding rise has, of course, taken place in the secondhand market, and a good business has been done, including spot at 1s 1⅞d to 1s 2d, March 1s 2d, and May 1s 2¼d to 1s 2½d. To-day the market is slightly easier in second hands, 1s 2¼d having been paid for May delivery and sellers thereat. In the United States P. &. W. brand has been advanced to 30c.

VANILLA.

The small supply of 345 tins offered in auction practically all sold at full prices, to 1s advance chiefly on short lengths. The buying was chiefly the home trade, and there was a good demand. The following prices were paid:—

SEYCHELLES.—8 to 9 inches, 23s to 25s 6d; 7 to 8 inches, 22s to 23s; 6½ to 7 inches, 21s to 22s 6d.

MAURITIUS.—8 to 9 inches, 25s to 26s 6d; 7 to 8 inches, 22s to 24s 6d.

(AVERAGE FOR ALL INDIA 6·34d., FEBRUARY 8TH).

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price.
eilgherry ...	149	5·12												
ooklands ...	30½c	6¾	30½c	6¾	..	...	...	...	...	...	...	...	...	...
evara Shola ...	18	4¼	...	...	4	4	8	4½	6	4	...	...	..	..
enmorgan ...	101 p	5	61 p	5¼ 5½	31	4¾	...	...	...	...	...	..	9	3¾
ravancore ...	777	4·64												
elford .	45½c	3¾	...	...	20½c	3½	20½c	4	..	...	3¼c	2¾	2½c	3¾
rady Goody ...	116	5¼	34	6	21	4	61	5 5¼	...	.	..	...	...	...
MR ...	24	4	...	...	13	3½	10	4½	...	...	1	2½	...	...
nmylies ...	32½c	4	...	...	30½c	4	...	...	...	...	1½c	3	1 c	3
ahandragherry ...	64½c	3¾	...	...	61½c	3¾	...	...	...	...	2½c	3	1½c	3
unt ...	115	4¾	...	...	33	4	45	6	14	3¼	.	...	23	4
nshurst ...	163 p	5¼	68	5½ 7¼	6	4 4⅝	..	..		...	29½c	4¼	...	...
av T Est Co BA...	218	4¼	57	5	61	3¾	49	4¾	34	3¼	17	3½	...	...
ynaad ...	194	4·41												
ramaculla .	118 p	4¾	...	...	33	4½	35	6	40	4	.	...	10½c	4¼
rindotty .	77	4	...	...	36	4¼	...	...	41	4	..	...	...	...

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SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 15th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad.

March 4th.—The blossom this year is a complete disappointment, and prospects are very gloomy, coffee cannot be cultivated at the present prices. *Works*—Pruning, manuring and weeding. *Health*—Good. *Interesting items*—A combination is being formed to see if some protection cannot be given to the fish and game of the district. The census was quietly and quickly gone through with on the evening of March 1st.

COFFEE.

We publish to-day a report on the Coffee movement in the United States and portions of a statement issued by the Board of Trade. Neither of these affords very cheerful reading for coffee-planters. At the very outset the Board of Trade refers to the difficulty of obtaining reliable statistics regarding Coffee in various countries. Unfortunately, statistics of production must be taken as below rather than above the mark of reality; as for consumption, statistics may be relied upon when coffee is imported into a consuming from a producing country. Where figures fail is in regard to home consumption in producing countries, as, for instance, Brazil, Mexico, and India. The Board of Trade enumerates the chief countries of production thus:—(1) Brazil, (2) Venezuela, (3) Colombia, (4) Mexico, (5) Costa Rica, (6) Guatemala, and (7) Hayti. No definite distinction is drawn between "mild" coffees and others, but a very interesting point is referred to in the remark that in the United States "while the average price of Brazilian Coffee has fallen from 20 cents (10d. per lb.) in 1891 and 1892 to 6 cents (3d. per lb.) in 1898 and 1899, the value of Costa Rica Coffee has at the same time fallen only from 19 cents in the former period to 14 cents in the latter, and Guatemala Coffee from 16 cents to 12 cents." The natural inference is that superior,

mild Coffees have been growing in favour. This is important to Indian planters, whose coffees are mostly of a class to compete with Costa Rica, and Guatemalan rather than with Brazilian. Yet the fact mentioned has little direct interest for coffee-planters in this country. A glance over the figures given elsewhere will show that Indian coffee-planters have practically no stake in the United States, and are thus only indirectly affected by fluctuations of market there or variations in the popular taste.

The United States occupies the same position in regard to Coffee as the United Kingdom holds in regard to Tea. It heads the list of consumers, and the demand among its peoples has been rapidly increasing. In 1898 there was an enormous spurt in American importations of Coffee; this fell back in 1899, but there was still left a larger importation than in any earlier year since 1898. The demand per head of population has increased, as well as the total demand, and a comparison of 1890 with 1899 shows that whereas the States imported for consumption 490,000,000 lbs. in the former year, in the latter imports were 801,700,000—showing an increase of nearly 65 per cent. Some of our readers will note with interest that there is no duty on imports of Coffee into the United States. They will perhaps attribute the rapid growth of consumption largely to the fact of the trade having been left free and unfettered; and this can hardly have failed to exercise some influence on the increase in demand per head of population. Much of the increased trade must, of course, be attributed to increase of population. Consumers in the United States give the preference to Brazilian Coffee, whether because of its very low price or for other reasons we cannot say; probably, not only because of its cheapness but also because sales are vigorously pushed by various merchants whose main trade consists in importing Brazilian Coffee. In the United Kingdom the largest amount of imports is from British India Prices in London have fluctuated as well as those in New York, though not so violently. In 1890 and 1897 they were over 10d. per lb.; in 1885 they sank to 6.82d.; in 1899 to 7.24d.

Now, we call special attention to the statement of the Board of Trade and the report on the American Coffee movement for a particular reason. Here we have distinct information given as to the chief consuming markets. The United States is at the head In Europe the country in which the most coffee is taken is Germany. France comes next. The question arises whether in the United States and in Germany demand for *Indian* coffees cannot be stimulated. France is already a large buyer of East Indian Coffees, and though the trade is at present threatened by proposed changes in the French import tariff, we trust that these changes will not be made in such a manner as to affect Indian coffee. In Germany India finds no proper market; in various other Continental countries Indian coffees are scarcely known. In Australasia coffee is but little drunk, tea being the popular beverage. These facts, read with a knowledge of the current grave depression in the Indian coffee industry, point un takably to two conclusions: (1) that it is essentially neces that Indian coffee should be vigorously pushed in markets as the United States and Germany, where Coffee, not the Indian description, is largely consumed; and (2) it is desirable that Coffee should be 'canvassed' in countries Australasia and the United Kingdom where the popula of tea continues to hold the front place. Hence the ex diency of prompt action being taken for the building up o Indian Coffee Foreign Markets Fund. The Shevaroy Coorg planters are willing. We shall be very please learn that Mysore, the Nilgiris, and Wynaad are prep to join heartily in carrying out the suggestion lately m that there should be a Coffee Cess, on similiar lines those along which the Ceylon Tea Cess is run, and for empl ment in similar fashion.

THE TEA CRISIS.

Although a great deal has been said and written duri the week on the present Tea Crisis, we defer remarking u this subject again at length until next week. The sim fact is that many of the speeches and letters referred to o serve to make confusion worse confounded, and our read have lately had such a flood of Tea that we hesitate to tr them to another deluge. For the present we need only s that at the Annual Meeting of the Indian Tea Associati (Calcutta) on the 2nd instant, Mr. H. C. Begg, the Chairma stated that it seemed the day could not be far distant wh they would have to consider the advisability of reducing t production of gardens and devote attention rather to the i provement of the teas than extending the cultivation. A are agreed as to what they have to do, but are not sure th they are agreed on the best way of doing it. They must t to decrease the supply or increase the demand. He thoug something ought to be done in both directions. The Gener Committee thought with him that the greatest efforts shou be given to the work of increasing the demand because th doubted the possibility of any scheme to restrict producti being lasting enough to keep the combination together fi for years. It was most difficult, for especially when pric rise, the temptation to growers to break away is gre Mr. Begg thought that we might yet see the Tea Cess accomplished fact. Mr. Mann, Agricultural Chemist, stat that the present working prevailing in India should tend n so much to increase production, but to improve quality. Fi plucking, he does not think will improve quality whereas a great extent close plucking will undoubtedly do so at t expense of the tea bush. Mr. Carter stated that there we three causes of over-production:—(1) Over-plucking, (2) t rapid supplies, and (3) persistent shipping to London, r gardless of the requirements of foreign markets.

Mr. Ashton and Sir Patrick Playfair spoke against t export duty, on the supposition that Government might dive the revenues to its own purposes. The Chairman moved th the rate of subscription should be one anna per acre for ea garden belonging to the Tea Association. He moved al that the crop should be reduced 10 per cent. for garde whose teas last year fetched 7d. or under; 8 per cent. f gardens which fetched 7d. to 9d.; 5 per cent. for those whi fetched 9d. to 11d.; and that gardens should be exem whose tea fetched an average of 11d. and over.

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nicholson's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf people, unable to procure the Ear Drums, may have them free.

Address—No. 989 D, The Nicholson Institute, Longcott, Gunnersbury, *London*.

[w. 26-5-00—26-5-1901.]

THE BRITISH TEA DUTY.

The General Committee of the Indian Tea Association Calcutta) has been informed, by the Secretary of the Gov-nment Legislative Department, that the resolution respect-g the British Import Duty on Tea has, under instructions om the Viceroy, been telegraphed to the Secretary of State r India with a request that it may receive the due conside-tion of His Majesty's Government. The Governor of eylon has also cabled home to the Secretary of State for e Colonies stating that his Government desires earnestly impress on His Majesty's Government disastrous conse-uences which further increase of duty on tea may entail on e chief industry of this loyal Colony. Whether these essages have the desired effect or not they will at least sure that the British Tea Duty will not be raised until the *ros* and *cons* of the matter have been well considered. It a curious thing that English statesmen during the las eneration or two have always had a fancy for picking up ecessary scraps of taxation from the breakfast table. To us ut here, it appears as if a small tax on Sugar might provide e Chancellor of the Exchequer with any additional funds which he is in need. But it is a regrettable fact that ngland's commercial treaties with various nations form such maze that it is very difficult to steer clear of the provisions nd conditions of each one of them when meditating a ew branch of taxation on imports. We can but hope, for e present, that Tea and Coffee will escape any increase of e burden that they have now to bear. The Import Duty Tea, especially, is already much too heavy.

TEA "FUTURES" IN THE U. S.

We learn from the *American Grocer* that trading in tea for ture delivery began on January 21 on the New York Coffee xchange. This is the second attempt to establish option ading in tea. The result of the first experiment was that lower Wall-street began speculating, were caught heavily, d then the trading stopped. This year the first sale was ,000 pounds for February delivery at 13·30 cents, and a cond lot at 13·50 cents. Our contemporary also reports:— A few sales have been made on the Coffee Exchange, in-ading 15,000 pounds May delivery at 13·90c, and 15,000 unds July delivery at 13·80c. Japan No. 4, spot, the basis contract trading, 14½c in bond. On Tuesday 15,000 pounds arch delivery at 13·40c." The rules under which trading in a for future delivery are conducted provide that all contracts r future delivery of tea shall be for 15,000 pounds, or ultiple thereof, deliverable in bond; each lot of 15,000 unds to be exclusively either Japan, green, or black tea, to in licensed warehouse, and to be composed of not more an ten lines of tea; deliveries on each contract of 15,000 unds not to exceed or to be short more than 100 pounds, d to be collectively of not more than three import bonds. The cost per month of carrying tea which costs 14 cents r pound, as posted on the New York Coffee Exchange, is ured by including storage, insurance, and interest at 6 per nt., not including brokerage charges and grading. Storage verage), 3c per half-chest; insurance, 40c on $100 per ar. For the different periods of time the cost is as follows: the end of one month, 14·13c; two months, 14·26c; three months, 14·39c; four months, 14·52c; five months, 14·65c; six months, 14·78c; seven months, 14·91c; eight months, 15·04c; nine months, 15·17c; ten months, 15·30c; eleven months, 15·43c; twelve months, 15·56c. Basis—Storage (average weight of half-chest, 60 pounds, at 3c), ·05c; insurance ($8·40—half-chest at 8c per month per $100), ·0112c; interest at 6 per cent., ·07c; total, ·1312c per pound."

NOTES.

Cinchona in London. Cable advices, dated 2nd instant, report a firm market. Price per unit 1½d. Monthly stock 10,000 packages.

Drought in Sylhet. A severe drought prevails in South Sylhet, and the tea crop outlook is serious. Only a quarter-of-an-inch of rain has fallen since 20th October. Nature is evidently taking her own measures to check over-production in Sylhet.

The Proposed Indian Tea Cess. In the course of an interview which the Calcutta correspondent of the *Times of Ceylon* had with the Secretary of the Indian Tea Association, Mr. Parsons stated that the Southern India planters solidly support the proposal for a tea cess, while others are waiting home instructions.

Ceylon Cardamoms. For the year ending December 31, 1900, the exports from Ceylon were 537,455 lbs., against 499,959 lbs. in 1899, 531,473 lbs. in 1898, and 532,830 lbs. in 1897. Of the above amount, 333,996 lbs. in 1900 were shipped to U. K., 117,290 lbs. to India, and 65,529 lbs. to Germany, &c.

The Portmore Tea Company. The Portmore Tea Company, Limited pays a final dividend of 8 per cent., making a total of 13 per cent. for the year. £684 is carried forward. The Board of Directors is reducing the plucking area as recommended by the Joint Indian and Ceylon Committee.

Jamaica Coffee. The Blue Mountain Coffee Company, Limited, was registered on December 31, by Last & Sons, 19, Pall-Mall East, S. W., with a capital of £2,000 in £1 shares. Object: to carry on, in Jamaica or elsewhere, the business of coffee (and other produce) planters, growers, and merchants, etc. Registered without Articles of Association.

Annual Production of Rubber. It has been estimated that the total approximate annual production of rubber is 57,000 tons. Of this amount, 21,000 tons by the United Kingdom, and 15,000 tons by the rest of the world. The Amazon District produces 25,000 tons; East and West Africa, 24,000 tons; and parts of South America, other than the Amazon district, 3,500 tons.

Colombo Tea Sales. At the public sale of tea at Colombo on the 27th ultimo about 9,291 packages = 773,643 lbs. were offered, of which about 7,124 packages = 604,259 lbs. were sold. The *Times of Ceylon* says that the sale passed off with good spirit, bidding

being brisk, especially for teas with any quality or flavour. Common sorts were in fair demand at late rates.

Perfume Farming.

A Perfume-farm and Factory have been established at the Collie River, Western Australia. Mr. Curtin has established a distilling-plant for the purpose of dealing with native plants, beginning with the wild verbena. He has several acres of lavendar planted, but means to extend this to twenty or thirty acres. The factory was declared open by Sir John Forest on November 24.

Manuring and Close Plucking.

Judicious manuring is excellent—writes an old Ceylon planter—but carried to such an extent as to double your yield it becomes serious, and if indulged in by a sufficient number of estates will ruin the industry in a shorter time than most men think. I heard the other day that a London firm wrote out that certain estates "have sent us everything excepting the roots of the bush."

Java Quinine.

The following sales are announced for 1901 :—

	Kilogrammes Sulphate of Quinine.
27th February	about ... 3,500
3rd April	„ ... 3,600
15th May	„ ... 4,400
19th June	„ ... 4,500
24th July	„ ... 4,600
4th September	„ ... 4,700
9th October	„ ... 4,800
13th November	„ ... 4,900
18th December	„ ... 5,000

Trout Ova for Ceylon.

The Ceylon Fishing Club have indented for this year's supply of trout ova from other hatcheries than those of Messrs. Andrews & Andrews, of Surrey. The first consignment of brown trout from the hatcheries of the Earl of Denbigh left England on the 30th January in the SS. *Prinz Regent Luitpold*, which was expected to arrive in Colombo on the 29th ultimo. Mr. H. D. Elhart who is in charge of the Nuwara Eliya hatcheries would personally receive them from the vessel and immediately take the cases up to Nuwara Eliya. Other consignments are expected from New Zealand.

The London Tea Market.

Messrs. Gow, Wilson & Stanton's weekly telegram, dated 28th ultimo, reports that competition in Ceylon tea is general and well distributed, and the market for fine teas is dearer ; while the market for Common Pekoes and Broken Pekoes is steady. The price of fair liquoring Ceylon Pekoe Souchong is 5d. (a farthing up) and the average price of Ceylon tea sold on garden account this week was 6⅜d. (same as last week)—as against 6½d. and 7⅝d. respectively in the corresponding week last year. Reuter reports that good qualities of Ceylon teas have realised full rates. Pekoe Souchongs are quoted at 3⅝d. (same as last week) and the average for the week at 6½d. (one-eighth of a penny up) as against 7⅛d. quoted for Indian tea. 30,000 packages of Ceylon tea were offered for sale, of which 28,000 were disposed of ; while of the 32,000 packages of Indian tea offered 28,000 found purchasers.

Speculative Dealings in Coffee.

Statistics have been posted on the New York Coffee Exchange giving the cost of carrying a pound of coffee on the Exchange. In the case of a pound of coffee cost 5c, charges are figured as follows : Storage, insurance, weighing, interest at 6 per cent., and probable loss of wei are all included, but not grading or brokerage char Storage, per month, 4c per bag ; insurance, 40c on $100 year ; weighing, 2½c per 100 pounds ; interest, 6 per c perannum ; loss in weight, three pounds per bag ; about points. For the different periods of time the cost is as lows : At the end of one month, 5·20c ; two months, 5·2 three months, 5·32c ; four months, 5·38c ; five months, 5·4 six months, 5·50c ; seven months, 5·55c ; eight months, 5·6 nine months, 5·67c ; ten months, 5·73c ; eleven mont 5·78c ; twelve months, 5·84c.

The Ceylon Tea Kiosk.

The *Ceylon Observer*, of 1st insta remarks :—We have to record to- that the Ceylon Tea Kiosk which has hitherto fulfilled purpose of supplying a *pucca* specimen of "the cup t cheers but not inebriates" has ceased to exist from da During the past few days there was a fair amount of patron and those interested in the concern must certainly have pleased at the manner in which a fair proportion of the la number of Russian sailors now in harbour patronised establishment, the want of which will be felt not only visitors to our port but also by the residents of the town. is already known, the site is to be utilised for the purpose erecting the Jubilee statue of the late Queen Victo Government has offered the proprietors of the Kiosk, Ceylon Tea Company, (which holds a meeting of shareholde to-day at Kandy), R10,000 for the recovery of the s To-day the furniture was being shifted in view of the auct sale of all the appurtenances at 11 a.m. to-morrow.

Coffee in London.

The *Produce Markets' Review*, 9th February, says :—In the termi market, although the daily receipts have kept very heavy a much above the average, an entirely altered tone has tak place. Early in the week a fall of nearly 1s. was establish but towards the close this has not only been recovered, b prices are fully 1s. above last Saturday, and there is app ently a strong "bull" feeling. This is due partly to a stea advance in the exchange, and also to the figures which ha just been published of the stocks, deliveries, etc., on t 1st instant. The reduction in the world's visible supply given at 21,000 tons, and the most is made of this, yet it i time when a reduction usually takes place, and last year was even larger than this. Without any advice of dama of any kind to the growing crop, it seems too much to ma a great deal of such a small reduction, for it is quite evide that there will be no shortness of stock at any time this ye but that, unless there is a very large increase in the consum tion, the world's stock at the end of the year will, in probability, be much heavier than now. At the auctio supplies are still on a small scale, and prices are stead finest Costa Rica showing some advance.

Quinine in Central India.

The sale of quinine at post offic in the Rajputana and Central Ind agencies was continued during the year 1900. The comp rative statement of sales for 1898-99 and 1899-1900 giv underneath shows a net decrease of 13,268 5-grain powde The powders sold during the year under review repres nearly 15 lbs. of the drug valued at Rs.313-0-6 as agai 24 lbs. valued at Rs.520-5-6 sold in the previous year. T

les by village postmen amounted to 1,476 powders as against 228 disposed of by them in 1898-99 :—

POSTAL DIVISIONS.	Sales, 1898-99.	Sales, 1899-1900
pper Rajputana ...	5,469	2,618
ower ,, ...	8,467	3,564
ewar .	7,401	2,653
alwa	11,965	11,199
	33,302	20,034, decrease 13 268.

he cause of the very large falling off in sales in the ajputana portion of the circle is unaccounted for, and has een made the subject of special enquiry.

razilian Coffee. Total value of Brazilian Exports in 1900 amounted to £18,601,129, which no less than £17,499,533 was represented by coffee one. The *Brazilian Review* remarks :—The difference 1,101,595 represents the total value of all other exports, ncluding Specie, Gold Bullion, Manganese, Mangabeira ubber, and Ox Hides. Results could not be more insignifiant or deplorable. Practically the activity of a population xceeding 6,000,000 distributed over an area as large as urope, abounding in Mineral and other sources of wealth, restricted to the cultivation of a single article—coffee—the pply of which already exceeds the demand, whilst supplies ven of foodstuffs are drawn chiefly from abroad ! How rious the situation of such a community would be were the offee industry to be destroyed, as it was by blight in India nd Ceylon, does not require to be enlarged upon. We have ut all our eggs into one basket and must take the consequences. Of late there has been an active movement in favour greater variety of cultivation that has done much already to bstitute native grown for imported cereals, and not only ust this policy be persevered in, but every effort to develop e great mining industry be encouraged by more liberal and mpler laws.

eylon Tea. In Mr. J. J. Street's report for the *Australasian Mail*, of 25th ultimo, it stated :—Offerings during the fortnight have again shown slight reduction. Prices show a wider range, low common ubbish further receding, while quality grades show expanon. Considerable irregularity exists. Estates hitherto producing poor tea, and now making better, suffering for their rmer bad reputation. It will take buyers some little time realize that these marks are worth tasting again. Quality many instances shows improvement, although there is still considerable quantity of undesirable quality offering Green as were almost entirely withdrawn, in the absence of bids, emand not being able to cope with supplies The Planters' ssociation has passed a resolution that the plucking area of a be reduced ten per cent. If this be adhered to, it will ndoubtedly raise prices. This, in our opinion, does not uite meet the case, as the supply of useful, good and fine tea *not* in excess of Trade requirements. A scheme which ould lead to finer plucking and more care in, and knowledge manufacture is what is wanted. Do away with the production of coarsely plucked and badly manufactured teas and e industry will right itself, and prove profitable to the lanters, and Ceylon Tea a more satisfactory article to those at handle it.

Indian Tea in London. The *Produce Markets' Review*, of 9th ultimo, says:—The demand is active, and a large business continues to be transacted, while, except for the common and less useful medium kinds, values have not materially changed. The fine and finer descriptions are well bid for and sell freely, which is due to the gradually diminishing supply, and prospects appear favourable to a firm and probably advancing market. Most of the finest qualities now coming forward are of a fine autumnal flavour, and where this is the case the competition for them is active, and improved prices in consequence have resulted. Medium teas giving a good infusion have been largely dealt in at former rates, and as these kinds form the principal portion of the consumption there is likely to be a well-sustained inquiry. The less desirable and thin liquoring sorts of the same grade met with but moderate attention, and where sales have been effected prices have shown a decline. A considerable business has been done in the lower sorts, but the quantity is ample to meet this increased demand, and values have fallen to a lower level than in the preceding week. The statistical position for the past month and in January, 1900, is as follows :—Imports 23,122,000 lbs and 18,634,000 lbs. respectively ; the deliveries being 18,256,000 lbs. against 17,489,000 lbs., which, it will be noticed, is considerably above the average, and is due to heavy duty payments made in anticipation of a possible rise in duty. The stock shows a large excess over last year, the figures being 74,788,000 lbs. and 62,629,000 lbs. respectively.

GENERAL ARTICLES.

RUBBER.

In Brazil several laticiferous trees exist from which rubber is manufactured. In the State of Ceara the Manihot Glaziovii, locally known as the macoba, is fairly extensively worked, and considerable attention is being paid to its cultivation. In the State of Maranhao the Hancornia speciosa, or manabeira, is beginning to give results. These trees, however, are unimportant compared to the Hevea brasiliensis, or seringueria, to which the Amazon Valley owes its present prosperity.

The Hevea brasiliensis is found scattered through the forests that clothe the banks of the Amazon River and its tributaries. In some parts it is much commoner than the other and for no apparent reason. Very large tracts of forests are to be found where it does not exist or is very scarce. It is generally met with in the swampy parts of the forest. Owing to the lack of trustworthy data on the subject it is not possible to state with certainty the proportion of Hevea compared to other trees existing in the forest. However, for districts where it is very plentiful, and for areas of 1,000 acres or more, about one tree to every two acres may, I think, be taken as fair estimate.

The Hevea brasiliensis does not strike the eye amongst the other innumerable varieties of trees to be met with in the Amazonian forests and is often difficult to detect. A peculiar glistening of the trifoliate leaves and the whiteness of the bark serve as a guide to the practised eye. The tree grows to the height of 70 to 100 feet, and has, as a rule, when full grown, a girth of from 5 to 7 feet at a height of 1 yard from the ground. The trunk is generally free from branches to a height of some 30 or 40 feet from the ground. The tree flowers in January; the seeds ripen and begin to fall in March in the case of old trees, and in May in case of young trees. The seeds are contained in a hard shell, two, three or four in each shell, which hang by a short stalk from the upper and outer branches. When ripe the shell explodes often with quite a loud report, scattering the seeds to considerable distances. For this reason it is difficult to procure seeds. When collected the seeds should be packed in powdered charcoal and sent to their destination without delay. I am informed by a competent authority that they are

not as a rule fertile if kept for more than three months after being collected. This fact would account for the difficulty experienced in rearing this plant in Africa, Ceylon, and other parts.

Setting aside scientific phraseology and distinctions, there are for practical purposes, three distinct varieties of the "seringueira" to be met with in the forest. These are locally known as the seringueiras "casca vermalha" (red bark) "barriguda;" (bellied), and "casca preta," (blackbark). The first of these, the "casca vermelha" grows in the higher parts of the forest which are seldom or never flooded. The latex which it yields is scanty, thick, and will not run. It is, therefore, of little value.

The second of these, the "barriguda" so named, because the trunk increases very rapidly in thickness towards the base, grows in those parts which are almost constantly flooded, named "igapos." It yields plentifully a thin watery latex which is of little value.

The third variety, the "casca preta" grows in those parts where a certain amout of drainage exists, and which form an intermediary zone between the permanently flooded parts and the high land. It is this varity which yields the latex from which the rubber of commerce is manfactured.

The "latex," or as it is commonly known, the "milk of the tree, is a milky juice contained in special tubes running amongst the other tissues of the plant. These tubes in the case of the Hevea are connected, forming what is known as the "laticiferous system." The latex is quite different from what is called the "sap" and probably does not play any part in the nutrition of the tree. According to some authorities, it forms a reserve of water to be drawn upon in cases of drought. The actual extraction of latex cannot kill the tree, and the common statement that the trees are "bled" to death is a mistake. As a matter of fact, though trees exhausted, inasmuch as they will not yield anymore latex, are common, actually, dead trees killed by overtapping are rarely met with. The latex, as it exudes from the bark is of a dazzling whiteness, resembling milk, which it also resembles in composition, inasmuch as it consists of an emulsion in which "caoutchouc" takes the place of the "butter" in ordinary milk. The fluid part of the latex consists of water with very small quantities of albuminous matter, organic acids, and phosphates in solution.

The extraction of the latex, or as it is usually called, the "tapping" of the tree, is effected by making an incision in the bark of the tree. From this incision the latex flows for about three or four hours, after that it stops flowing of its own accord. The incision should not penetrate beyond the bark, which is generally about $\frac{3}{8}$ inch thick, into the wood of the tree, and for this reason a very small axe, which rapidly thickens, wedge-like from the cutting edged is used, the shape of the intrument preventing it entering too deep. The axe is generally about $\frac{3}{4}$ inch wide. The custom is to strike with it a back-handed blow upwards, thus making an oblique cut in the bark. It is probable that a better method would be to use a chisel and mallet and make a V shaped incision. Recent experiments at Henaratgoda have shown the advantage of this shaped incision.

This incision having been made, a small tin cup of a capacity of about 4 ozs., is affixed justbelow it to receive the latex which as it flows. This is effected by pressing the edge of the cup is sharp, into the bark until it gets a sufficient hold to remain firm. By this method, however, a second wound is made in the bark which is injurious. No better method has as yet been suggested. In some places a winding groove is cut in the bark of the tree, and by means of a clay breastwork the milk is conducted into a vessel placed at the foot to receive it. This method is found, however, to be very exhausting to the tree and is falling into disuse. The usual mode of tapping is to make an incision with the axe at a height of some 6 or 7 feet from the ground; on a level with that incision and at a distance of some eight inches, a second cut is made, and so on round the tree. On the next day incisions are made just below these and so on day by day until they reach the ground. Incisions are then made on the same plan beginning as before from the top, and working down wards between the former rows. A tree that will carry seven cups 8 inches apart is considered a large one, and though trees that will carry eight or nine cups are to be met with, the average do not carry more than four or five. It is not possible in the present state of the industry to give any precise data to the average yield of latex per tree. To begin with, the trees are extremely irregular in their yield. Two trees growing close together and under apparently precisely similar conditions, will often vary very much as regards their yield of latex. Some trees are very rapidly exhausted, while others have to tapped for some time before they yield the full amount of latex which they are capable. The natives account for this by saying that the tree has to be accustomed to being tapped. Sufficient data are not available to enable any judgment to be formed as the correctness of this view. It is certain, however, that even the most experienced cannot judge of the value of a rubber est before at least a year's work has proven it. The examination the books of a number of rubber estates actually working a from reliable information received, leads to me to believe th for estates working with over 20 men, a yield of 300 kilos. annum per man may be expected should it be a good distri 200 kilos. should the district be only fairly good; and 100 ki per annum works 200 trees this would place the yield for tree, when worked under satisfactory conditions at 1 to 1½ ki per annum. On the same basis and taking the whole of the c from the Amazon district as being 24,000 tons (a out) per annu there would appear to be about 120,000 labourers employed in c ting rubber at present Calculating still on the same basis th should be some 24,000,000 trees being tapped, and these on a ba of one trees to every 2 acres would give an area of about 50,000,0 acres of forest at present being worked for rubber. When it considered that the district in question embraces well over 1,000,0 sqire miles, and that it is by no means easy to find virgin rub forests within 200 or 300 miles of Para or Manaos. it will be se how comparatively scarce is the Hevea in the Amazonian forest

The Hevea is found to yield its latex more freely at the b than higher up the trunk. In some places. however, where t trees have already been considerably worked, and the lower part the trunk is already covered with knobs due to excessive tappi it is the custom to build stagings in order to enable rubber-cutt to reach a higher portion of the trunk. A good tree will still yi freely to a height of some 20 or 30 feet.

If allowed to rest for three or four years, even a completely hausted tree will quite recover itself. the tree is not killed wh the supply of latex runs short, and as a rule sufficient dama has not been inflicted to prevent the tree from recovering its This fact is important as owing to it the supply of rubber availa will probably not run short as has been often prophesied of la Trees have been known to have been tapped off and on during years, and to be still yielding a plentiful supply.

The latex having been obtained and collected the "caoutchou or rubber known to commerce, may be obtained from it in vario ways. The only method however, that has met with practi success it that of evaporation by which the watery portion of t latex is driven off and solid caoutchouc remains. The object to secured is that as little water and proteid matter shall remain the caoutchouc, the putrefaction of the caoutchouc, owing to t presence of these matters being extremely detrimental to its elas properties, and, therefore to its market value. In the Amaz district the method followed is to light a fire upon the ground a to invert over it a specially constructed funnel-shaped chimn From the narrow end of the funnel which is open, the smoke a heated gases pour out in a concentrated form. The fuel used the fire consists. as a rule, of chips from any hardwood tree th grows handy to the labourer's hut The nuts of the "Urucu palm" (Attalea excelsa) are sometimes used. their smoke containi a trace of acetic acid and creosote being found particularly effect in curing the rubber and preventing putrefaction. It is, howev a mistake to suppose that all or even a large proportion of t rubber coming from the Amazon district is cured in this way. is, on the contrary, very rarely that the rubber-cutter will be at t trouble to collect these nuts, he nearly always prefers to use wo chips which give him less trouble to procure.

The fire having been made, and a large stream of hot smo pouring out of the chimney, the operator seats himself on a sm stool by the side of it. The latex is contained in a basin placed hand In his right hand he holds a paddle-shaped piece of woo in his left hand a small calabash. Dipping the calabash into t basin of latex he pours a small quantity over the paddle which then revolves in the smoke issuing from the chimney. That havi dried in a layer over the paddle he repeats the operation. course of time a "ball" or "biscuit" of solid rubber is thus forme In some parts where it is the custom to manufacture very lar balls or "pellets," an arrangement is made by means of a pivot rotate the ball over the chimney. The wooden core is withdra through a slit made in the "biscuit," or simply drawn out in t case of the "pellet."

The latex of a tree named "Maoaranduba" (Mimusops elata), nd more often that of a tree named locally "Amapa," is sometimes sed to adulterate that of the Hevea. In both cases the adulteraon is extremely prejudicial to quality of rubber produced. hree distinct qualities of rubber are manufactured in this dis-ict named "Fine," "Entrefine" and "Sernamby" respectively. Fine" rubber has been well smoked, is free from putrefaction. Entrefine" rubber has been either burnt whilst being smoked, or as been insufficiently smoked, and has therefore putrified. It is ue to carelessness on the part of the workman, which it should be ossible to avoid. "Sernamby" is the "negro-head" of commerce, nd consists of scraps, mixed with dirt, or strips peeled of the bark f the tree and mixed with impurities of sorts.

A very important factor, from the merchant's point of view, in ne rubber trade, is the loss of weight that is constantly taking lace in raw rubber. This loss is extremely variable, and a congnee. has to place the greatest faith in the consignor that the nvoiced weight of rubber has really been shipped, as more or less nortage invariably takes place. Moreover, the shrinkage in weight so variable that no exact figures can be quoted by which it may e calculated. The cause being the evaporation of the water conained, it varies according to the quality, being greater in the case f the porous "Sernamby" than in the firmer "fine" rubber. he longer rubber is kept and the larger the pieces the less it oses in weight. Dry "sertao" rubber coming from distant parts hence shipments are only made once a year will lose only about per cent. between the estates and Manaos; whereas newly-made ubber coming from close at hand will lose as much as 10 per cent. s the means of communication get more rapid and the rubber reaes Manaos sooner after being manufactured, the tendency to lose weight becomes large. Between Manaos and foreign markets loss of 4 per cent. may be taken as an approximation of the averge loss in weight.

A machine designed on the principle of a cream separator to eparate caoutchouc from the watery part has been tried, but has ot proved successful as regards the latex of the Hevea, though ood results have been stated to have been attained with the latex f the "Castilloa."

Another means of separating the caoutchouc as to add chemical eagents which cause the latex to coagulate. Of these, ascetic acid nd corrosive sublimate have been found to give the best results. he latter owing to its antiseptic properties, would appear particurly suitable. A solution of alum is used to a small extent in the tate of Matto Grosso, to prepare rubber from the latex of the Hevea.

The following analysis of the latex of the Hevea brasiliensis is iven by Seeligman:—

	Analysis per cent.
Caoutchouc	32
Nitrogenous matter	2.3
Salts	9.7
Resinous matter	traces
Water	55 to 56

COFFEE IN THE UNITED STATES, 1900.

During the calendar year, 1900, the movement of coffee in ne United States and Europe was as follows:—

	Bags.	Bags.
Stocks, January 1, 1900—		
Europe	4,021,401	
United States	1,079,692—	5,101,093
Arrivals during 1900—		
Europe	8,422,861	
United States	5,511,910—	13,934,771
Total supply for 1900 ...	...	19,035,864
Less stocks, January 1, 1901—		
United States	1,031,610	
Europe	3,881,735—	4,913,345
Deliveries during 1900 ...	...	14,122,519
Deliveries during 1899 ...	...	14,891,499
Decrease in 1900 ...	...	768,980

The deliveries in the United States were 5,559,992 bags, and in urope 8,562,527 bags—a total of 14,122,519 bags.

The world's visible supply compares as follows:—

	Bags.
January 1, 1900	7,560,345
January 1, 1901	7,036,093
Increase in 1900	524,252

The receipts in Rio and Santos for the calendar year compare as follows:—

	Bags—1900.	Bags—1899.
Rio	2,809,000	3,508,000
Santos	6,500,000	6,394,000
Total	9,309,000	9,902,000

From the above statements, says the *American Grocer*, we find that the total supply of coffee last year exceeded the deliveries by 4,913,345 bags.

The average annual requirements of Europe and the United States will not exceed 14,500,000 to 14,750,000 bags, to meet which there will be a grand total of nearly 20,000,000 bags. When supply outruns consumption prices fall. A decline has taken place from the high figures of a year ago. In 1893-94 No. 7 Rio sold in New York from 15¾ to 18⅜ cents, with a Brazil crop of 4,309,000 bags. In 1899-1900 the price ranged from 5 7-16 to 8 13-16 cents; for the calendar year 1900, the range was from 6¾ to 10 cents.

Does this drop of over 50 per cent. measure the extent to which a decline should go? That is a question each must answer for himself.

COFFEE.

The following is taken from a statement issued by the Board of Trade:—

The production of Coffee, like that of Tea, is largely increasing, and may be said, speaking generally, to have doubled in the last ten years The chief producing countries are all in America, Mexico being the most northern, and Paraguay the most southern of the countries of that Continent where Coffee is produced. The chief countries of production, in the order named, are Brazil, Venezuela, the United States of Colombia, Mexico, Costa Rica, Guatemala, and Hayti. It is difficult to get any reliable official returns even of export (except in the case of Mexico), much less of production. Estimates have in some cases been made by individuals for trade purposes, but with these it is not necessary to deal here. The only official statistics that exists are those of the importing countries, and with these it is possible to deal with some degree of accuracy.

The United States holds a very similar place in the Coffee trade to that held by the United Kingdom in the Tea trade, the relative consumption in each case exceeding that of all the other countries of the civilised world put together. The Coffee trade of the United States, therefore, may be said to virtually control the trade, as well as to a certain extent the prices of Coffee throughout the world. It appears desirable, therefore, to deal at some length with the United States trade in Coffee, and the fluctuations thereof in recent years.

In past years the imports of Coffee into the United States have been large, although not nearly so large as they have been during the last year or two. The following statement shows the quantity of Coffee imported for home consumption into the United States at various periods since 1870:—

IMPORTS OF COFFEE FOR CONSUMPTION INTO THE UNITED STATES.

Years (ended 30th June).	Total lbs.	Per head of the population lbs.
1870 ...	231,000,000	6·00
1875 ...	311,000,000	7·08
1880 ...	440,000,000	8·78
1885 ...	539,000,000	9·60
1890 ...	490,000,000	7·83
1895 ...	643,000,000	9·22
1898 ...	851,700,000	11·45
1899 ...	801,700,000	10·55

The above figures represent the imports of Coffee "for consumption" into the United States. The total imports are rather larger, the re-exports of Coffee varying much from year to year, having been less than 4 million lbs. in 1894, and over 30 million lbs. in 1885 and 1899. On an average the re-exports of Coffee varying

much from year to year, having been less than 4 million lbs. in 1894, and over 30 million lbs. in 1885 and 1899. On an average the re-exports may, however, be stated to approximate to 16 million lbs., which is not a large figure as compared to the enormous amount imported. The greater bulk of the Coffee imported comes from the largest Coffee-producing country, *viz.*, Brazil; the second largest quantity coming from Venezuela. The following statement shows the *total* imports of Coffee into the United States from the chief countries of production during the last three years:—

TOTAL IMPORTS OF COFFEE INTO THE UNITED STATES.

Years (ended 30th June).	From Brazil lbs.	From Venezuela lbs.	From Colombia lbs.	
1897 ...	542,857,000	58,913,000	20,940,000	Total Imports, 1897-9, lbs
1898 ...	661,009,000	62,983,000	26,866,000	737,646,000
1899 ...	628,418,000	61,955,000	28,169,000	870,514,000
	From Mexico lbs.	From Costa Rica lbs.	From Guatemala lbs.	831,827,000
1897 ...	28,834,000	19,300,000	11,570,000	
1898 ...	34,721,000	13,749,000	12,443,000	
1899 ...	27,325,000	16,626,000	14,925,000	

It will be seen from the above statement how very large is the quantity of Coffee imported into the United States, and also how considerably the imports have recently increased. There is, it may be remarked, no duty in the United States on Coffee imported into that country. During the last sixteen years the declared value at the point of importation has fluctuated very largely, having been as high as 10d per lb. in 1892, and under 4d. in 1886, 1898, and 1899.

Three-fourths of the Coffee imported into the United States comes from Brazil, and it is consequently the price of the Brazilian product which chiefly controls the average price of the whole; but it is worthy of observation that while the average price of Brazilian Coffee has fallen from 20 cents (10d per lb.) in 1891 and 1892 to 6 cents (3d per lb.) in 1898 and 1899, the value of Costa Rica Coffee has at the same time fallen only from 19 cents in the former period to 14 cents in the latter, and Guatemala Coffee from 16 cents to 12 cents.

The quantity of Coffee consumed in the United States has, as already stated, risen from 500 million lbs. in 1884-5 to over 800 million lbs. in 1898-9, the consumption per head having risen at the same time from over 9 lbs. to over 11 lbs. Whether this large increase is due to the fall in the price of Brazilian product and its consequent increased cheapness, or whether it is due to the decrease in the consumption of alcoholic beverages which has taken place in the United States of late years, is a moot point. Probably it is due in some measure to both these causes.

The Coffee trade of the United Kingdom is of very much less importance than the United States trade in that article. The larger part or approximately two-thirds of the total imports of Coffee into the United Kingdom are re-exported. Of the remainder less than 30 million lbs. go into consumption annually, as compared with 800 million lbs. in the United States. Consequently in the latter country over 10 lbs. of coffee are consumed per head of the population, whereas in the United Kingdom the consumption is approximately 0·70 of a lb. per head. Indeed, in the United Kingdom the consumption of coffee is rather decreasing than increasing, having rather over than under 0·90 of a lb. per head of the population in the years 1884 and 1885.

Of the coffee imported into the United Kingdom the largest amount comes from British and Ceylon, though a certain quantity is also imported from the United States, Brazil, Colombia, Guatemala, and Costa Rica. The price of the coffee at the port of landing in the United Kingdom has also fluctuated though not perhaps quite to the same extent as in the United States, having been over for a lb between 1890-97, and as low as 6·82d in 1885 and 7·24 1899. The Coffee re-exported from this country is sent chiefl Germany, Holland, and other countries of the European contin

The European country in which Coffee is most taken is Germ where at the present time three hundred million lbs. go into sumption annually, which is equivalent to over 6 lbs. per head o population; for many years past the annual consumption of coff that country has exceeded 5 lbs. per head of the population. Co therefore, as a beverage, may be said to hold much the same in Germany as Tea does in England. The price of Coffee at the of landing has fluctuated in Germany much as it has in the Un States, having been as high as 10d per lb. in 1890, and under 5d lb. in 1898-99. The Coffee consumed in Germany comes ch from Brazil and Central America, and also to some extent from Dutch East Indies and from Holland. The following staten shows what has been the importation into the German Empire f each of these countries during the last three years:—

IMPORTS OF COFFEE FOR HOME CONSUMPTION INTO GERMANY.

Years.	From Brazil Kilogs.	From Central America Kilogs.	From Dutch East Indies Kilogs.	From Holland Kilogs.	Tota Impo Kilog
1897 ...	60,924,000	21,265,000	14,000,000	11,044,000	136,
1898 ...	83,417,000	17,563,000	12,553,000	9,732,000	153,
1899 ...	82,995,000	22,199,000	11,289,000	9,799,000	156,

Note.—The kilog. is equal to 2·2 lbs.

INCLUDES COSTA RICA, NICARAGUA, HONDURAS, SAN SALVADOR, A GUATEMALA.

The Import duty in Germany on raw Coffee is slightly ove per lb. as compared with a duty of 1½d per lb. on the United Kingd

France is also a large consumer of Coffee, taking annually ab 170 million lbs., are approximately half of what is consume Germany. The per capita consumption in France amounts to ra over 4½ lbs. per annum, which may be considered large in view relatively high import duty amounting to 6d per lb.

The consumption of Coffee in Austria-Hungary is rather un 100 million lbs., or approximately 2 lbs. per head of the populat

The other European countries consume Coffee, but in m smaller amounts. In Italy the annual consumption amounts t million lbs, or much the same quantity as that consumed in United Kingdom. In the Russian Empire approximately 18 mil lbs. are consumed.

With regard to the British Colonies it is to be observed tha the Dominion of Canada over 5 million lbs. of Coffee are consu annually; the consumption, therefore, amounts to 1 lb. per hea the population as compared with, approximately, 10 lbs. in United States; in both countries raw Coffee is imported free.

In Australasia the consumption of Coffee is but small, amount to approximately 2 million lbs. per annum, or about ½ lb. per h of the population.

In most European countries import duties are levied on r Coffee, the highest being, France 6d. per lb., Italy 6½d., Austria 4d. Germany levies a duty on Coffee of slightly over per lb., and Norway, Denmark, and the United Kingdom of appr mately 1½d per lb. In the United States Coffee as previou stated is imported free.

The following statement shows the import duties per lb. on r Coffee, with the approximate present value at the point of land for the latest year available:—

	United Kingdom.	Russia.	Germany.	Holland
Import duty:	d.	d.	d.	d.
Coffee per lb. ...	1·50	4·11	2·18	Free
Value per lb. at point of landing:				
Coffee	7·24	8·26	4·47	4·00

——	Belgium.	France.	Italy.	Austria-Hungary.*	Uni Sta
Import duty:	d.	d.	d.	d.	d
Coffee per lb. ...	0·43	5·92†	6·53‡	4·02	Fr
Value per lb. at point of landing:					
Coffee... ...	5·23	4·80	3·93	4·50	3·3

* Import duty and value of Coffee imported by sea.
† Minimum duty by Treaty.
‡ Special duty on Brazilian Coffee 5·66d per lb.

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

THE INDIAN TEA INDUSTRY.

"Mr. Spaker," said an Hibernian M. P. on a memorable occa-on, "in the course of a life long experience, I have invariably oticed that single misfortunes never come alone, but that the reatest calamities are always either preceded or immediately llowed by disasters of even larger proportions."

This remark unfortunately seems to hold good of the Indian Tea dustry, which having already received in the Currency Legis-tion of the Government of India in 1893, and the increased duty posed by Parliament in 1900, two very severe blows, is now reatened with further disaster in the proposed legislation of the overnment of India and the rumoured further enhancement of ity with the coming budget.

We print in another column the proceedings of an influential eeting of those interested in tea, held at the Bengal Chamber of ommerce last Friday, and would invite the serious attention of e Government of India to the remarks of the various speakers, l of whom spoke with a sense of responsibility, and with a knowl-ge of what they were talking about.

It is no light matter to cry havoc on an industry like this. The in of the Tea industry will spell disaster to the coolies whom the overnment of Assam desire to take under their paternal care. e would advise the Government not to take the Chief Commis-oner of Assam too seriously, the earthquake of 1897 has much to nswer for, and they will find that in Assam cotton manufactures e a very poor substitute for tea.

We understand that the London Tea Association have wired to e Tea Association here that no extra duty on tea is anticipated, t urging the Association to support them in agitating for a re-uction in the present duty. It is curious that Mincing Land ould have been so differently informed in this matter.—*Capital.*

NOTES FROM BRAZIL.

(From the *Brazilian Review.*)

Exchange.—The present improvement of exchange is attribu-ble to two causes: one natural, better prices for coffee during the rly part of the year with the consequent improvement in the arket value of investments, and the other artificial, the conse-uence of interference with the volume of the currency and the rced restriction of imports. During the latter part of the year e advantage of higher prices for coffee gradually disappeared, nd, independent of other causes, a fall in the market value of vestments was to be expected. This natural process which had ready commenced in July was, unquestionably, greatly accele-ted by the Banking *debacle* of September, that not only locked up rge sums of money thus further restricting the demand, but by rowing enormous quantities of securities on the market also rfeited the supply. Apart from the transitory effect of panic, ere is no doubt that the market is over-supplied with investment nd will continue so as long as the present impoverished condition its productive elements prevail. There may be spurts, but any eady improvement can only come from increased demand and at, principally, from improvement of economic conditions. The me rule that is being employed with the currency must be ap-ied to securities, and their quantity reduced to a level more mmensurate with the demand for investment, if prices are to be nproved and maintained. The present *debacle*, which is attribut-d generally to the government policy of restriction of currency nd over-taxation, was in any case the inevitable result of the rinkage of earnings and, consequently, of the purchasing power the community at large entailed by the depreciation of their incipal and, practically, exclusive product, coffee, and, though e simultaneous monetary stringency and additional burden of xation that the government's policy gave rise-to unquestionably ggerated the symptoms, they did not originate them nor would ey disappear even were that policy abandoned.

Extremes during the week ending January 18 were 9 7/8—10 1/4d. r 90 d/s Bank paper and 9 15/16—10 5/16d. for private.

The average Bank 90 d/s counter drawing rate for the week comes t at 10 1/32d. the corresponding sight rate being 9 31/32d., ainst 10 1/16 d. the average sight rate of the *Camara Syndical.*

The average depreciation for the week, calculated on the basis of e Banks' sight rate, is 63·07% and the premium on gold 170·82% ainst 63·94% and 177·36% last week.

Ninety days rate on London opened on Monday, 14th instant, at 9 15/16d. rose to 10 1/4d. during the week and finally closed this evening weak at 10 1/32d.

A few weeks ago we ventured to predict that rates might not impossibly reach 10 1/2d. in the course of the current month and if our somewhat venturesome forecast has not been yet actually verified, events have, at least, proved that it was not so unfounded as at the time generally believed. Without extraneous assistance of any kind rates rose since the beginning of the year 1/2d. Naturally a rise so violent could not be unaccompanied by speculation and was bound to create a reaction when covering commenced, but the tendency during the last two weeks, in the face of the uniformly depressing outside influences of every kind, points unmistakeably to the equilibrium of purely local factors. In spite of a 5% Bank rate and the financial crisis in London: in spite of the news of the Boer war and the postponement of several undertakings that were looked on as imminent: in spite of the miserable prospects of coffee, the depreciation of the sterling price of rubber, and increasing remittances on account of the Treasury, rates have not only refused to respond, but have positively risen! The fact is symptomatic of an equilibrium momentary, possibly, but effective, between the demand and supply, that is to be attributed more to the slackness of demand than the importance of the supply, because not only were declared sales here and at Santos 29,000 bags under the previous week's and 46,000 under those of the corresponding week last year but their value has even fallen to only 35s. per bag compared with 41s. this time last year.

At Pará, too, the value of rubber going forward has been insignificant for the time of the year, only £410,000 shipped from the 1st to 15th of the month. The requirements of the market are more reduced than ever, as not only were the imports, which are now being paid-for, on a much smaller scale than the previous year's but, owing to late failures and suspension of payments, private remittances are on a much smaller scale than usual. The tightness of money, on the other hand, prevents any attempt at deliberate "bearing" and is, in fact, the powerful factor of the situation. . . .

It seems likely that rates will oscillate slightly above 10d. for some time and until new coffee bills considerably supplement actual supplies.

Estimates.—There is nothing to add to the previous report regarding the future crop, which is now generally estimated at 11 to 12 million bags, the former being regarded as a decidedly low estimate. From the outset the weather has been extraordinarily favourable and even a prolonged drought, of which there seems little chance, would only slightly affect the weight and quality.

Reports with regard to the coming crop continue to be optimistic. On one large fazenda the coming crop will be at least 30,000 bags. It is, however, well to recollect that so enormous a yield is *certain* to be followed by a very small crop in 1901 and 1902; in this particular instance not over 5,000 bags being counted on. It is this factor that must be taken into account and, were it possible, it would be wise for planters to hold back as much coffee as possible for next year and not spoil their own market by rushing their produce down. On the large and richer fazendas this we hear will be done, but in many cases the want of money will make it impossible.

CEYLON PRODUCTS.

The Report of the Committee of the Ceylon Chamber of Commerce for the half-year ending 31st December, 1900, contains the following references to *Exports:*—

1. *Tea.*—The year shows a large increase in export of tea, *viz.* 18½ million lbs. over 1899, but the prices obtained for many medium and low-country crops were at times under cost of production. More careful plucking will, it is hoped, remedy prices in 1901.

The attention of the Chamber has been drawn to one or two shipments of bad teas to the United Kingdom and Australia. It cannot be too strongly impressed upon growers that the manufacture of such teas tends to lower the demand for Ceylon kinds among consumers and they are earnestly desired to see that nothing is packed which is not sound tea.

The increase in duty from 4*d.* to 6*d.* per lb. is unfortunately not likely to be reduced for some time to come, owing to the larger expenditure in connection with the war in South Africa.

2. *Green Teas.*—These received more attention last year than in previous years from Ceylon, and a good demand existed for a short time for America. Towards the close of the year supplies increased considerably and somewhat exceeded demand, and prices paid locally show a severe drop.

3. *Plumbago.*—The reaction which set in at the close of 1899 was intensified during this year, and notwithstanding that the quantity exported fell off by the large total of 11,500 tons as compared with 1899, prices have also given way considerably. The exceptional prices ruling early in 1899 led to undesirable qualities being mined, which at ordinary times would not be worth attention. Prices for medium to fine qualities are, however, still good compared to those ruling prior to 1898.

4. *Cinnamon.*—Quills and chips both show a large increase in volume exported, and prices have at the same time been very good. The shipment of wild cinnamon has almost ceased. It has been "found out" and is now practically unsaleable in London.

5. *Products of the Cocoanut Palm.*—All these show a large increase in quantity exported, and prices have also been good all the year round. The industry seems to have a good future before it. *Copra* towards the close of the year reached a very high level in price.

6. *Cocoa.*—Crop was very short, but good prices were paid for large bright beans.

7. *Cardamoms* show a fall in value, but at the same time the crop was a large one, and prices still bring good returns to the grower.

The undernoted Comparative Statement of Shipments will be found of interest:—

	1900.	1899.	1898.
Coffee ...	10,773 cwts.	18,542 cwts.	13,313 cwts.
Tea	148,431,639 lbs.	129,894,156 lbs.	119,769,071 lbs.
Cocoa ...	33,476 cwts.	42,745 cwts.	36,982 cwts.
Cardamoms ...	537,455 lbs.	499,959 lbs.	531,473 lbs.
Cinnamon, Bales...	2,678,111 „	2,515,031 „	2,534,056 „
Do Chips...	1,863,406 „	1,829,127 „	1,414,165 „
Cocoanut Oil ...	443,959 cwts.	400,979 cwts.	435,933 cwts.
Desiccated Cocoanut ...	13,604,913 lbs.	13,571,084 lbs.	13,040,534 lbs.
Copra ...	362,467 cwts.	325,401 cwts.	506,277 cwts.
Cocoanut Poonac...	185,992 „	174,786 „	216,620 „
Cocoanuts ...	14,995,909	11,723,392	12,027,714
Plumbago ...	383,350 cwts.	616,385 cwts.	473,075 cwts.

CINCHONA BARK.

Under the headline "Our View of Bark and a Broker's," the *British and Colonial Druggist* remarks:—

Readers who have followed our articles on cinchona and quinine during the last three years will be specially interested in a letter recently issued by Messrs. Woodhouse & Co., the well-known bark brokers. There is nothing remarkable in the fact that this firm interprets the figures relating to cinchona as we do, for it is difficult to see how anyone taking a wide survey of the situation can come to any other conclusion. The only people who doubt the evident conclusion are those who expect that if the natural position of an article is strong the article should stand any amount of rushing by speculators without having reactions. Messrs. Woodhouse's way, however, of putting certain points are, perhaps, curiously like ours. As the letter is lengthy, we can only, of course, refer here to scattered passages.

First, the fact is noted that 1900 is memorable as being the first for many years in which the value of the unit in bark did not fall below 1d. per pound, and the price of quinine below 1s. per ounce The average units for bark were for 1900 10·13 cents in Holland and 2d. in London, as against 7·05 cents and 1⅜d. in 1899, and 4·78 cents and 1 5/6d. in 1898. One noteworthy point to which we drew attention is here emphasised—*viz.*, that whereas in 1899, at the point when the unit reached 10·90 cents, manufacturers raised quinine to 1s. 9d., in 1900 the alkaloid was never above 1s. 7d., though 12·25 cents was the unit in September. A calculation is also made, showing cost of quinine in bark, this cost *plus* that of manufacturing, and the selling price. Taken in the order named these factors are:—1900, 1s., 1s. 4d., 1s. 5½d.; 1899, 8d., 1s., 1s. 3d.; 1898, 5½d., 9½d., 11d. This reveals at once how the general trend of bark and quinine has been strongly upwards, and how a healthier situation is being promoted by the closer approach of cost and selling pri In the broker's letter the cost of manufacture is put at 4d. per o we think 3d. is a fairer figure.

Turning to the question of consumption and production, so carefully compiled tables are given, which, however, we will lea for later consideration. At present we may simply say that t conclusion from these is the one we have repeated again and aga *viz.*, that consumption has overtaken production. In these tabl the production is probably stated rather too low; indeed, alkaloi other than quinine sulphate are purposely excluded. The figur given for the last three years, set out as ounces of quinine, are follows:—

——	1900.	1899.	1898.
Production	12,261,000	12,447,000	12,855,000
Consumption ...	14,818,000	14,861,000	14,464,000

Thus we have been drawing on stocks of bark, that in Lond having fallen from nearly 20,000 packages to less than 10,0 Allowing for the increase in stocks of quinine, the net reduction the last year of bark and quinine stocks is given as 1,213,000 o of the latter.

Moreover, Java bark has been falling off in quality as well quantity. In 1897, 5,315,000 kilos. offered gave 10,256,000 ounces quinine; in 1900, 5,260,000 kilos. only gave 8,735,000 ounces. Abo 900,000 ounces of quinine have been sold in Java during 1900. Th manufacture locally has undoubtedly had a marked influence, stated, of forcing European makers to maintain a good unit for ba and a low price for quinine. Java planters have thus the matter their own hands (irrespective of financial obligations), and, if th behave sensibly, we ought to see higher prices still this year.

TRAVANCORE TEA ESTATES COMPANY, LIMITE

The ordinary general meeting of the Travancore Tea Estat Company, Limited, was held at the offices of the Company, Eastcheap, on the 4th ultimo.

The chair was occupied by Mr. W. Mackenzie, Chairman of t Company.

The Secretary (Sir William Johnston) read the notice convenin the meeting.

THE CHAIRMAN'S SPEECH.

The Chairman, in moving the adoption of the report and accoun said: I do not think I ought to begin the business of our meeti without expressing our deep regret at the death of Her Majesty t Queen and our sympathy with the Royal Family. Since our la report death has deprived us of the very useful services of o colleague, Mr. Tod, and Mr. Talbot, another of our directors, abroad. The report and accounts you have had for some days, a unsatisfactory though they be, may, I presume, be taken as rea The crop was 128,000 lbs. more than the previous year, because the larger area being plucked. But for the absence of rain, whi caused the Indian famine, and the excessive downfall of the la two months of our financial year, August and September, wh 3 in. fell daily on an average, the yield would have been conside ably larger. In the report you are told that 1,702 acres ga 304 lbs. per acre. But, as you will see, one-half of that area w immature tea. For the current year the estimate from the sa area is 743,000 lbs. I say the same area, because nothing of a consequence can be gathered this year from the 1,500 acres, mo or less, planted in 1898. During the first three months of th financial year to end of December the crop from the 1,702 acr has been 49,000 lbs. more than for the same three months of la year. More serious even than the falling-off in crop from the b weather has been the fall in tea prices. In the early half of t year we were doing well, and we were quite justified in paying t interest on preference share to end of March. But the unprecede ed fall which has occurred since then has upset all calcul tions, and has brought the average price from 7·18 in the prev ous year to 6.20, a drop of ·98 of a penny per lb. The avera price of Ceylon teas since June has been 7·48, against 8·42 the prev ous year, and Indian teas is also all but 1d. lower for same perio The yield we anticipated four years ago has been realised, exce

uring the final months of last financial year, when first drought using famine, and then an excessive rainfall lost us nearly 50,000 s. of tea. The cost of production from mature tea has been less an we expected, the price alone is responsible for our present fficulties. Another misfortune we have to record is the loss of bout £2,800 in advances to native contractors. This money was ven out three to four years ago, when we were preparing for the rge development in acreage made in 189-. The acting manager ho advanced this money has been resident in Travancore for many ears, and was well acquainted with the native contractors. He as home here a year ago, and was then confident he could recover ree-quarters of the money on his return. As yet, however, he has ot been able to do so. This advance system is universal in the ast, but is seldom attended with loss in Ceylon. In some of the reat tea-producing districts of Northern India, however, it is quite nderstood that labour costs R100 per head, for a coolie, and it is eldom that any of this is recovered. In Travancore we trust this ay be our only loss under the heading. The result of the several isfortunes I have mentioned, the loss of crop from bad weather, ne fall of 1d. in price, and the loss on these advances, is a deficiency our resources of about £6,000. To cover this we propose to issue 7,000 of Preference shares, and if your and our property is to be rotected something equivalent to this is absolutely necessary. At ne present moment the average price of our tea is 1¼d. less than st year's average of 6·20d. and this means that it is being produced t a loss How long this is to continue we, as Directors, have no etter means of forming an opinion than you have. Were it to go n for years, then it were better not to throw away more money, ut to allow the properties to pass to the Debenture-holders. ut pessimistic as we all are at present, I doubt whether any ne in this room really believes that prices are not to rise ithin a reasonable time. The laws of supply and demand will ssert themselves. Planters will not go on producing 500 lbs. o 600 lbs. per acre at a loss of 1d. per lb., when they can roduce 400 lbs. of a better tea which may show no loss. The emand is increasing all over the world. The crisis has been rought on us by the great success of the tea-planting industry our to six years ago, which induced Companies to open up hunreds of thousands of acres, the produce of which has swamped the arket during the last two years. I might say much more in xplanation of the position, and as encouragement for the future. ut I refrain, as we have no wish to persuade shareholders against heir convictions. I do not even wish to advise them. As Directrs we can merely make suggestions. It is for you to decide. ut failing this scheme, the only resource known to us, short of anding over to Debenture-holders, is a re-construction, or rather re-arrangement, with a call on the shares. The sum we propose o raise, *viz.*, £7,000, is what appears to us sufficient for the present. ut it must be clearly understood that with a continuance of preent prices, the whole of this might be used up in paying Debenture nterest, and the difference between cost of production and sale rices; but such a condition of things, though we cannot, of course, ay it is beyond the range of possibilities, we can only hope may ot arise, as the enormous tea industry of India and Ceylon would n that case also become involved in a general disaster. We show ou in our report what we expect from the working of the Company our teas fetch 6½d. per lb. when the land is in bearing. The rice is 2d per lb. below that at which the Company's teas stood hen the Company was formed, and if you think that is a fair and easonable figure to assume when production and consumption ave adjusted themselves, then I think you should have no hesiation in subscribing for your share of the extra capital. The natter rests entirely in your hands, however, and you must judge r yourselves. With regard to the Debenture issue, I may state hat when the Company was formed there was not the slightest ntention of issuing Debentures. It was stated in the prosectus that the first issue of shares was for the purchase and orking of four estates, therein named aggregating 2,371 acres. t was also stated that further lands would be acquired and eveloped. This latter entailed the raising of more capital, and ne total acreage is now 7,163 acres. The Directors considered that he issue of debentures presented the best and cheapest form of aising the necessary capital. The Directors were of opinion that he Company from the first would be a success, and there would be o difficulty in raising Ordinary and Preference share capital when was required, but as the price of tea gradually fell and tea nvestments were not in public favour, they saw clearly it would not have been possible to obtain the necessary capital from the shareholders. The contemplated acreage of development was very materially curtailed but what was begun had to be brought to completion. The Directors have given constant and anxious attention to the affairs of this company from its inception to the present time, without fee or reward of any kind, and respectfully maintain that as they could not foresee that Travancore teas would fall from 8·50 per lb. (the price when the prospectus was issued) to an average of 6·20 per lb., the present state of the Company's finances is solely attributable to low prices. Anyone experienced in tea cultivation knows that £35 per acre is a reasonable price at which to bring tea into bearing with buildings and machinery, so it cannot be said the shareholders' money has been squandered. No new clearings of tea have been made for the last two and a half years, land it is practically three years since the land was opened out, roaded, and drained, for planting up. The properties are good, and have been well cared for, and the whole position entirely rests with the future market price of the produce, which we must all hope will soon take a turn for the better. I now move the adoption of the report and accounts.

Mr. H. K. Rutherford, in seconding the adoption of the report and accounts, said: I would add a few words to what has fallen from your Chairman, and to recount the history of this Company. It was started in 1897 as a Tea company to develop and open out Tea estates from jungle lands, having as a nucleus a certain acreage of land under tea. The land was reported on most favourably by the Ceylon manager of the Ceylon Tea Plantations Company, a gentleman of very high standing and experience in tea cultivation—and we have no reason, even at the present moment, to doubt the capabilities of the land to be less than he estimated. The principal vendors were your Chairman and Mr. Knight, our manager in India —two gentlemen of the highest probity. The price paid was a reasonable one, and I believe they could, had they been anxious to do so, have sold these properties for cash to others, but they were desirous of retaining a large interest in the concern, as they had absolute confidence in the potentialities of the property. That interest your Chairman afterwards considerably increased by purchasing a large number of shares. Your Directors, from their intimate connection with tea, shared in the confidence of the Chairman, and had not the slightest hesitation in investing and joining in the management of the Company. Let us now consider why results have fallen so much under our anticipations. There is one fact, very patent, that it is not over-capitalisation that is the cause, as the price at which our estates stand is a fair normal cost for opening out and equipping tea properties, and therefore the Company stand at practically bed rock price without inflation. When we negotiated for these properties exchange stood at 1s 2½d, and the price of the teas at 8½d, and at the present time the former is 1s 4 15-32d, and the latter 6¼d. When I have stated that simple fact I have stated the whole of our case. I do not know if any shareholder has taken the trouble to apply the condition of exchange and the price of tea in 1897 to the accounts in this report, but if so, you will find that had these two factors held good, instead of showing a loss we would have earned Debenture and Preference interest and 7 per cent. on the Ordinary shares, and further, if you continue the application to the estimate of crops which it is practically certain the estates will yield, the Ordinary shares would earn something like 50 per cent. dividend. I ask you, therefore, as reasonable men, even if after allowing what one would consider a safe discount in the 1897 conditions of exchange and price of tea, if it can be said any of us —either we as Directors, or you as shareholders—went rashly into this venture. Shareholders may complain to-day of minor matters of finance in our accounts, which in a successful concern might have been looked at as virtues, but, believe me, the real crux of our position is the price of tea. If you believe this state of things cannot continue in the tea world very long, then you ought to keep this Company afloat. It has potentialities if tea recovers, and if you stick to the ship I have no doubt whatever that you will reap a fair return in due course. So serious is the position of tea producers at the present moment that efforts are being made to bring all into a co-operative movement to reduce the output of British-grown tea for this season in India and Ceylon. If we make no profit whatever out of our estimated crop of 743,000 lbs. of tea, then our debit balance, after paying Debenture interest, will be some £8,200, and therefore the £7,000 we ask you for would not suffice, and we would again require to come to you. We do not wish to call upon you for one penny more than necessity demands, and it becomes a

question for you to decide whether in the meantime it would be better to make this call in the hope that it may be sufficient to tide us over, or at once re-arrange the Company. No one could have foreseen the difficulty, and we must leave the matter in your hands.

Mr. Dangerfield thanked Mr. Rutherford for his remarks, and stated that although the position was an unfortunate one, the explanations given would. he felt sure, meet the views of the shareholders. He also asked how the required capital was to be raised.

The Chairman stated that the Directors would leave the shareholders to decide how that was to be done. They were, however, prepared to put it *pro rata*. The position of the tea market was accentuated since the report was drawn out. The market might fall again to-day, and they could not say what might happen. They did not anticipate a month ago what had now happened. That being so, the Directors would not pledge themselves that the amount, as stated in the report, would be sufficient. The call would be spread over a number of years, and would be made as easy as possible.

The resolution for the adoption of the report and accounts was then put to the meeting, and carried unanimously.

Mr. D. Reid proposed the re-election of Mr. Rutherford as a Director. He remarked that in doing so it was no easy task he was asking Mr. Rutherford to assume. He had always carefully watched over the interests of the Company, and had devoted much time and thought to their interests. They had been deprived of the assistance of Mr. Mackenzie, the Chairman, for a greater part of the year, as that gentleman had been travelling in Canada and the States with the object of trying to raise the consumption of Indian and Ceylon tea. He (the speaker) joined the Board of this Company four years ago, believing that it had good prospects, and that tea from Travancore would realise a good price. The Directors could not foresee that such a mass of tea would be thrown on the market. He thought it would be very unfortunate for the shareholders to throw up the sponge. He believed the depression would pass away, as a great industry, such as the tea industry, could not go on as now. The Directors were all willing to lend a helping hand. They did not get any fees, and the item for keeping the books, etc., was a mere trifle, so there was no such thing as bolstering up the Company.

Mr. Dangerfield, in seconding the proposal, remarked that the shareholders could take it for granted that the whole of the Board were acting in good faith. He had perfect reliance in them, and believed that if the Company could be pulled through they would do it.

The resolution for the re-election of Mr. Rutherford was then unanimously agreed to.

On the proposal of Mr. Worthington, seconded by Mr. Dangerfield, the auditors were re-elected.

The proceedings closed with a vote of thanks to the Directors.

MARKET REPORT.

[*Per Mail advices of* 15*th February* 1901.]

COFFEE.

The London Commercial Record says:—The supplies at auction during the week have been on a moderate scale, and a fair proportion found buyers at irregular prices. Mocha was all bought in, but privately business has passed in long berry at 70s, and short berry at 80s to 82s. Bold colory Costa Rica is in request and higher prices have been paid, but for the bulk, as well as for Central American descriptions generally, the market has been rather in favor of buyers. Mexican sold at a decline of 1s to 2s per cwt. The market for "futures" has been influenced by the rise in Brazilian exchange, and March Santos reached 31s 6d per cwt. but has eased down in the last day or two on profit-taking sales, the closing quotation being 31s per cwt. Yesterday March sold at 30s 9d to 31s, May at 31s 3d to 31s 6d, September at 32s, and December at 32s 4½d to 32s 6d. To-day the auctions went off very slowly, with values unchanged for all descriptions. Supplies included 413 bags East India, 2s casks, 1 tierce, 5 barrels, 19 bags Plantation Ceylon, 102 packages Mocha, 36 bags Nyassaland, 149 packages Jamaica, 2,050 bags Costa Rica, 1,404 bags Guatemala, 1,040 bags Salvador, and 1,181 bags Unwashed Dumont. We quote:—

London ...	Santos ...	March delivery	... 31s 0d.
New York	No. 7 Rio...	,,	... 5·60 cents.
Hamburg...	Santos ..	,,	... 31 pf.
Havre ..	Santos ...	,,	... 38 francs.

Imports, Deliveries and Stock of Coffee in London, are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	19
Tons ...	13,513	12,420	2,767	2,
	Home Consumption.		Export.	
	1901.	1900	1901.	19
Tons ...	2,442	2,606	1,796	2,

To

The preceding figures exhibit—

In the Imports a decrease this year of
Home Consumption a decrease of ...
Export a decrease of ... ...
Stock an increase of 1,

Auctions this week have passed off as under:—

Mocha.—30 ½-bales were bought in.

Haiti. 40 bags damaged bulked sold—small dark greenish 2 medium 36s 6d, pea-berry 47s.

Dominica.—10 bags sold—greenish 28s to 35s.

Costa Rica.—Of 2,602 bags catalogued 2,400 bags sold—smalls 6d to 46s 6d, low middling greenish 46s to 51s, middling 51s 6d 56s, good middling 59s to 63s 6d, bold 63s 6d to 71s 6d, good to f 73s to 89s 6d, pea-berry 41s to 79s.

Guatemala.—650 bags mostly sold—smalls 36s 6d to 40s 6d, go ordinary 38s 6d, low middling 42s to 47s 6d, good middling 54s 55s 6d, bold 56s 6d to 57s 6d, pea-berry 53s to 60s.

Vera Paz.—78 bags sold—smalls 38s, low middling 51s 6d, b 75s to 75 6d, pea-berry 51s 6d.

Central American.—1,034 bags catalogued and 820 bags sold smalls 40s 6d to 43s, low middling 47s 6d to 48s 6d, middling good middling blue 52s to 55s 6d, bold 75s to 77s, pea-berry 59 68s 6d.

Colombian.—209 bags sold—smalls 30s, low middling 42s, b 47s to 51s 6d, pea-berry 54s; damaged bulked, smalls 31s to 32s low middling to middling 41s 6d to 45s, bold 45s 6d to 46s, pea-be 38s 6d to 50s.

Mexican.—443 bags mostly sold—smalls 36s 6d, good to f ordinary 38s 6d to 40s, bold 43s to 43s 6d.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-9 Bags
Rio ...	1,937,000	2,497,000	2,230,000	3,192,0
Santos ...	6,142,000	5,049,000	4,415,000	5,031,0
Total...	8,079,000	7,546,000	6,645,000	8,223,0
Crop ...	—	8,971,000	8,772,000	10,461,0

Rio Exchange 10 1/32d, previous day 10½d.

Havre, *Feb.* 14.—Good average Santos February opened stea at 38f. and closed quiet at 38f., March opened at 3f. a closed at 38f., May opened at 38¼pf. and closed at 38¼f., Septemb opened at 39f. and closed at 39f., December opened at 39½f. a closed at 39½f.

Hamburg, *Feb.* 14.—Good average Santos February opened stea at 30¾pf., and closed steady at 30¾pf., March opened at 31pf., a closed at 31pf., May opened at 31¾pf., and closed at 31¾pf., Septe ber opened at 32½pf., and closed at 32½pf., December opened 33pf., and closed at 33pf.

New York, *Feb.* 14.—Closing prices of No. 7 Rio were as follow:

	Feb.	Mar.	April.	May.	Ju
February 14...	5·60	5·60	5·65	5·70	5
February 13...	5·60	5·60	5·65	5·65	5

TEA.

Indian.—Rather less was brought forward at auction, the tot being 54,400 packages, compared with 57,500 packages in t foregoing week, and 39.000 packages a year ago

Extensive clearances in anticipation of the Budget, reaching fro 2½ to just under 4 million lbs. per diem, have occupied the time a capital of the trade, and adversely affected the market. Biddi was consequently languid, and prices tended lower for mo descriptions, while a considerable quantity was withdrawn owi to unsatisfactory offers. Common to fair, both leafy and broke receded ¼d to ½d per lb in value, and medium, particularly Peko were also cheaper. Fine and finest went irregularly and in favo of buyers, though choicest lots held their own. Several "last the season" invoices were printed, and when possessing a touch cold weather flavour commanded attention. Of the 2,000 packag

m South India submitted, the majority were of unattractive aracter and results disappointing.

Only 25,000 packages are advertised for next Monday, many porters being unwilling to accept current rates. It is satisfac-ry to see that according to the figures given below business with tside quarters is increasing, the exports from London during nuary being double those of 1900.

For 50,000 packages on Estate Account 6⅛d per lb. was obtained, ntrasted with 8⅛d per lb. for 32,200 packages and 9¼d per lb. for ,200 packages in the two previous seasons.

CEYLON.—Catalogues comprised 30,100 packages against 27,900 ckages on the 5th instant and 24,800 packages at this period elve months since.

Competition was less brisk and much unevenness prevailed. ekoe Souchongs ahd Pekoes under 6d per lb. showed a fall of ¼d ½d per lb., the medium sorts and Orange Pekoes, too, ruled sier. Broken Pekoes with inferior style and cup marked a rinkage, and for the better kinds quotations were very erratic, a cided decline being apparent in some instances, whereas in hers little change was noticeable. The small proportion of finest tched full figures. There was a fair number of orders from the ntinent, the exceptional opportunity now presented for making rchases evidently attracting shippers.

The average is barely 6d per lb. On the 7th instant it stood at d per lb,, and 7½d per lb. in 1900.

JAVA.—Nearly 1,800 packages of direct import passed the mmer, and in sympathy with other growths were dull of sale. bout 1,400 packages are advertised for the 21st instant.

Deliveries.—The clearances of all Tea (on which duty has been id) from the London warehouses, as per official returns are, z.:—

From 1st to 12th February, 1901 ... ... 25,194,295 lbs.
Do. do. 1900 ... ... 7,831,162 „

During the week the following have been printed for sale by blic auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	32,546	21,820	54,366
Ceylon	20,370	9,773	30,143
Java	994	770	1,764
Total ...	53,910	32,363	86,273

Also 99 packages from second hands.

PIMENTO.—Quiet, but steady. 116 bags offered and 38 bags ld—ordinary to middling 2⅝d to 2¾d per lb.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated February 15th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
00-1901	1,264,585	926,036	41,394
99-1900	1,289,297	875,333	43,328

,909 *pkgs.* INDIAN
,521 „ CEYLON
,764 „ JAVA
} Total 89,194 packages were offered in public auction this week.

During the calendar year 1900, 12½ million pounds more Tea re exported from India, and nearly 19 million pounds more from eylon than in 1899, making a total increase of over 31 million unds from the two countries.

With such heavily increased production and consequent collapse the Tea market, it is satisfactory to learn that the Indian and eylon Associations are now issuing a circular to proprietors of ea gardens, with the object of reducing the output for the coming ason.

Duty payments have continued on a very large scale, lbs. 29,525,597 aving been cleared in January against lbs. 37,238,954 last year, hen there was also an agitation in reference to the duty, and s. 17,991,818 during January, 1899; while from the Beginning of ebruary to the 13th inst., duty was paid on lbs. 27,571,122 against s. 8,251,049 same time last year.

The result of these heavy clearances is seen in the severe de-ression which has come upon the market, buyers having to provide nds not only for the payment of duty, but for the immediate moval of duty paid Tea from the warehouse. These operations sorb so much capital, that buying for stock to retain in bond is cessarily somewhat restricted, with consequent limited market mpetition. Prices have now reached a figure which may soon ing fresh capital into the trade.

INDIAN.—The downward trend of prices still continues except for really good liquoring Teas, common and medium grades showing a further fall, amounting in some instances to ½d. per lb. with a very irregular market.

Week's average of Tea sold on Garden Account 1901, 49,319 pkgs., av. 6·12d. 1900, 32,570 pkgs., av. 8·14d.

Total Tea sold on Garden Account 1st June 1900 to date, 1,046,087 pkgs. av. 7·32d. 1900, 1,006,442 pkgs., av. 8·36d.

CEYLON.—Common and medium descriptions again showed a decline in value, a fall of ¼d. to ½d. per lb. being frequently recorded. The few Teas with special point in liquor continue in demand.

Average for week 5·88d. against 7·39d. in 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 176,997 pkgs., av. 6·48d. 1900, 180,434 pkgs.. av. 7·58d.

JAVA.—Sold with considerable irregularity, although the depression in this market was somewhat less pronounced than among other growths, owing to the support given to this class of Tea by exporters.

Bank Rate 4½ per cent. Exchange on London three months sight:—Calcutta 1/4 9/32. Colombo 1/4 5/16.

COCOA.

There is no alteration in the conditions previously ruling; West India still tends lower, foreign growths are slow but steady, whilst fine Ceylon continues to realise full values, the trade for the medium and common grades being slow. At auction on Tuesday 7,194 bags were brought forward of which 2,600 bags sold. Of 868 bags Trinidad about 500 bags found buyers at about last week's rates—good to fine red 68s to 71s. Of 1,876 bags Grenada 850 bags were placed at a decline of 6d, *viz.*:—Fine red 65s 6d to 66s 6d, common to good 62s to 64s. 146 bags Jamaica about half sold at 64s 6d to 65s for good to fine. 138 bags St. Lucia partly disposed of at 62s to 64s for common to good. 8 bags Colombian sold out of 61 bags offered, at 59s 6d for common gray, 22 bags Sanchez realised 64s. 28 bags wormy and defective Esmeralda brought 60s to 63s. Of 98 bags Buba, one lot sold at 63s. 105 bags African catalogued and 70 bags sold at 64s for ordinary. Of 2,704 bags Ceylon 1,050 bags sold at valuations for the best lots but at comparatively low prices for the less desirable qualities; fine bold red brought 96s to 102s 6d, middling to good bold and medium 78s to 90s 6d, common to fair dull medium 66s 6d to 75s, and smalls 54s 6d to 69s 6d. 142 bags Dominica, 359 bags Samana, 151 bags Haiti, 40 bags Venezuelan, 379 bags Guayaquil and 73 bags Java all bought in. Privately about 500 bags Trinidad and Grenada sold at auction rates, also 400 bags Guayaquil at 80s for good Arriba, and 71s for Caraquez.

PEPPER.

BLACK.—The market has been dull in tone this week but is steadier at the close. For arrival 100 tons Singapore are reported sold at 6 7/32d down to 6 3/16d March-May shipment (s.), and at 6 9/32d for June-August, On the spot sales have been made at 6 1/16d for fair Singapore.

At public sale on Wednesday 80 bags light dusty brown from Singapore, but Penang character, sold at 5½d, whilst 92 bags Tellicherry, 1,214 bags Lampong 200 bags Aleppy, and 130 bags Trang all passed the hammer unsold.

WHITE.—The market is very quiet, and next to nothing done in the shape of business. Small sales of fair Singapore on the spot at 9 3/16d, and of fair Penang at 8½d per lb. For arrival the market has been a black.

At auction on the 13th instant 37 cases 317 bags Singapore were bought in at 9⅛d to 1s, also 276 bags Siam at 9⅛d to 9½d per lb., and 223 bags Penang.

To-day the market is dull and no sales for arrival reported. March-May Singapore 6 7/32d sellers.

GINGER.

COCHIN.—Demand has quitened down considerably this week, but the advance is well maintained. Some 500 bags sold privately since our last at 34s 6d to 35s for medium and small washed rough, and at same prices for rough Calicut Sorts. Under the hammer 136 cases 264 bags were offered and 3 cases 85 bags sold—medium and bold rather roughly cut and scraped 72s, small ditto 45s, ordinary medium and small dusty washed rough 33s, ditto mouldy 32s, sea-damaged cuttings 26s per cwt.

JAMAICA.—7 barrels small and lean, part dark, sold at 34s to 39s per cwt.

CINCHONA.

There was a brisk demand at the auctions on Tuesday, and as will be seen from the table below the bulk of the small supply offered found buyers. principally for American account. Prices were about 10 per cent. higher compared with the previous Amsterdam sale, the unit averaging fully 1½d.

The following table shows the quantity of goods offered and sold:—

	Packages Offered.	Packages Sold.
East Indian cinchona	746	610
Ceylon cinchona	318	243
Cultivated Calisaya cinchona ...	114	114
Java cinchona	90	90
	1,268	1,057

The following were the quantities of bark purchased by the principal buyers:—

	Lbs.
American factory	84,285
Messrs. Howards & Sons	39,170
Brunswick factory	31,145
Imperial factory	27,090
Paris factory	22,231
Frankfort-on-Main and Stuttgart factories	4,210
Mannheim and Amsterdam factories	2,748
Druggists, &c.	14,190
Total quantity sold	225,069
Bought in or withdrawn ...	58,485
Total quantity offered and sold ...	283,554

The following prices were paid:

South American.—Bolivian cultivated Calisaya, fair quill, 7½d to 8¼d; and thin papery, 4½d per lb.

Java.—Twigs, ¾d; Ledgeriana, stem chips, 3d to 4d; and root, 4⅝d per lb.

Ceylon.—Crown, chips and shavings, 2½d to 5d; broken quill and chips, 2¾d to 4⅛d; Hybrid, natural stem chips, 3¾d per lb.

East Indian.—Red chips, 2⅝d to 3¾d; root, 2¾d to 4⅝d. Natural branch, 2½d to 2¾d; chips, poor, 3⅜d to 3¾d; fair to good, 4⅛d to 5⅞d; rich, 6d to 7d; root, 5d. Renewed, 5¼d; rich, 7¾d to 9d per lb.

The monthly public sales of bark on Tuesday presented 1,262 packages for competition, and with a good demand about 1,050 packages sold at an advance of 15 per cent. on the prices realised at the Amsterdam sale, the unit value obtained being 1½d, against 2d at this time last year and 1⅜d in 1899.

114 bales *South American* all sold, at 4½d to 8⅛d for Bolivian cultivated Calisaya quill and 8¼d per lb. for broken ditto.

Of 318 packages *Ceylon Cinchona* catalogued 250 packages sold: Succirubra, chips and shavings 2½d to 4¼d, root 3⅛d to 3⅝d; Hybrid, chips 3¾d per lb.

Of 740 bales *East India Cinchona* bronght forward about 6 bales sold as follows:—Officinalis, chips 2½d to 6⅞d. shavings 3 to 7d, chips and shavings renewed 5¼d to 9d; Red, chips a shavings 2⅝d to 4d, renewed chips 8½d, root 3¾ to 5d: Ledgeria branch 4⅞d per lb.

90 bales *Java Cinchona* sold—Ledgerina, chips 3d to 4d, r 4⅝d per lb.

The shipments from Java for the first half of the month w 525,000 Amsterdam lbs., against 180,000 Amsterdam lbs. last ye

QUININE.

Sulphate of Quinine improved early in the week and sales HB and B&S were made up to 1s 2d spot and 1s 2⅛d May delive but later in the week on the Bark shipments being known, mark gave way and finished up 1s 1½d spot and 1s 1¾d May. Abo 100,000 ozs. sold in all.

Official Quotations.

	in tins.	*in 1oz. vials*
Howards & Sons	1s 3 d @ 0s 0d	1s 5d for 1,0 ozs., nomina
Thomas Whiffen	1s 2½d ,, 0s 0d	1s 4½d @ 0s nominal
Brunswick	1s 2 d ,, 0s 0d	
Mannheim	1s 1½d ,, 0s 0d	
Auerbach...	1s 2 d ,, 0s 0d	
Zimmer	1s 2 d ,, 0s 0d	
Milan	1s 1½d ,, 0s 0d	0s 0d ,, 0s
Taillandier	1s 1½d ,, 0s 0d	
Amsterdam	1s 1½d ,, 0s 0d	nominal
Pelletier's	1s 7 d ,, 0s 0d	0s 0d ,, 0s

After the close of our last report the market became dull a easier, owing to the United States wants being supplied for t present, and the week ended with small sales for spot at 1s 1¾ and may at 1s 2¼d per oz. This week the market opened easi again, with a small business at 1s 1½d for spot, but on Tuesd there was a slight recovery previous to and after the London ba sales, business being done on the spot at 1s 1¾d to 1s 2d, March 1s 2d, and May at 1s 2¼d. In auction 3,000 oz. of Taillandie brand sold at 1s 1d per oz. Since then, however, the market h been easier, owing to the heavy shipments of bark from Java f the first of the month (525,000 Amst. lbs.), and there are selle to-day at 1s 1½d. spot.

CARDAMOMS.

Cardamoms sold at unchanged but irregular rates, at the follo ing prices:—Ceylon-Mysores, fine bold long pale, picked, 3s 7 medium to bold ditto, 3s 5d to 3s 6d; dullish ditto, 3s 2d to 3s 4 good medium pale, 2s 6d to 2s 11d; long dullish, 2s to 2s 2d; sma and medium pale, 1s 10d to 2s 1d; small dull, 1s 7d; pale split a pickings, 1s 4d to 1s 7d; brown and split, 1s 4d. Seeds, 1s 9d 2s 3d per lb. Six cases of so-called wild Chinese seed sold "wit out reserve," at 2d per lb.

(Average for all India 6·12d., February 15th).

Garden.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Du and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price
Travancore ...	**1331**	**4·18**												
Braemore ...	58 p	4	12	4¾	23	3½	12	5	4	3½	4	3	3½c	3¼
Cherian Mallay ...	194 p	3¼	104 p	3½ 4	10	2½	...	...	...	...	...	...	80½c	2½ 3
Glenmary ...	140 p	4¾	55	4¼	..	..	35	6¾	30	3¾	...	...	20½c	3½
Kan Dev H Co M ...	297 p	5½	75	5¾	70	4¼	117½c	7¼	35	3⅝	..	...	...	...
Merchiston ...	83	3¼	...	...	54	3½ 3¾	...	...	19	3¼	10	2½	...	...
Poonmudi ...	125 p	4	...	...	49	3¾	31	4½	23	3¼	6	3¼	16 p	4½
Riviera ...	50 p	4	...	...	29	3⅝	15	4¾	...	...	2	2¾	4½c	2½
SITCoKuduwa K ...	113	4¾	52	4¼	...	...	38	6	23	3¼	...	...	...	...
Sth Trav Co Ven ...	205 p	4¾	...	...	138	4¾	27	5½	26	3½	...	...	14½c	3½
Vembenard ...	66	4½	34	5¼	...	...	...	...	...	...	20	3¼	12	4
Wynaad ...	**357**	**4·25**												
Erramacullah ...	157 p	4¼	...	...	44	4½	58½c	5	40	3¾	...	...	15½c	4¼
Wynaad T Co Per...	200 p	4¼	72	4½	...	...	50½c	6	60	3½	11	3	7½c	4½

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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ADVERTISEMENTS.—The charge for line advertisements is As. 4 line for the first; As. 3 for the second, and As. 2 for the third and ceeding insertions. Five-line (or shorter) advertisements from Subscribers ll be inserted for three issues for One Rupee; non-Subscribers will be arged Two Rupees.

DOMESTIC OCCURRENCE.—The fee for inserting a domestic currence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, lanting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 22nd instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad. *March 11th.*—*Weather*—fine, wind westerly, temperature 62° to 86° in shade. *Works*—Pruning, weeding and manuring. Coffee is generally of a healthy colour, even though the crop is small; this is the trying month for supplies, and they should now be carefully seen to, a mulching or light shading is very beneficial. *Health*—Fair. A little fever about. *Interesting item*—A meeting is called at the Saklaspur Club to consider ways and means to preserve fish and game in the district. Preservation would be a great boon to the district, and we wish it every success.

Coorg. Polli Betta, 13*th March*.—*Weather*—Very hot and dry with high East wind at present. *Crop*—Gleaning of old crop still continued in parts. The blossom which the rain of the 19th and 20th ultimo brought out seems to have set having had clear weather. A good deal of blossom remains to come out. Pruning and manuring are being pushed on with. *General Health*—Fair.

THE RIVALRY OF CHINA TEA.

One of the chief dangers that we foresee in the event of India and Ceylon largely reducing the production of Tea is that any such course must necessarily encourage rivalry on the part of China. Englishmen are always prone to underestimate the strength of their enemy. It must not be forgotten that English enterprise and English capital are available in China as well as in India and Ceylon, for the benefit of the Tea trade as well as for general commercial purposes. Nor must it be thought that British merchants in China are indifferent as to the future of the Chinese Tea industry. This is very far from being the case. Reorganization of *likin* taxation and other influences adverse to the growth of the tea

industry in the Celestial Empire may be remote, but if Indian and Ceylon planters voluntarily handicap themselves in the race they do something towards reducing the disadvantages under which Chinese competition now labours. An ex-China merchant has warned Ceylon planters, through the medium of the *Colombo Observer*, that it would "be unwise to dismiss from one's mind the possibility of the restoration of the China Tea Trade." Probably regarding internal reforms in regard to Chinese taxation, etc., as too remote to be taken into account, this gentleman, Mr. M. P. Evans, has declared that nothing would stimulate this restoration of the tea industry in that country so much as "the growing inferiority of Indian and Ceylon tea." He does not hold that demand leans towards the cheapest, but asserts that it will inevitably go to the best, "as it did in the early days of Ceylon tea." Granted that these remarks open a wide field for discussion, granted that many planters will not accept them as statements of fact but merely as expressions of opinion; yet it would certainly be unwise to ignore the possibility referred to.

It is undeniable that there are, as Mr. Evans says, "fresh economic reasons resulting from political events of recent date in China, which render this possibility greater than before." Further arguments in favour of the avoidance of the dangerous policy under reference are stated. It is said to be a mistake to suppose that the trade, or the British public, are wedded to British-grown tea. When the China Tea Trade flourished not so many years ago, common Congou possessed a standard quality, it was regarded as the consols of the London Tea Market, and extensive time transactions were regularly effected in it: its understood value was 7d. to 8d. per lb. In those days there was always the equivalent of 250,000 chests of refuse tea kept in China, which was wisely considered too coarse for the markets of Europe, it was consumed in the native tea houses by the cooly class; but as demand for England and Russia increased, much of this inferior leaf was used for mixing, with the object of producing quantity, so as to meet this increased demand, the result being that, the standard of quality was lost in the London market, and the price fell away, gradually receding year by year, until 3d. to 4d. per lb. was reached, a price, which failed to pay the shipper. This inferior article ceasing to attract the trade was only bought at the price of rubbish, and this, coupled with deterioration of the better kinds from the same cause, brought about the decay of the China Tea Trade. If these statements by Mr. Evans are correct, it may be said that History has repeated itself, India and Ceylon having recently acted as China did some years ago. There has been a large supply of rubbish under the name of "tea." The standard of quality has been lowered, and the supremacy of the reputation of Indian and Ceylon leaf has been undermined. Even if we were to attach less weight to the above arguments than does the ex-China merchant whose remarks we have alluded to, we should yet feel it our duty to warn British tea-planters that there is sufficient evidence that improvement of quality is more to be desired, and is more likely to be found profitable, than reduction of quantity.

Broadly speaking, the solution of the Tea problem is a matter of calculation. Whether can planters generally make more money by reducing the area under cultivation while still plucking close, or by fine plucking, which would have the effect of improving quality and simultaneously reducing output. Individual experience may yield different results; individuals may not be willing to conform to the ruling of a majority. It is, however, obviously desirable the interests of the British tea-planting community that standards of Indian and Ceylon teas should be kept at a hi level, so that sales may not be retarded by any falling off the repute in which these teas have hitherto been held. Th may be instances where it will be more profitable to indi duals to produce quantity rather than quality, despite depressing effect that this must exercise upon prices Spe ing of the British tea industry as a whole, however, judge that the wisest policy is that which has for its obj the maintenance of such a standard of quality, combi with such a level of cost of production, as shall ensure the planter a steady demand for his product at prices t will yield him a reasonable profit. Another danger t attaches to the policy of curtailing the area is that ab doned tea shrubs will be much more likely than those un cultivation to breed pests and to assist in the spread blights. Pests and blights have a more or less migrat tendency; once bred in abandoned tea they will not s there, but will gradually spread to neighbouring shru Anything of this kind would materially handicap such t in the competition with China leaf; and the general effe of anything that retards British teas may, for practi purposes, be regarded as not very different from those of a special stimulus to China teas.

A PULPING MACHINE FOR LIBERIA COFFEE

In reply to an enquiry for information regarding the i provements applied to Butin-Schaap's Liberia Coffee pulpi machine, Mr. Graafland has been kind enough to furnish t *Revue des Cultures Coloniales* with information, of which t following is a translation :—

Amsterdam, 12*th December*, 1900

During the twenty-two years that I spent in Dutch In as a coffee planter, I have always tried my utmost to procu the best possible machines for the manipulation of coffee, b I have always experienced the greatest difficulty in pulpi Liberia coffee until the time I received, in 1897, the But Schaap pulping machine, which was preferred to every oth machine. This apparatus possesses, in my opinion, and the opinion of many others of my colleagues, the followi defects :—

(*a*) The machine is not of a neat construction.

(*b*) The grooved cylinders gets worn away too soon and can be set right.

(*c*) The pressing plate is almost beyond the reach of the wo man, and, to regulate it, the whole of the higher portion of t machine has to be taken to pieces.

(*d*) The *pulping* concern does not possess a cleaning apparat so that the machine gets easily spoilt by the stones.

(*e*) The pulping concern again consists of a double cylind system, which renders its regulation very difficult

And yet, the Butin-Schaap Method is even now recogniz as the best—the construction alone being below the mark f the aforesaid reasons; and it is therefore that I decided up getting for the Coffee-plantation I had under my manageme

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nich son's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf peo unable to procure the Ear Drums, may have them free.

Address—No. 989 D, The Nicholson Institute, Longcott, Gunnersbury *Lond*

[w. 26-5-00—26-5-1901.]

pulping machine which, while simple in construction, was onger and more moderately priced. The first experiments th these pulping machines sent to India in February, 1900, ve proved so satisfactory that my friends requested me to nd them similar machines,—a demand to which I have ven all possible satisfaction.

The maker here is busy just now in improving his works, d next month he will be in a position to execute every der in four weeks. Although the machines were originally ovided with cast steel cylinders, the pulping machines now ported are with strong wrought steel cylinders.

The cast steel cylinders were found sufficiently satisfactory, cause the Butin-Schaap pulping machine has these parts in st iron, but the solidity of wrought steel being very much eater, the maker has been induced to utilize only that metal spite of its increased cost, in order that his machine might be sound as possible. I have been myself very much pleased ith this machine, and, besides, I can mention to you the mes of Messrs. Waller & Plate of Amsterdam, who have nt for these machines for their plantations in Java. So lly satisfied were they with these machines, that their first ders have been followed by a second. Moreover, there are ready some pulping machines working in Sumatra, and r. H. des Amori van der Hoeven, a planter in Telock etoeng, will be able likewise to state that he has altered his tablishment in order to procure these pulping machines nich the *Indische Mercuur* has also said to be the best ailable. Should you be desirous of receiving the testi-onials of approbations which the maker has received, I am uite prepared to forward them to you.

THE PROPOSED TEA CESS.

A CORRECTION.

Mr. H. S. Ashton wires us as follows:—

"Misreported in your issue ninth. I spoke at Tea Associa-on Meeting favouring Cess."

[We greatly regret that there should have been an error in the vices that first reached us, but we are glad to welcome Mr. shton among the ranks of believers in a Tea Cess. A report of his eech is given on another page.]

NOTES.

nchona in London. A firm market is reported by cable, the price per unit being $1\frac{13}{16}$d. Total onthly sales, 1,700 packages.

ffee in London. Reuter quotes Mysore "B" Coffee 52s to 62s. Stock, 15,291 tons. Fort-ght's landings 3,500 tons; deliveries 1,800 tons.

coa and Chocolate in Ceylon. A Ceylon firm has set about the preparation of Cocoa and the manufacture of Chocolate. We wish them success.

eylon Green Teas. The *Ceylon Observer* understands that estates at high altitudes have opped the manufacture of green teas as there is no demand r that class of teas.

Cinchona in Coorg. As reported last year the planting of cinchona has ceased in Coorg, and even the better prices now said to be obtained for the bark have failed to reanimate the industry.

Cacao in Ceylon. The Cacao Committee of the Planters' Association of Ceylon has resolved to ask Government to import from Trinidad cacao plants of varieties showing marked strength and vitality.

Tobacco Cultivation in Victoria. After collecting the year's crop of tobacco the Government intends to close the tobacco plantation, as all the experiments in this direction have been a complete failure.

Tea in Coorg. The dry season proved disastrous to the tea planting in the Sampaji Ghât and it is feared that the syndicate which took up 2,000 acres for tea planting in the Sampaji Ghât have determined to close operations.

Rubber from Ceara Trees in Ceylon. Mr. F. E Tringham has shown the *Ceylon Observer* a very clean, superior sample of rubber, the result of tapping a single Ceara tree—four to five years old—on Pen-y-lan, Dolosbage. Trees giving so much for four hours' tapping are worth looking after and planting should be extended.

Pepper. Large quantities of Californian pepper seed are, says the *Central African Times* of December 15, being distributed amongst the planters of B. C. A. by the Scientific Department. At Zomba the seed has been a great success, and it will doubtless prove a workable and paying adjunct to the products of this country.

Ceylon Tea Exports and Green Tea. The *Observer* remarks:—We are glad to see that a separate heading for "green tea" has been opened this week in the Chamber of Commerce circular, the first shipment, curiously enough, being 1,840 lbs. for *Rangoon!* It is a pity the shipments of green tea since 1st January cannot be given; but it is good to have a beginning made, and we trust every lb. of green tea exported, will be separately entered henceforward.

Native-grown Tea in Ceylon. An old planter writes to the *Ceylon Observer*:—"In my opinion there was very little more acreage of native tea gardens in bearing in 1900, than there was in 1899, and 1901 will not much exceed last year. Owing to low price many of the small gardens are not weeded carefully. The rush of leaf in 1900 was caused by (1st) large Companies piling in manures, and (2nd) Kelani Valley, coarse plucking." But whence, asks our contemporary, came the unnamable "rubbish" which we fear is still going forward?

Ceylon Green Tea in Canada. The "Salada" Tea Co. lately received the following from The North Bay Supply Co., Limited, North Bay, Ont.:—

DEAR SIRS,—Our 30-lb. sample order of Brown label Ceylon green is sold right out, and our customers are very much pleased with it thus far. Kindly rush forward order for 500 lbs. sent you some days since. We believe this tea will displace our trade for 25c.

Japan; in fact, we are so sure of it that we have not given our usual import order for Japan tea. "Salada" tea right through from 25 to 50c. is becoming our leader, and if the year continues as it is starting, our business in "Salada" will be more than four times that of last year.

Amsterdam Bark Market. There was an advance of about 3 per cent. to-day 21st ultimo, in the auction unit says the *B & C Druggist*. Out of 37,058 kilos. of sulphate of quinine offered in the form of bark, 33,720 kilos, were sold. The druggists' bark among this contained 3,390 kilos. of quinine, of which 3,345 were sold, and the manufacturers' bark contained 33,668 kilos., of which 30,375 were sold. The unit was 7·50 cents per half kilo. (1½d. per lb.) against 7,25 cents at the last auction (nearly 1½d. per lb.). The shipments from Java for the first half of the month were 525,000 Amsterdam lbs. against 180,000 Amsterdam lbs. last year.

Tea Planting in Java. The *Straits Times* says:—Tea-growing pays so well in Java that the area under the staple shows increase. Yet capitalists, as a rule, shrink from investing money in this line of enterprise. The Batavia *Nieuwsblad* deplores this lack of interest at the present time, when coffee is on the down grade and when, owing to the abandonment of many coffee estates, thousands of labourers thrown out of employment can be started on tea-planting. Investors object that tea-growing stands under the disadvantage of no dividends being available in the early years of an estate. The reply is that this is made good by the heavy dividends sure to come once the estate has begun to bear.

Cinchona. The Vriessivum reports having received a telegram stating the Java bark shipments to be January 1 to February 18, 990,825 Amst. lbs. The shipments during 1900, were January 1, 1900, to January 7, 1901, 10,827,408 Amst. lbs.; January 1 to January 7, 1901, 140,825 Amst. lbs.—total for 1900, 10,686,583 Amst. lbs. The 1900 total tallies fairly with the total (10,780,000 Amst. lbs.) of the Nederl. Veem., but the shipments as above from January 1 to February 18 are so much smaller than the January shipments (Nederl Veem-1,000,000 Amst. lbs., and shipments first-half February, 1901, reported from London as 525,000 Amst. lbs.) that there is evidently a mistake somewhere.

Ceylon Tea in Canada. The *Canadian Grocer* states: Mr. R. D. Ross, who has been for so many years prominently associated with the tea trade of Canada, originally with the "Salada" Tea Co., and latterly as manager of the "Monsoon" Tea Co., is launching out for himself in connection with the Ross Tea Co., importers and packers of Ross' high-grade Ceylon teas. They have equipped a plant at 11 and 13 Front street east, Toronto, with the latest and most up-to-date machinery for packing tea in lead packets, and with a capacity for a large output. Mr. Ross enjoys the reputation of being one of the best judges of Ceylon teas in Canada, and, as he proposes to live up to, and not on, this reputation, a goodly measure of success should be the lot of the new company.

The Indian Tea Trade. Remarking on the proceedings of the annual general meeting of the Indian Tea Association last Friday, *Capital* says:—We are quite at one with Sir Patrick Playfair in considering it unsound policy to invite Government to impose taxati The Government is something like a shark, it has a v capacious maw and a very retentive one. The less Gove ment interferes with any industry the better; and all that planter should desire is to be severely left alone. Indust that are fostered and promoted by Government rarely h the strength and hardihood of those that grow alone. have already suggested that the tea industries could impo cess on tea by means of the selling brokers; but any in ference on the part of the Government is strongly to deprecated. The fable of the frogs who desired a ki should not be forgotten. King log is infinitely better t king stork.

The London Tea Market. Messrs. Gow, Wilson & Stanto cable, of 7th instant, to Colom reports that the demand is strong for fine kinds of Cey tea, and the market for medium liquoring Pekoes and Brok Pekoes as well as for Common Pekoes and Broken Pekoes steady. The price of fair liquoring Ceylon Pekoe Soucho is 5d. (same as last week) and the average price of Ceyl tea sold on garden account this week was 6½d. (one-eighth a penny up). There was no sale in the corresponding we last year and therefore the usual comparison cannot be ma Reuter reports that fine qualities of Ceylon tea sell at f prices. Pekoe Souchongs are quoted at 3¾d. (one-eighth u and the average for the week at 6⅝d. (also one-eighth up) against 7¼d. quoted for Indian tea. 35,000 packages Ceylon tea were offered for sale, of which 33,000 were dispo of; while of the 45,000 packages of Indian tea offered 43,0 found purchasers.

Tea Planters and Tea Dealers. Referring to some recent rema of ours, the *Ceylon Observer* say —"Our contemporary of *Plant Opinion* has some pungent criticism of the recent suppo action of our Planters' Association—'supposed' we s because the writer can only refer to 'legislation' as an int ference with individual liberty, and neither the Chairman any one in Ceylon advocated interference by law or anythi but voluntary action on the part of planters." Our rema did *not* only refer to 'legislation.' There is such a force public opinion, and this may easily be employed,— effectually as legislation, or almost so—to interfere w individual liberty. We are certain that many a planter w personally doubts the efficacy or the wisdom of the 1 reduction of area system will yield to public opinion so as to express willingness to give it a trial, thus permitt his liberty as an individual to be interfered with.

Coffee in London. The *Produce Markets' Review* say: As the new cropCoffees come forw in larger quantities there is generally a more settled mar established, and such is particularly the case this year, follo ing a time when, owing to a slow demand, it had beco almost impossible to accurately fix a value to many parc During the week there has been a much brisker busine and the catalogues have been all cleared in almost ev instance, while prices have shown a decided upward mo ment. There has been a strong demand for bold new c Costa Rica, and rates are fully 3s above the opening pri of the same marks. The quality, as a whole, has contin unsatisfactory for the home trade until yesterday, when a f

rcels showed an improvement and fetched correspondingly gh rates. The new crop of East India comes to hand owly, but some fine Mysore may be expected during the xt week or two. In the terminal market heavy receipts ntinue to check an advance, which a rising exchange would turally point to, and quotations close at practically the same ices as last week.

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ffee in Coorg.

"The total area of coffee land was 1,02,214 acres against 1,04,545 acres the previous year. The cause of decrease was chiefly signations of old estates—one of the oldest of the Europeans' tates in province known as Fischer's estate, having area of 90 acres was resigned entirely. The area of assessed coffee nds held by European and Native owners respectively as llows :

	No.	Acres.
European estates	381	31,980
Native do.	13,454	70,234
Total ...	13,835	1,02,214

The coffee crop during the year was 2,760 tons against ,558 tons in 1898-99. As was anticipated in last year's eport, the unusual heavy rain in February and March seriously ffected the quantity of crop, but the quality of the crop was etter than in 1898-99 and better though as a rule not good rices were realized. The industry continues depressed, but he planters are not quite so dispirited as regards future rospects as they were." Thus says the Administration Report or Coorg, 1899-1900.

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ndian Teas in London.

Although a smaller quantity has been submitted to public auction rices have been irregular, says the *Produce Markets' Review*, nd a considerable proportion was withdrawn. The large ithdrawals from the sales is in a great measure due to the ttention of the trade being practically absorbed in the duty ayments which continue very large. This abstention from eneral buying by the trade has caused an almost general ecline in values, common Teas having fallen to a price nprecedented. The medium and fine Teas have participated the downward course, the former from ¼d to ½d, the latter a less extent, while a few parcels above the average quality ave attracted attention, and have readily sold at better prices han last week. When these heavy clearances are discon- nued, it is probable that the market will be steadier, but uch will depend on the supply. If importers continue to talogue Tea in excess of requirements, the depression in alue will be more marked, as buyers during the past few eeks have bought freely and practically stocked themselves r the next two or three months. At the public sales 54,580 ackages were offered, and the large total of 21,098 packages ithdrawn.

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rade Customs and London Dock Charges.

In a long letter to the *Public Ledger* of February 20, Mr. Samuel Figgis refers to the evidence given at he Royal Commission on Docks, &c., and asks if the London hamber of Commerce cannot assist importers and merchants proposing definite changes in trade customs. Under the tered conditions and small profits of importers, he suggests oing away with all discounts, selling everything at fourteen ys prompt net cash delivery, and urges a special quay-rate cover three or five days' rent ; all goods landed and weighed be taken at landing weights if these are within one month of sale ; any produce sold at re-weights to be re-weighed within three days of sale ; weights and tares (of low-priced produce) to be taken in drafts of five or ten bags ; no tret at all, and the doing away with all allowances, thus making accounts exact and cheaper, and working charges less, and enabling quicker despatch of accounts. These matters would, Mr. Figgis thinks, often make the difference of a merchant's commission of ½ to 1 per cent., and the further suggests that the Chamber of Commerce should ventilate the matter, as the produce associations are interested parties, and will not readily make the changes which they fear may injure their hold on clients.

Manicoba Rubber.

O. Araguary gives an interesting account of the progress of rubber planting in that district. The centre of the rubber plantations in the State of Minas is Bagagem where at least 150,000 shoots have been planted during the last two years. On one plantation the trees had already reached the height of 5 metres (16 feet 3 inches) some of them of little more than a year's growth. The trunks, however, have not developed in proportion and only measure so far, about 20 to 30 centimetres (10 to 12 inches). This plantation is situated on high gravelly soil and counts some 10,000 trees. The older trees planted 2 to 3 years ago show signs of abundant latex, which exudes from the tender shoots and solidifies on the stems. The growth of the trees was greatly retarded in the Winter months, from June to August, but afterwards the development was surprising, nearly 3 feet in three months. The trees were raised from seeds planted 3 together, the holes being at distances of 12 to 15 hands from one another in regular lines. Only one weeding is necessary per annum. The climate of Minas is cold, falling below freezing point in some localities during the Winter, and as *maniçoba* appears to be peculiarly susceptible to cold, it is necessary to choose the ground carefully. Within a few years the *maniçoba* industry may be expected to give important results.

LETTERS TO THE EDITOR.

ARSENIC.

SIR,—In your issue of January 19th of this year, page 43, one of your correspondents gives a note of warning against the use of Artificial Fertilizers for Coffee ; as the arsenic, the fertilizers might contain, might be taken up by the plants and act as a poison to consumers of the coffee. The article is logical and well written, and as the sources of information are given, must be convincing to a large number of your readers. But further reflection will, I think, show that there is no cause for alarm.

(1) Superphosphates have been used extensively for considerably over half a century and during all that time they were made, as now, by using impure sulphuric acid, (which is *liable* to contain arsenic) but no case of poisoning has been traced to the superphosphate.

(2) In America, Paris-green (an Arsenite of Copper) has been universally used for about 25 years as a dressing for potato vines to destroy the potato beetle, and no arsenic poisoning has been traced to the consumption of such potatoes notwithstanding that a considerable quantity of the poison must invariably drop on the soil in which the potatoes are grown.

(3) Although plants take up considerable quantities of arsenic when the latter is *dissolved* in solutions used for *water cultures,* only "infinitesimal quantities" of arsenious acid are taken up by the plants if this poison is contained in the *soils*, on which they grow as proven by, among others, Gorup-Besanez, in his article published in the "Annal der Chemie un Pharmacie," vol. 117, part 2, page 243. The assimilation of arsenic by plants has been a subject for investigation more than 50 years ago and it is therefore not a field likely to give startling revelations now.

(4) Without having a report of the "Manchester Analyst" or a copy of the "Lancet" referred to by your correspondent, it is impossible to enter into a discussion of these. They are contrary to the generally accepted opinion of men of science and this opinion is based on the experimental evidence of half a century. On what evidence the opinion of the writer in the "Lancet" is based is not stated.

(5) Arsenic when assimilated by plants (as for example in water cultures) is one of the so-called accidental constituents of plants. These are rejected by plants when forming their fruit. Therefore if the coffee trees assimilated arsenic this poison would not enter the beans. But as only infinitesimal quantities of arsenious acid (quantities too small to make the coffee tree a poison if it formed an article of food) enter the tissues of plants when growing on a soil containing salts of arsenious acid, coffee-planters may rest doubly sure that no arsenic poisoning can be produced by the consumption of pure coffee, even if the fertilizer used on the estates contained large percentages of arsenious acid, which is by no means the case.

Bangalore,
March 14*th*, 1901. A. Lehmann.

GENERAL ARTICLES.

THE CONDITION OF TEA.

The Produce Markets' Review, commenting on the Circular lately issued by a Sub-Committee of the Indian Tea Association on the subject of "How the present condition of Tea affects Producers," remarks :—

Judging from the enormous clearances of Tea during the past few weeks, there is a general expectation, not of a reduction as proposed by the planters, but of a further increase in the duty. The Chancellor of the Exchequer will, however, no doubt keep his secret to the last, and the trade will have to wait for the declaration of the Budget, until they see what is to be done. In the meantime the statement of the Indian Tea Association that the additional 2d per lb. on Tea has seriously injured the producers cannot be disputed. There can indeed be no doubt that the result on the public demand has been such as to seriously depress the price of Tea in bond, so as, at any rate partially, to make up for the extra duty. The sufferers, of course, have been our planters in India and Ceylon.

A good deal has been published with reference to a proposed combination to control and lessen, to a certain extent, the increased and increasing production of Tea, but it appears extremely doubtful whether any measure of the sort can be successful. The interests of those concerned are very divergent, and indeed in some cases almost irreconcilable as regards such a movement. Take for instance a comparatively new garden about to come into bearing, and on which large sums have been spent in previous years. If production is not allowed on the full scale, those who have been from year to year putting money in without return, would feel that they were suffering far more than the older producers who had no new land coming into bearing. As regards the fixing of the exchange at the artificial rate of 1s 4d, there can be no doubt that hitherto it has been injurious to local planters; but whether it will continue to be so is a matter for consideration, for theoretically, at any wages and other expenses should be decreased by a rise in exchange. The action of the artificial exchange on Tea is, howe economically peculiar. The Indian Empire is so vast, the diffic of communication so great, and the standard of economic educa so low, that the late depression in the rupee, while its effects very marked in external trade both in imports and exports, not had time seriously to raise the price of labour and so o India itself. It will be seen, therefore, that while the artificial hancement in the exchange is injurious to the planters, they not in a position to make the economies that may theoretically made in India.

While many difficulties may seriously interfere with form combination among the Tea planters, there can be doubt that condition of the trade at home loudly calls for alteration. It is only the Indian planters who have to complain of the condition Tea and the depression in prices, but the system of conducting business has of late years proved most unsatisfactory to the ho trade as well. Unreserved public sales and the unrestricted pu city of prices have removed the old inducement to hold stoc A great deal of capital has, therefore, been withdrawn from business, and, while there are infinitely more varieties and qualit of Tea than used to be the case in old times, the margin in val has to a great extent disappeared. The retail grocers in the sa way are not contented with the system which brings all Tea do practically to an almost uniform price, and at any rate to a pr which only permits the purchase of comparatively common kin and decreases the proper reward which should be reaped by th who pay special attention to the trade and endeavour to develop higher branches. Apart from the public sale system, which in present exaggerated form has proved injurious to distributors well as to producers, the Tea trade is organised in an obsolete a most costly manner. In fact, the expense of distributing Tea is n out of all proportion to the cost of the commodity or to the profit be obtained upon it. Under these circumstances it has been sugge ed that the various branches interested in Tea should meet togeth and endeavour to introduce mutual and beneficial advantages. similar course has been adopted with excellent results in oth branches of trade, and there can be no reason why Tea should be exception. In fact, we attach as much, or more, importance what can be done by an agreement at home towards placing market on a sounder basis, as to any attempt to interfere with p duction, or any movement based on the forlorn hope of a reduct in the duty.

THE UNITED STATES.

IMPORTS OF COFFEE.

The imports of coffee were 785,918,534 pounds, valued $59,510,771, against 878,198,029 pounds in 1899, valued at $56,068,9 The following were the sources of supply :

	Pounds.
Brazil	608,429,596
Other South America	56,052,222
Central America	43,961,550
Mexico	30,010,567
East Indies	22,224,166
West Indies	9,148,580
Other Asiatic countries	3,562,864
Germany	4,416,834
France	2,159,374
United Kingdom	2,128,942
Netherlands and other Europe	3,688,813
Africa and other countries	135,026
Total ...	785,918,534

From the above it appears that Brazil furnishes 77.3 per cent. the total supply, thus showing the dominant position that Repub occupies in the coffee market of the world.

The following statement shows the imports, exports, and imports for the year :

	Pounds.
Imports	785,918,534
Exports	44,625,914
Net imports	741,292,620
Net imports, 1899	851,645,477

The above shows a decrease in net imports of 110,352,857 pounds, 836,000 bags, as compared with the preceding year. The new ork Coffee Exchange report for the year made the 1900 deliveries 8,980 bags less than in 1899.

IMPORTS OF TEA.

The following table shows the imports, exports, and net imports tea:

	Pounds
Imports	96,384,696
Exports	1,176,736
Net imports	95,207,960
Net imports 1899	85,929,024

The Chinese Empire furnished 54,111,195 pounds, or 56 2 per ent. of the imports; Japan, 33,261,387 pounds or 34.4 per cent. of he imports; all other countries, 9.4 per cent., showing that there still a great field for British-grown tea.

IMPORTS OF COCOA.

The imports of cocoa for 1900 were the largest ever known, eaching 45,305,016 pounds of crude and 995,401 pounds of manuactured product. The exports were 2,228,632 pounds of crude and 085 pounds of manufactured, leaving net imports of 43,076,384 ounds of crude and 994,316 pounds of manufactured, as against et imports of 35,797,458 pounds of crude and 1,038,934 pounds of anufactured in 1899. This shows a wonderful increase in the se of cocoa and its preparation.

TEA-GROWING ON PAPER.

Tea-growing is becoming a newspaper industry in this country. bout 60 acres of land in Summerville, S. C., are laid out as a tea lantation, and the quantity of matter written about the enterprise ould hardly be greater if it promised to supply the entire domestic emand for tea, with some left over for Europe. But the industry ay grow more rapidly during the next decade than it has during he past five or six decades, for there is talk of capitalists in Conecticut having bought some thousands of acres of land near harleston, S. C., for tea raising proposes. and it is also said that a ouple of syndicates are being formed for a similar purpose. The a duty looks like a fixture, and, with the present party in power, here is always a possibility of getting an increase of duty or even bounty. Any Congress that will seriously discuss Mr. Hanna's rguments in favour of bounties to rich shipowners wouldn't mind little thing like helping two or three tea companies at the expense 76,000,000 people. Therefore, we think there are possibilities in hese tea schemes in South Carolina, and, if the worst comes to the orst, the demestic tea could always be disposed of as a curiosity.—*Merchants Review*, New York.

BRITISH DUTIES.

A week full of that trying monotony to which, unfortunately, e have lately become accustomed, has passed again, says the *ondon Commercial Record*, and if it had not been broken somewhat some speculation and curiosity regarding the probable action the Chancellor of the Exchequer with reference to the next udget, the monotony would have been intensified. As it was, he activity displayed in certain quarters in anticipation of a raised uty created some interest. The effect of last year's Budget ith its sudden imposition of duty on Tea, Coffee, Tobacco, etc., as remained fresh in everybody's memory, and all those interested articles favourable to the purpose of the Chancellor of the xchequer, have been grealy troubled, and their peace of mind has en much perturbed by the uncertainty of the decision of Sir ichael Hicks-Beach. Tea, Coffee, and Tobacco have formed a obby lately of those entrusted with the compilation of Budgets, and he anxiety felt by holders and dealers that a renewed raid on their eserves was contemplated, was very natural and pardonable. he utterances of the Chancellor in the House this week have by means removed the anxiety, and the wholesale "clearing" of ntiable articles continues unabated. This removal from Bond s attained such enormous proportions that it begins to depress arkets, inasmuch as consumers and dealers, of some of the ticles threatend, have locked up vast sums in the clearance of eir stock, and are thus prevented from profiting by cheap offers. We hear, to give only one instance, that Belfast, which is the third largest Customs Duty-paying Court in the Kingdom, has returned an increase of £242,000 for dutiable goods cleared during the first-half of February, as compared with the same period last year. Whichever articles the Chancellor of the Exchequer may select for his purpose of filling the coffers of the State, he will hardly hit upon Tea, for this commodity, in our opinion, cannot bear heavier taxation Its value, on the whole, has declined to about the extent of last year's increased duty, and a further imposition would undoubtedly restrict the total consumption to a serious degree, a fact which, at the present state of the Tea markets, would be absolutely fatal. The position of the article at the moment is such that special efforts have been deemed necessary to devise a method for the re-establishment—with as little delay as possible—of a sound and healthy basis for working Tea both here and in Ceylon. Meetings for this purpose have been held in London and Colombo, and a decision has been carried at the latter place by the Planters' Association to reduce the plucking acreage by 10 per cent., and to increase the production of green Teas. The report does not state whether Indian planters have agreed to this arrangement as well, but it is to be hoped they have, for without them it would not be complete. Not hampered by a further imposition of duty, and strengthened by a fall in supplies, Tea should have a good chance of recovering its old value.

REDUCTION OF AREA WITH INCREASE OF OUTPUT.

"Manager" writes to a Colombo contemporary :—

Your leading article of 21st inst. gives startling figures. I will not repeat them though they look simple enough, but I should think India will pause before agreeing with Ceylon to rest any part of her cultivated area.

17,717 tons manure means 53,151 acres of tea manured. The friend you support—on his style of working—would expect quite 200 lbs. per acre as the legitimate extra quantity of tea to be produced by the application of this manure that equals 10,630,200 lbs. extra tea. With the present labor supply in the country there is nothing to prevent a still larger increase in manuring operations for 1901. What is the use then of resting one portion while we go on increasing our production in this way from the remaining area. Does not above go to prove that it is not the resting of 10 per cent. of our tea that is needed (any benefit from that is doubtful) but an actual reduction in output of say 10 per cent. This could be leased on the actual crop of the last two years; thus an estate averaging 100,000 lbs. for the two years should undertake to put ony 90,000 lbs. on the market, leaving it to the proprietor to decide whether he would pluck finer, rest a portion, destroy his low grades, or sell to the natives of Jaffna, Trincomalee or India; just reduce as it best suits his own taste or individual estate.

In some such way only shall we get any reduction in output that will be of any help to us. Still we must support the best scheme that is brought forward so as to make a beginning and do our best to make it workable in such a way as shall benefit us all. I do not think your friend was unjustly criticised. We do not object to manuring, it is fair legitimate cultivation; but we do object to everything being taken that the bush will produce, and this at the lowest possible cost of plucking, so making and throwing on the market all unnecessarily increased quantity of low class teas that are spoiling our good name and ruining our industry.

In olden days we made tea so as to get the best price obtainable, the question was not—How cheap are you plucking? or—What is your yield per acre? but—What price did you get for your last break?

If men would work now on these lines, and manure so as to keep their bushes healthy, we should not hear so much about over-production; high and low estates would each in their own line get better prices than even your highly manured old coffee land has given during the last year or two.

Here are figures from a typical old coffee estate averaging over 40 years' cultivation in that product. Not a single acre of new land has been opened for tea and it is not in a favourite district Area in tea, 356 acres, carefully plucked, and manured, just sufficient to keep up the fertility of the soil.

Season ...	1895	1896	1897	1898	1899	1900
Total crop ...	184,539	182,133	173,000	169,000	175,000	185,000
Spent on manure ...	R1,982	2,521	2,800	2,149	1,705	2,712

TEA "REFUSE" AND CAFFEINE; ALSO CINCHONA PROSPECTS.

Mr. F. L. Seely,—the very worthy and well-informed representative of a big American drug house—has been giving us some useful information about tea refuse and caffeine Mr. Seely is chiefly interested in cinchona and quinine, and he tells us plainly that Java commands—and must for many years command—the "bark" market with her 25,000 acres of old trees, chiefly Calisaya, which, if the price justified the export, could supply five or six million lbs. in place of the normal one million lbs. of bark, each month. Last year Java supplied 12,000,000 lbs. of cinchona bark and manufactured one-tenth (one million ounces) of the world's supply of quinine. There is, therefore, no special encouragement to grow cinchona in Ceylon, save as an adjunct to other products; and in this direction, a good deal may be safely done, because the Java planters are bound to keep up the price for their own protection. Mr. Seely ran up to Kandy, Hatton and Blair Athol; but finding it took him four hours to find as many cinchona trees (!), he thought he had better hurry over to India.

But now to turn to refuse tea and caffeine, Mr. Seely estimates that the world's requirements in caffeine equal 50,000 lbs. at least and may shortly rise to 100,000 lbs. To produce this quantity, chemists require from five to ten million lbs. of refuse tea. The firm of Messrs. Bohringer, as representing the great Mannheim Chemical Manufactory, have hitherto been the chief purchasers of such refuse; but they find a difficulty in dealing with planters, because of their fear lest any of the tea should be sold for food consumption. Of course, such an idea is absurd in the case of a house of the standing of Messrs. Bohringer. But Mr. Seely suggests a very easy check. The addition of some lime to refuse tea would prevent its use for food consumption, while it would aid, even expedite, the work of the chemist. If, therefore, the planters consigned their refuse tea to Messrs. Bohringer's store in Colombo, a representative of the Planters' Association or "Thirty Committee" could, once a month or once a quarter, check the consignments and see the lime duly added. We give this suggestion for what it is worth. Certainly the transfer of some 5,000,000 lbs. of refuse or rubbishy teas to the chemist ought to be an object worthy of attention from the Association and Chambers' Committees. —*Ceylon Observer.*

CEYLON SCIENTISTS.

In the report of the Director of the Royal Botanic Gardens, Peradeniya, it is remarked :—

The Mycologist and Entomologist have carried out a great deal of work during the year, and their departments are becoming gradually organized on the lines which experience shows to be most useful. The bulk of their time is of course taken up with researches into the nature and life history of the numerous insects and fungi which are or may become of importance with regard to agriculture, but they have also travelled through many districts of the Island to investigate diseases and to give advice and assistance in dealing with their attacks. One method employed with some success has been for one of them to attend a meeting of the local Planters' Association in a given district, and there to discuss particular diseases and the modes of dealing with them, subsequently visiting selected estates to give practical instructions and to study the diseases more in detail. Such work is at present considerably handicapped by the extreme reluctance of cultivators to say or do anything that may seem to confess the presence of disease among their crops, but as time goes on the advantages of taking early advice and action will become more evident, and this source of difficulty and friction be lessened. Detailed reports of both officers are given as appendices.

The organization of a department to deal with prevention of disease is a new and a very important, though perhaps a less showy, line of work than that of the introduction of new industries. The losses caused by disease are enormous, and to save even 5 per cent. of them is a great gain. The establishment of other industries has, however, not been lost sight of. The Botanist and the recently appointed Chemist have devoted much attention during the year to camphor, which seems, owing to the action of the Government of Japan, likely to prove worth cultivation in Ceylon. They have also commenced a detailed investigation into the chemistry and bot of the citronella and tobacco industries, with a view to discover what improvements are possible that may avert the threate danger of collapse from over-production and foreign competit Further details are given below.

The office and clerical work of the department has increased v much during the year. The correspondence with planters others on diseases, modes of cultivation, etc., is rapidly increasi and takes up a very large part of the time of the scientific staff. is hoped to relieve this pressure during the next year by publication of more frequent circulars, etc., which may be dis buted instead of letters in answer to many of the most frequen recurring questions. A lithographic press has been recen obtained, and it is intended in future to illustrate the circulars proceeding which should add to their usefulness. Their circulat continues to increase, and they seem to meet with approval fr the agricultural public.

CINCHONA BARK SHIPMENTS.

According to our cable advices the total quantity of cinch bark shipped from Java to Europe during January, 1901, 500,000 kilos. as compared with 550,000 kilos. during Decemb 1900, and 307,000 kilos. during January, 1900. In the follow table we give figures showing the quantity of bark shipped dur each month since January 1, 1899:—

	1899. Kilos.	1900. Kilos.	19 Ki
January	255,000	307,000	500
February	465,000	320,000	
March	488,500	325,000	
April	498,500	265,000	
May	476,500	408,000	
June	566,450	433,000	
July	470,000	314,500	
August	601,200	488,500	
September	616,000	683,000	
October	479,000	550,000	
November	681,000	745,000	
December	313,000	550,000	
	5,910,150	5,389,000	

[Equal to 13,002,330 lbs. in 1899 and 12,856,000 lbs. in 1900.—Ed., *C.*

During the first half of last month the shipments amounted about 300,000 kilos. and in some quarters it was expected that total shipments for the whole month would again be large and a par with those during the last five months of 1900. It is t that the shipments were larger as compared with the first half 1900, but, from the fact that since November there has been a sli falling off each month, those who have been of the opinion that available supplies in Java were rushed forward to take advant of the high prices which prevailed during the last part of last y derive some encouragement. Bark shipments, as we have s many times before, are always uncertain, but the opinion is very general that shipments will show a further falling off dur February and also during March, unless there is a substan advance at the coming Amsterdam bark auction on the 2 February.—*New York Drug Reporter.*

BAD TEAS FOR AUSTRALIA.

The Secretary of the Chamber of Commerce, Colom has placed at the disposal of the Press certain corresponde on this subject. We need only quote the following extracts

From letter from Melbourne Chamber of Commerce

I may mention that an excellent Act (copy of which I am post to you) is in operation here, and is in charge of a tea expert for purpose of preventing inferior tea coming into this port. The cellency of the Act consists of the legal definition of the w "exhausted," which you will notice according to section 55 of Act, means tea deprived of its proper quality and strength virtue, by steeping, infusion, decoction, or other means. The te "other" legally meaning other similar means, consequently le lation is really passed to prohibit the importation of tea wh

es not exist, and the office of the tea expert is practically a ecure, so far as being of any benefit to the consumer.

If the word "any" had preceded "other" your Chamber would ve had no occasion to take action so far as Victoria was concern-, as the bulk of the tea complained of was sufficiently exhausted have lost nearly all qualities pertaining to tea, and if it could be imed that it contained no injurious qualities to consumers it uld be held as of no value as a beverage.

I should be pleased to know whether the samples sent to you uld be admitted into the United States of America, there being Act in force in that country under which rejections could be de easy.

From Mr. Alfred Harvey to the Melbourne Chamber of Commerce.

Dear Sir,—At your request we send you herewith a few samples low class Ceylon teas which have reached this market during e last two or three months. It is impossible to give you garden rks, because it is the custom in Colombo to ship under an *port mark* after the estate name has been scraped off.

MELBOURNE, 30*th January*, 1901.

From Messrs Copland, Mackie & Co. to the Ceylon Chamber Commerce.

Dear Sir,—At the request of our local Chamber of Commerce we nd you under separate cover samples of tea as at foot. These present lines offered or sold at auction here during the last few nths and on some of these we based our remarks in our circular ted 31st July, 1900. We do not mention the names of vendors we consider the blame lies with the grower primarily and the ippers at your end. During the past season we have found that ry largely owing to the poor quality of Ceylon teas arriving our yers have preferred and largely used Indians in their place, the neral average quality of the lower grades being much better.

We trust that for the sake of all interested in the trade you will e your influence in the direction of prohibiting the export of s of this class, every pound of which sold displaces a pound of od tea which might have been sold.

CINCHONA BARK AND QUININE.

Messrs. C. M. and C. Woodhouse say in their annual port for 1900.

The year 1900 was, like 1899, remarkable for great fluctuations the prices of bark and quinine, but the year will be especially morable as being the first for many years that the value of the it in bark did not fall below 1d per lb., nor was the price of inine under 1s per oz.

The year opened with a firm tone, prices of quinine having vanced to 1s 3d per oz. from 10d per oz. in the previous Autumn, d manufacturers being busy executing the orders placed with em for United States and elsewhere. The exports of quinine, ., from Germany during January amounted to 29,900 kilos., being largest monthly total for some years past. As advices came to nd of small shipments of bark from Java, there was a strong culative demand, and prices rapidly advanced till by middle of bruary the manufacturers had raised their quotations to 1s 6d, d sales were made up to 1s 6½ in London market. This advanced ught out sellers, and prices gave way gradually, the market ving a declining tendency till April, when business was done on spot as low as 1s 2½d per oz., though manufacturers' quotations l not fall below 1s 4½d per oz. As, however, for month after nth the exports from Java continued to be under a million lbs., out the beginning of July there was a sharp recovery, and prices vanced till the middle of September, when manufacturers' quo-ion was 1s 7d, and sales on the spot were made up to 1s 7½d per But during the last four months the shipments from Java re considerably in excess of previous years, and prices again idly declined until at the end of the year the manufacturers' otation was back at 1s 3d, and the value of quinine on the spot wn to 1s 1¼d per oz.

One of the principal features of the year has been the high prices id by manufacturers for bark at the auctions both in Holland d London. The average value of the unit for the whole year mpares with that of previous years as follows, *viz.*:—

	1900.	1899.	1898.
In Holland ...	10·13 cents	7·05 cents	4·78 cents
,, London ...	2d.	1⅛d.	$\frac{15}{16}$d.

These facts speak for themselves as to the change that has taken place in the views of manufacturers during the last two or three years.

Prices of quinine, however, though sometimes forced up too high for speculators, have on the whole been moderate compared with values of bark, and form a great contrast with what took place in 1899. In that year, when the value of the unit at the March auctions in Holland reached 10·90 cents, manufacturers raised their quotations for quinine to 1s 9d per oz.; whilst last year their quotation was never above 1s 7d per oz., though 12·25 cents was the average value of unit at the sales in September.

It will be remembered that the years 1894, 1896 were those in which prices of bark were lower than ever before or since, the average value of the unit for the three years being only 3·03 cents, and hardly any of the bark sold during this period could have paid cost of production; as, however, the market improved each succeeding year, so we find the production increasing, but not at all to the same extent as consumption did. In fact it appears certain that for the last three or four years consumption has overtaken production, and we have been drawing on our stocks of bark to make up the deficiency. This can be proved in another way, *viz.*:—

	1900. Eng. lbs.	1899. Eng. lbs.	1898. Eng. lbs.
Imports of Bark into U. K. and Holland	15,770,000	16,321,000	16,800,000
Exports ,, from ,, ...	16,243,000	15,828,000	15,160,000
Difference ...	—473,000	+493,000	+1,640,000
Estimated Bark consumed by English and Dutch manufacturers	2,000,000	2,000,000	2,000,000
Estimated reduction in stocks in London and Holland ...	2,473,000	1,507,000	360,000
	ozs.	ozs.	ozs.
Quinine, equivalent to 4½ per cent.	1,776,000	1,085,000	259,000
Deduct increase in stock of Quinine in London during the year	563,000	997,000	257,000
Estimated net reduction in stocks of Bark and Quinine together in London and Hull reduced to Quinine equivalent	1,213,000	88,000	2,000
	pkgs.	pkgs.	pkgs.
Stock of Bark in London, 31st December	9,621	16,099	19,991
Estimated weight lbs.	1,490,000	2,544,000	3,072,000

It is obvious that it would be impossible to supply another such deficiency from the London stocks of bark, as it would require nearly 1,000,000 more than the entire stock. It is uncertain what stocks may be held in Holland in *second hands* (the published stocks in Amsterdam being only *first hand* bark), but they are believed to be moderate, and the only other source to meet the deficiency is the London stock of quinine.

The average quality of the Java bark appears to be deteriorating (owing to the increased quantities of succirubra and other inferior barks being shipped when prices are high).

Public sales of quinine were held in Batavia in 1900 for the first time, and the number of them originally fixed as five was subsequently altered to eight. About 9 0,000 oz. quinine have been sold, chiefly for shipment to the United States. As exports of quinine from Germany to United States show a reduction of 1,000,000 oz. as compared with those of 1899, it is probable that America has taken Java quinine instead. The quinine factory in Java has, no doubt, had a considerable influence, as it must be to the interest of manufacturers to keep up the prices of bark and depress quinine, so as to induce planters in Java to send their bark to Europe.

In conclusion, the immediate future of the market is mainly in the hands of the Java planters. Each bi-monthly telegram of shipments is awaited with the keenest interest and promptly responded to by the market here. The high values of the unit in July, August, and September last no doubt induced planters in Java to send larger supplies of bark (though the excess was mostly of inferior

quality); but. as the effect of the extra million of lbs. shipped during the last four months of the year has been to reduce the value of the unit from 12·25 cents in September to 7·25 cents at the last sales, and with the prospect of a still further decline if shipments continue heavy, it is only reasonable to suppose that planters will not be so blind to their own interests as to continue extra harvesting, but before long we may expect the exports to become normal again, in which case prices both of bark and quinine, which at present appear to be lower than the statistical position justifies, can hardly help rising, as we have seen the present production is not sufficient for consumption. It must not, however, be forgotten that bark is *not a crop*, and at any time it is possible for a planter to uproot half or the whole of his estate, and so contribute to over-supplying the market. This would temporarily unduly depress prices; but later on, if these operations had been done on a large scale, there would be a famine in supplies, with comparatively inflated prices.

DISTRICT ASSOCIATIONS.

NORTH MYSORE.

Annual General Meeting held at the Balehonur Club, 28th February, 1901. Present :—Messrs. O. Scot Skirving, *President ;* H. Edgington, C. H. Browne, H. G. Bonner, L. Thompson, A. Buchnan, A. Foster, H. Pilkington, C. P. Reed, C. Danvers, and F. J. Parton, *Honorary Secretary.*

The accounts for the year having been audited were passed.
The Honorary Secretary then read the General Report.

Annual Report, 1900.

Gentlemen,—On behalf of your Committee I have much pleasure in laying before you the Annual Report for the year now ending.

Accounts.—The income derived from subscriptions amounted to Rs. 1,161-10-3, the expenditure to Rs. 786-0-6 and there is now a total credit balance of Rs. 3,123-3-7.

Crops this year have been good, and the sample generally an improvement on the last few years; but the market reports are very gloomy, and I fear we must make up our minds to expect the very lowest prices for our coffee that we have as yet obtained.

Roads and Communications.—Your Committee regret that, during the current year, the condition of the main Mulnaad roads shows a considerable decline. The state of the Tarikeri, Hoppa, Hariarpur and Umblihulla road, with the exception of a few miles on either side of Gedahalli, is deplorable, it being full of holes and ruts, and the same remarks apply to the Sullebile, Balehonur and Aldur road, which I understand is in a worse condition than it has ever been for the last twenty years. The matter is a most serious one, for if our main roads are more or less impassable during the monsoon, it makes a considerable difference to the supply of grain. This year the prices were almost at famine rates, and the bad condition of the roads was to some extent the cause of the abnormal rates, and it is to be hoped that the Durbar will not sacrifice the good condition of the Government roads, in order to complete the big schemes at the Cauvery Falls and Mara Kanave. While on the subject of communications, my Association wishes to express its thanks to the P. W. Department of this Province and South Canara for their promptness in making the Boom Ghaut Road passable for wheeled traffic after the big landslip in August.

Agricultural Chemist.—Dr. Lehmann has paid two visits to the district during the current year, and on both occasions addressed those interested in coffee on various subjects connected with the industry. His first lecture was printed and forwarded to the members of this Association and we are all grateful to him for the trouble he has taken in giving the lectures and answering the numerous questions put to him. We hope that, in the course of a very short time, that his laboratory will be ready for analytical work.

Planters' Labour Act.—I regret to say that, since the last General Meeting, no further news of this long-desired act has come to hand, and when it will ever become law seems exceedingly problematic.

New Markets for East Indian Coffee.—A circular on this subject was sent to all the members of the Association and favourable replies received from about 9 members, representing about 35 to 40 % of the acreage of the Association. The question is on the Agenda paper to-day, and it is to be hoped that some decision will be decided to make an attempt to relieve the London Market of some of surplus East India crop, for which there is apparently now no us

Coffee-stealing.—One case of conviction for the theft of coffee been reported to the Association and a reward of Rs. 50 was paid the person responsible for bringing the thieves and receivers to just

French Tariffs on Indian Produce.—As the law now stands, enhanced duties will come into force after June next. The Impe Government has already been approached on the subject, but so no reply has been received, as to what steps are being taken protect the interest of the Indian Planters, and your Committee i opinion that the Chairman of the U. P. A. S. I. should again add the Imperial Government on the matter.

An address in a small silver cylinder was presented to H. The Maharajah on the occasion of his marriage last June by members of this Association.

The thanks of this Association are due to Mr. C. H. Godfrey representing us on the Local Board Fund.

In conclusion, your Committee beg to place its resignation in y hands and ask you to elect office-bearers for the ensuing year.

(Signed) Fred. S. Parton,
Honorary Secretary

Mr. O. S. Skirving said :—

Gentlemen,—There is only one subject with which my rema could possibly begin, *i.e.*, the death of our Queen. Yet on suc subject I feel some diffidence in saying anything. What one wo feel disposed to say has been said, and better said already in thousa of other places, and the grief which the great heart of the Empire f has already found adequate expression.

But what I will venture to say is that, in no spot throughout Mighty Empire over which Queen Victoria reigned, so long, so wis and so well, is the grief more heartfelt than in North Mysore.

Our loyalty and allegiance to his Majesty King Edward VII is n the less that we shall feel it sad and strange to frame with our "God save the *King*," and we shall revere the memory of our d Queen as that of the best sovereign of this or any age, one who r in sympathy with and for her people.

Gentlemen, I shall not go into all the subjects mentioned in report as having engaged the attention of your Committee; bu would emphasize the bad state of the roads in the Malnaad. F what I hear many are in a deplorable state from neglect and redu expenditure. I have personally experienced the state of disrepai the Koppa Tarekeri road. I trust that a representation to the Gov ment on the subject may result in something being done before monsoon renders the roads so bad that a grain famine will result cannot, I think, be the intention of Government to run the risk famine—from stoppage of grain supplies owing to bad roads—at end of the Province, that funds may be available for a water sche at the other.

The necessity for an act for the protection of wild animals i matter which this Association has for years urged on the Governm of Mysore, and the Honorary Secretary has again written to press urgency of measures being adopted without further delay if cert species of fur and feather as well as fish are to be preserved from tinction in the Province.

Gentlemen, the coffee industry appears in a desperate state w prices at present level—it is to be hoped that they have now at le touched bottom,—if not I cannot help saying that we shall alm deserve the fate that awaits us, since the scheme for the raising funds for pushing the sale of coffee in new, or only partly exploit markets has met with such half-hearted support. To those who far have been lucky enough to obtain reasonable prices for the hig grades of their coffee, I would say would it not be to your advanta Would you not be on safer ground if the London market was relie of the present glut of lower-grade coffee ?

At last annual meeting it fell to my lot to wish those of our co munity who joined "Lumsden's Horse" God-speed, and a safe retu to-day it is my pleasant duty to express our welcome to such of th as have returned from the war, having fought for the Empire t their Queen with honour to themselves and credit to the commun to which they belong.

In conclusion, Gentlemen, I thank you for the confidence reposed in me by re-electing me your President last year. It possible you may propose to do me similar honour in the cou year; so, to avoid inconvenience, I think it is only fair that I sho state now that I do not stand for re-election. I think it is undesira that one man should hold office as President for more than two ye

succession when there are others, as in this case, well fitted to fil the duties of President.

Mr. Parton asks me to state that he wishes to retire from the ecretaryship, as he has much work on hand irrespective of the ssociation. You will I know urge Mr. Parton to reconsider his cision, but I fear he also has quite made up his mind in the matter. You will I know wish Mr. Parton a hearty vote of thanks for his lendid services to the Association in the past; to me it has been deed a pleasure to work with so able and so tactful an Honorary ecretary.

Gentlemen, I now lay my resignation in your hands.

Mr. C. H. Browne proposed and Mr. Bonner seconded a hearty te of thanks to Messrs. O. Scot Skirving and F. J. Parton for their rvices as President and Honorary Secretary for the past four years, d regretted that they had expressed their determination not to offer emselves again for re-election.

The Committee was then balloted for with the following results:— Messrs. C. H. Browne, President, O. Scot Skirving, A. G. Bonner, Danvers, F. S. Parton, C. P. Reed, and H. Edgington, Honorary ecretary.

The following proposals were then submitted and carried:—

Address to H. E. The Viceroy.—That the S. M. P. A. be thanked r the trouble that has been taken in presenting the address, and at this Association do pay half share of the expenses incurred.

Queen Victoria Memorial Fund.—That the Deputy Commissioner be ked if he could not take steps to collect subscriptions for a local emorial, the feeling of the meeting being strongly in favour of a local emorial, even more than towards an Imperial one.

Closer Union of the S. & N. Mysore Planters' Associations.—That this ssociation cordially approves of the proposal, and suggests that e executive of the two Associations should meet at Chickmaglur or after the 22nd instant to discuss matters further.

Coffee-stealing in South Canara.—That the Honorary Secretary ank Mr. Sullivan for his letter, and the interest he has taken on our ehalf, and that a copy of his letter be sent to the various curing firms, express their opinion on the contents.

That the Collector of S. Canara be requested to establish Police- ations at Charmadi and Someshwara, to facilitate the supervision of ne imports of coffee into S. Canara and to check the number of bags assing through the said stations on their way to the Coast.

New Markets for Coffee.—Resolved that this Association support r. Shaw's scheme and that a sub-Committee, consisting of Messrs. rowne, Pilkington, Parton, and Edgington, be appointed to consider rther proposals for increasing the sale of East Indian coffee.

After the usual vote of thanks to the chair, the meeting broke up.

(Signed) FRED. S. PARTON,
Honorary Secretary.

INDIAN TEA ASSOCIATION.

ANNUAL GENERAL MEETING.

Mr. H. C. Begg, of Messrs. Begg, Dunlop & Co., presided t the annual general meeting of the Indian Tea Association, hich was held at 3 P.M. on Friday, the 1st instant, and was ell attended.

THE CHAIRMAN.

The Chairman, in presenting the report for the period from 1st larch to 31st December, 1900, said:—

I have now to submit to you the Committee's report for the year 900, and in accordance with custom, to make a few remarks upon me of the chief matters with which it deals. I had at one time oped that I might be able to congratulate you on the absence uring the past year of any of those disturbing factors, one of hich had caused so much anxiety in the previour year. But nfortunately the tea-industry is at the present moment face to ce with a problem more far-reaching in its character, and more ifficult in its solution than was that relating to the one pound raft allowance. Greatly to my regret the troubles which I pre- icted at our last annual meeting are already upon us. You will emember that I then said that "I cannot fail to have certain mis- ivings as to the prospects for the future, if energetic and succes- l measures are not taken to find new outlets for British-grown as. It seems to me that the day cannot be far distant when we all have to consider the advisability of reducing the production of our gardens, and to devote our attention rather to the improvement of our teas than to the extending of our cultivation. In order that that day may be postponed as long as possible, we must do our utmost to extend the sale of Indian teas in markets other than the United Kingdom." As you all know, the question of diminishing our production is now being very seriously put forward as one of the methods by which present difficulties may be overcome. It is perhaps scarcely needful for me to re-state to you what those difficulties are; for everyone here must be well acquainted with the fact that the supply of British-grown tea to the markets of the world last year exceeded the demand by many millions of pounds. An unprecedentedly low range of prices has been the inevitable consequence of the operation of the law of supply and demand in such circumstances; and the task before us is to devise ways and means by which the value of tea may once more be placed on a remunerative level. We are all agreed that is what we have to do; but I am not so sure that we are all agreed as to the best way of doing it. Shall we try to make prices rise by decreasing the supply or shall we try to do it by increasing the demand—that is the question before us: and for my part I have come to the conclusion that we ought to do something in both directions. But I think, and the General Committee think with me, that our greatest efforts should be given to the work of increasing the demand; because I doubt the possibility of any scheme to restrict production being a lasting one. It must be more or less of a temporary expedient; for to keep the combination together for a long term of years, will be most difficult, especially if prices rise, as the temptation to growers to break away will then become great I know that the task of increasing the demand, or if you like, of opening new markets, is one which requires time, and, what is more, which requires money. To obtain sufficient of the latter has always been our supreme difficulty; and we cannot but be envious of the comprehensive measures which the Ceylon planters were enabled to take nearly ten years ago to place themselves in possession of funds sufficient to do real and solid work year by year in the way of opening and developing foreign markets for their teas. The annual appeals, which we have made for voluntary subscriptions on a much lower scale than Ceylon, have not been responded to by the industry with that liberality which we were entitled to expect. And in the present year, when the need was never so great, we have regretfully to acknowledge that the funds contributed or even more scanty than before. A compilation we have recently issued of subscriptions to the American and Foreign Market Fund for season 1900-1901, goes to show that out of a total area of 514,785 acres of tea under cultivation in India, only some 250,000 acres, less than half, have contributed to the fund. Is it right or fair, gentlemen, that the burden should fall on so few, when it cannot be denied that any advantage derived from the opening out of new markets for the every-increasing output of our gardens is shared by all? I think not, and I venture to think you will uphold the view, which your Committee have consistently held, that a tea cess, similar to that in force in Ceylon, should be levied in India. We have recently made the suggestion to the Local Government; and we are now taking the opinion of the industry upon it. I can conceive of no reason why the Government should not help us, or rather, help us to help ourselves. When foreign Governments give to sugar producers a bounty out of the revenues of the State, there can surely be no valid objection to the Government of India collecting for us tea-producers a fund out of our own revenues. Any objection to such a proposal must, as it seems to me, be either sentimental or selfish; and I do not think the present position of the industry justifies our encouraging objections of either description. It is too early yet for me to say what the result of our appeal to the industry will be, but it is most gratifying to note that already the planters of Southern India have voted almost to a man for the cess. And if we on this side can for once exhibit sufficient magnanimity to forget our personal jealousies and to sink our petty difference for the sake of the common good, I think we shall yet see the case an accomplished fact.

You will understand then that your Committee see little or no hope of the demand for our teas being appreciably increased unless the cess is levied. Without it we can make but little headway in America; we can do practically nothing in Europe; and in Central Asia, and in India itself our efforts can only be on a tentative and experimental scale. Even the manufacture of green teas, which we are anxious to encourage, depends to a large extent upon the cess; for with our present limited funds, we can only offer a bounty upon a small quantity. In fact at our present rate of progress it will be

some years before the sale of Indian green teas can help the market for black teas, while in Ceylon they can annually offer a bounty on as much as two million pounds; and they have reasonable grounds for hoping that the manufacture of green teas will ere long afford some sensible measure of relief to the existing depression.

But, it will be complained, all these proposals for increasing consumption will take time to work out, while immediate relief is what is wanted. We have seen a multitude of suggestions recently put forward to achieve that end; and we learned the other day that Ceylon had decided to rest ten per cent of their acreage. Your Committee, a short time since, endeavoured to ascertain the views of Indian growers upon this proposal and upon other alternative proposals, such as finer plucking, a shorter manufacturning season, and so forth. The replies do not point very strongly to any one of the schemes being generally approved. But we have since seen the recommendations of the Joint Indian and Ceylon Committee in London; and they seem to be based upon the foundation that, if every grower is willing to reduce his outturn by a certain percentage, proportionate to the price of his teas, he may decide for himself, within certain limits, upon the method by which the reduction may be made. That seems a business-like idea, more especially when we take into account the diverse conditions of the different Indian-producing districts. But like every other scheme it will necessitate united action; and its success will depend, be it remembered, not upon your Committee, nor even this Association, but upon the loyalty and good sense of proprietors generally. For myself I heartily hope it will be successful, and that, as a result, we shall witness an upward movement in prices before very long.

I think I have said enough to show you how, in my opinion, we should face the present position. To put it briefly, my idea is for immediate relief, restriction of output, and for a permanent improvement in prices, more strenuous efforts—to be rendered possible by means of the tea cess to develop the markets of America, of Europe, of Central Asia, of Persia, of India itself, and of every other country where there is any likelihood of tea being sold in reasonably large quantities.

There are several other matters of importance referred to in the report, to which your Committee have given attention during the year. The two of greatest consequences are, I think, the British import duty, and the Assam Labour Bill. I need say but little respecting either, for the action decided upon at the public meeting, which was held last week concerning them, must still be fresh in your minds. I can add nothing to the forcible protests then made; but we are all, I am sure, especially glad to see that His Excellency the Viceroy has telegraphed to the Secretary of State asking His Majesty's Government to consider our protest regarding the duty.

We have just received information that the duty on tea is not likely to be increased. Let us hope that it is true, though I don't know that the information is correct. We had information the other day that some 20 million pounds of tea had been cleared from the customs to avoid the duty that was probably to be levied, on the Budget being placed before the House, and therefore I think some explanation is required, as there seems to have been some misunderstanding somewhere.

We can only hope that this action of His Excellency will have the effect of preventing any further enhancement, and we trust that our protests against the proposed increase in the rates of labourers' wages will receive equally favourable consideration from the head of the State.

Then there is the question of the scientific officer. At our last annual meeting, you will remember it was my pleasant duty to welcome Mr. Mann, who had arrived from England a few days previously. During the ten months he has been in India, Mr. Mann's energy and activity have been great. He has toured twice through Assam, besides making a preliminary tour in Cachar, Sylhet, Chittagong, the Dooars, the Terai, and Darjeeling, and publishing several valuable contributions to our knowledge of the insect enemies of tea. In Darjeeling he was accompanied by Dr. Watt, who was making investigations prior to the re-publication of his book on the pests and blights of the tea-plant. Mr. Mann returned to Calcutta from the Brahmaputra Valley in January, with the intention of devoting some time to a series of soil analyses. When these scientific operations are completed, I have no doubt we shall be placed in possession of further valuable information as regards an important branch of tea-cultivation, in which our knowledge hitherto cannot be said to have been extensive.

At the annual meeting of the Bengal Chamber of Commerce Tuesday last, at which I have no doubt many of you were prese the President concluded his address by referring in eulogis terms to the manner in which the Secretary, Assistant Secreta and general staff of the Chamber had carried out the arduo duties imposed upon them during the year. I should like to st here that the duties which the work of this Association have imp ed upon the same staff, and more particularly upon the Assista Secretary who had the control of the details of our business, we of an equally arduous nature, and they have been performed to t entire satisfaction of your Committee.

At the conclusion of his address, the Chairman invited the me bers present to express their views.

MR. R. R. TOYNBEE.

Mr. R. R. Toynbee said: Before coming to this meeting I w asked by the managing proprietor to request your support to th proposed export cess. Your Chairman has gone into the questi very fully, and I don't think I have very much more to add to wh he has said, except to point out that in no business in the world success achieved without advertisement, and advertisement mea money; but we have not got it.

MR. MANN.

Mr. Mann said: I hardly expected at such an early stage of t meeting to have had anything to say, but I was asked by Mr. Be yesterday to say something about the tours I have usually to mak in the tea districts and the observations I have made during tho tours. Well, I returned on the 22nd January after a very lon tour in the Brahmaputra Valley. I think I have visited almo every district, if not every district, in Assam, and there is nothi which struck me more during the whole of that tour than t fact that during the past five years there has been great addition extensions of tea area without any effort being made to keep u the production of the area already obtained. In fact from o or two gardens I have figures which seem to show that, althou the area has been doubled, the production of tea was precise the same as it originally was. In one garden in Newgong t area was exactly doubled, and the production of tea was exact the same as before the additional area was taken up. Of course certain proportion of that decrease would certainly be due final plucking, but one cannot think that the whole of th decrease in production per acre could by any means be explain by any method of final plucking. Therefore it seems to me th what we need at present is to concentrate our attention on the ar which is already under tea. To say the least, it would be recognise as bad agriculture to go on extending the area year by year wit out attempting to keep up the production of the area which already obtained. At the present moment it does not seem to the idea of your Committee of the tea industry to increase t production at all. We should devote our attention to improvi the quality, or rather to keeping up the quality, of the tea alread obtained. There seems to me no doubt that during the past te years the full quality of the tea of a very large number of garde has deteriorated, and this is more especially the case in those di tricts which have a larger area, as, for instance, Debroo, Doo Dooma, and Sibsagar. There are a very large number of garde where, in spite of free final plucking, the quality has undoubted deteriorated, and I am at present devoting more attention to th point than to any other. I am trying to find out what circumstanc are present in those gardens which are famed,—which have bee famed in the past for the high quality of their tea. This improvi the quality or keeping up the quality may be dealt with in two three ways. One way is final plucking. Here I should like to mak a difference which has been made in the past between fine pluckin and coarse plucking. Fine plucking will not, I think, improve th quality of the tea to any great extent. On the other hand, coar plucking, as practised in Doom Dooma, will improve the qualit but at the same time it will improve the quality, at the expense the tea bush. Therefore one will have to balance the advantage t be gained by enhancing quality with the injury done to the te bush. Another way to deal with the subject is to ascertain wh manure is likely to improve the quality of the tea. In connectio with other industries and in other countries, this has been carrie out with great success, especially in America and Germany, and in th way quality has been improved to a very appreciable extent. I thin by this means we may improve the quality of the tea. At any rat at the present time I am working very closely on this line, and co

ring not so much the question of increasing the quantity of tea luced per bush per acre, but rather the improving of the quality ie tea from the same garden. With regard to the other question, o the best appliances in the manufacture of tea, I hope to deal that later on, but improving the quality by fine plucking, by hods of pruning and methods of manuring, seem to be the most ortant question at present.

HON'BLE MR. BUCKINGHAM.

he Hon'ble Mr. Buckingham said that he was very glad to hear other day that they intended to hold this meeting earlier this than they did last year, and it was a great pleasure to him to present. He had no doubt that they would expect him to say a words about the amendment of Act I, but time would hardly w of his going through the Act from beginning to end. They e aware that the chief amendment to the Act was aimed at ping abuses in the recruiting districts, and he hoped this ect would be attained. As far as the labour districts were con- ned, certain amendments were made which would affect them ally with the coolies, though it perhaps gave the latter the antage. He thought the Association owed a great deal to untiring zeal and energy displayed by the. Hon. Mr. eigh, and also to the member in charge of the Bill, the n. Sir C. Rivaz. They had more than 15 sittings. There was one nt which he desired to mention, and that was with regard to ing an Assistant Superintendent of Emigration. He thought y would all agree with him that they should get a good man, one getting anything like Rs.100 a month. He saw that in har it was proposed that there should be subscriptions of one ee towards the pay of the Assistant Superintendent of Emigra- . He thought this was a matter which this Association should e up. It was not very much, but it would enable them to have very best man available. He did not think they would have y much difficulty in getting the Government to agree to their inating some one to be approved by the Government of Bengal. agreement with the coolie should, in the first place, be a written and in the second place, there should be a substantial advance, in the next place, the period of limitation should be in plain ds three or four years. He thought this was only fair and est in dealing with the coolie. The last year he was down they sidered the cost of sending specie to Assam which was nearly ble what it cost up the Irrawady to Mandalay though the ance was shorter. He referred this matter to their Committee, referred it to Messrs. Kilburn & Co., who very willingly re- ed the cost. Since then he had seen the steamer companies decided to reduce it lower by cargo steamers. It was originally annas, but it was now reduced to $9\frac{1}{4}$ annas per cent. This was very much, but still in the long run it would come to a good l. In dealing with the question of reducing the output of tea, did not see how this could possibly be done. Some gardens ght have had a bad season last year, and hope for a good season year to make it up. In the same way gardens that had an eptionally good season last year might not be as fortunate this son. It seemed to him, therefore, unfair that 10 per cent. of the put should be cut. They talked about reducing their output and y could not get rid of their surplus tea. A great deal had been tten and said about getting the natives of India to use their tea. idea was that gardens should send their lower grades of tea, and t a Committee should be formed here with a Secretary, whether ointed here or got out from England did not very much matter. is Committee should be supported systematically. A company uld be made. He did not see any difficulty in getting the essary funds. He thought the gardens should send tea to the mmittee who should be careful to realise only very small sums. y should certainly want some money to start with, and after- ds send down tea straight to the Secretary. They should lise sufficient sums to keep the concern going. There was a posal that they should ask Government to help them by allowing post offices to sell the tea, but he thought it was more than y could expect. It was utterly impossible to do it, but a great l could, he thought, be done through what were called extra partmental post offices. There were at present 13,431 post ces in India, and there were 7,672 extra departmental post ces, which might help them a good deal, as they were kept ng by people who were allowed to sell things. He only put forward as they might at some near date be able to take the tter in hand. He desired to say, in conculsion, that the Assam sociation owed a great deal to the Chairman and Secretary of this Association in Culcutta, and he wished to record his thanks to this Association.

SIR PATRICK PLAYFAIR.

Sir Patrick Playfair said: He did not feel certain in his mind that to attempt to reduce production by resting 10 per cent. of the area in full bearing would have either practical results or be a measure of economy. In the first place, the less profitable areas would be those to be temporarily abandoned by growers; efforts would at the same time be made to improve production from the cultivated area to reduce the cost of the crop. And the measures that will be adopted to raise the quality of the crop would further tend to maintain quantity. By concentrating labour on the reduced area this can be probably brought about. As an illustration he called their attention to the report of the labour immigration for 1899 where the Deputy Commissioner of Darrang reports "that although some of the more favourably situated gardens are well stocked with labour, in others leaf had to be left on the bushes last year for want of hands to pluck it." They would recollect that the measures taken to curtail production of gunny bags by stopping factories one or two days in the week did not really arrest output for manufacturers having the inclination and the time to repair and replenish their machinery, and so make good the days the mills were silent, the operatives being equally interested through income in production. It might also be feared that under this system a forced supply of fine grade teas may cause the market to be overstocked, and might affect consumption among the masses. His feelings coincided with the views expressed by a writer in *The Financial Times* at the end of January, who said: "What is wanted is for growers to produce better qualities. Let Cachar, Sylhet, Dooars, and Ceylon go back to produce their former standard of teas and the position will be soon alleviated." He reminded them that when the dark clouds of 1882-84 hung over the tea industry to the apparent ruin of a great many growers did not enter into a combination to curtail crops, but they sought the developement of new markets and made efforts to raise the standard of the quality of the crop. Distributors, such as Lipton, Mazawatee, Cleary, and others, arose and not only by their own efforts promoted consumption, but also imparted greater activity into the old distributor or middleman. He recollected Mr. Goschen once observed that there was no use of having tons of raisins at the docks and old ladies in the Provinces willing to make plumpudding unless there were an organised system for distributing the raisins. It seemed to him that this illustration fits the case in India, and that they probably have a large market at their doors were it properly exploited. He believed it would be less wasteful and probably more profitable to distribute a percentage of the crop in India practically free of cost rather than wantonly destroy it, as a speaker suggested at the London meeting, or leave it on the bushes. If two syndicates could be formed, the one to distribute the produce of the Province of Assam throughout Bengal, Orissa, Central Provinces, the North-West Provinces, and the Punjab, while another syndicate arranged to distribute the produce of Ceylon and Travancore throughout Madras. Bombay, and Baluchistan, he thought it would be a good division of labour. If special rates of inland steamer and railway freights, and of warehouse charges in Calcutta, could be obtained for this tea, and if a cheap envelope were found in a close woven gunny bag, a well-worked system might deliver supplies to the markets throughout the country by the medium of the Bazaar. *moodi*. It would be a great undertaking, and he believed it could be accomplished if a Committee of nine earnest men were to give it their close and constant attention. If growers contributed the tea free of cost, it would perhaps be possible to obtain from the *moodi* a price to cover administration expenses, but he did not think any more. Were the tea to be distributed without charge, it might be looked upon with suspicion. A necessary precedent to this scheme would be to ascertain whether the people would be likely to drink tea, for it must be remembered that only a few people in and about the Presidency towns have ever tasted tea, and understood how it is to be prepared. The very preparation will cost the consumer something in fuel and utensils, and that alone may be a consideration to the poorest people which class they wish to serve. Were growers to agree to give 3 per cent. of the coming crop for free distribution it would help the industry, and such donation would not be likely to encourage coarse plucking, because growers have seen that quality must be the very first consideration and on this account a finer system of plucking will be generally adopted. Contributions for working capital would be required in addition to

the funds at the disposal of this Association. The crop of 1900 was undoubtedly bad in quality, perhaps from climatic influences as well as from free croppings. He would have liked to have heard Mr. Mann's views on this subject. He would hope that the favorable cold weather that has been experienced in many districts, if followed by seasonable rains, will produce a quality of leaf of superior merit this year. He often found this to be the case, and he looked forward to 1901 being what might be termed a better "vintage year," the sap having been well driven down and the soil have been sweetened by drying.

He was afraid he was one of those who do not consider it a sound policy to invite Government to impose taxation. Most people are averse to taxation, and to quote Burke's famous saying: "It is as difficult to tax and to please as it is to love and be wise." Differences of opinion would no doubt arise as to the method and field for distribution. They might wish ineffectually to have the tax removed and might find taxation suggested by the executive for other purposes. If it be in the interests of many to combine and join in a scheme for advertising or distributing their wares, as a previous speaker said it was, it will no doubt be carried out voluntarily without holding the abstention or want of support of a small minority, sinking their jealousies as the Chairman said they should, and if they benefited themselves, others may eventually join them.

MR. TOPPING.

Mr. Topping said: Mr. Chairman and Gentlemen,—I would like to make a few remarks in regard to the curtailment of output question. It is quite evident that something must be done whether by the elements themselves or by ourselves, that is the question to reduce the output this season. If we could rely upon the elements doing the needful in the matter, there would, of course, be no further need for us to discuss the question, but as we cannot do that we have to face the position as it now presents itself to us and try to devise some means of putting our house in order, or rather I should say of combatting the resultant evils of an over-stocked market of inferior, but at the same time very cheap tea – cheap I mean to the consumer, but a dead loss to the producer. I know, Sir, that several schemes must have been put before you within the the last few weeks, some of which at least if put into practice and carried out loyally right throughout the season would have the desired effect of relieving the market at home considerably this year, and although at this meeting it may not be possible to discuss any of the schemes that have been suggested, still I would venture to suggest that the scheme put forward by the Surma Valley sub-Committee, of which I have the honour to be Chairman, might be mentioned at this meeting. I don't mean you to infer, Sir, from my expressed desire that the views of the Surma Valley sub-Committee should be ventilated at this meeting, that the members of that Committee imagine themselves to be superior in intellect to their neighbours; but what I will say is that some outside the Committee having read our proposed scheme consider it to be one of the most practical put forward, and on that account, Sir, I would like all the members of this Association assembled here to know about it, and I would suggest that, in order to gauge the feelings of members in regard to the carrying out of any such scheme, a show of hands be taken for and against the adoption of the proposed scheme. Seeing that the next mail from London will bring us the result of the deliberations of the Association there as to the scheme which should be carried out, we cannot of course bind ourselves to any particular scheme now, still I do not think any harm can be done by our doing what I have suggested in regard to the Surma Valley sub-Committee's proposed scheme. Before I sit down, Sir, there is one other remark I would like to make in connection with this matter. I know it is the opinion of some that it is unreasonable to expect producers, who have been getting paying prices for their teas this last year, to agree to do anything to curtail their output this season, which means of course that if this is to be the policy for the conduct of our affairs at this critical stage of the industry, the weakest will go to the wall. This is no doubt a sound enough argument for such fortunate producers to put forward, but, Sir, I would respectfully beg to point out to such gentlemen that, in my humble opinion, it will be to their advantage, I think, to support their weaker brethren at this time, otherwise the places of the weak are almost certain to be taken by others who may in the end outdo the strength of those who are strong at present. We have worked in a body against the proposed increase of coolie wages and against any enhancement of duty, which combined effort is for our common benefit, so I think while the industry is on the verge of a serious crisis, it behoves everyone connected with the indust do his little all to save it from a crash that will bring serious l not ruin, to hundreds of our fellow-countrymen.

Mr. Ashton said that Sir Patrick Playfair had opposed the pr ed tax on tea. He understood Sir Patrick Playfair's reasons were it was an unusual kind of tax, which was perfectly true, and t the tax were imposed the Government might divert the rev afterwards to its own purposes. He did not see how Govern having raised the tax at the request of the trade, and having a to hand over the tax to the Executive Committee, could afterw take it for the general revenues of the country. They had for been trying to get an increase of the voluntary contribution, an proposition was brought forward as an alternative, as it was in sible to get the Government to levy this tax unless they were tically unanimous; he thought he was justified in asking Sir Pa Playfair to see if he could not withdraw his opposition.

The Chairman, before putting the motion to the meeting, said Mr. Buckingham had placed at their disposal a number of pa which contained very valuable information to which he dire their attention.

The motion was then put and carried unanimously. The C man moved, and Mr. R. H. A. Gresson seconded, the first resolu which ran as follows:—"That the proceedings of the General C mittee during the past year be confirmed, the report adopted the accounts, as audited, be passed as correct." It was ca unanimously.

The Chairman moved, and Mr. Norman McLeod seconded next resolution:—"That the rate of subscription for the cur year from each garden belonging to the Association be fixed at anna per acre under tea cultivation." Carried unanimously.

The Chairman moved, and Mr. R. Magor seconded, that following firms be requested to nominate a representative to s on the Darjeeling and Dooars sub-Committee during the cur year:—Messrs. W. S. Cresswell & Co., Davenport & Co., Du Brothers & Co., Finlay, Muir & Co., Jardine Skinner & Co Mackillican & Co., McLood & Co., and Octavius Steel & Co.

The motion was carried unanimously.

Mr. H. S. Ashton moved and Mr. R. R. Toynbee seconde "That the thanks of the Assam Association be conveyed to members of the Cachar and Sylhet Branches, and to the mem and Honorary Secretaries of Local District Committees, for t co-operation in promoting the objects of the Association, w was also carried unanimously."

The Chairman reported the result of the election for the Ge Committee of the Association for the year 1901, held under 5 of the Rules of the Association, as follows: Messrs. Begg Dunl Co., Williamson Magor & Co, Jardine Skinner & Co., Octa Steel & Co., Duncan Brothers, Shaw Wallace & Co., Bal Lawrie & Co., Finlay Muir & Co., and Kilburn & Co.

MR. TOPPING'S SCHEME.

The following is Mr. Topping's scheme for the curtailmen output:—

"That the average outturn of gardens for the last two years, 1899-1900, less 10 per cent. from the basis of this season's crop, is to say, the quantity of tea to be made by any one garden, the exception hereafter mentioned, must not exceed the ave outturn for 1899.

"The gardens have the choice of curtailing their output by ducing their crop figures or abandoning an area sufficien ensure the necessary reduction in the outturn.

"The above to apply to full-bearing gardens, and as regards native gardens the Committee would propose that 10 per cent deducted from the estimated crop figures for this season.

Some exception, the Committee consider, must in all fairnes made in the case of gardens whose teas have been realising prices, and they would propose that a reduction of outturn in cases be made on a sliding scale as follows:—

"10 per cent. in respect of gardens whose teas have fetched du the year 1900, an average of 7d per lb. and under in London or equivalent of that price here.

"8 per cent. ditto ditto. An average from 7d to 9d in Lon or the equivalent here.

"5 per cent. ditto ditto. An average from 9d to 11d in Londo the equivalent here.

"And that gardens whose teas have fetched 11d per lb. in Lon or its equivalent here should be exempted."

SHEVAROY.

Proceedings of the Quarterly General Meeting of the evaroy Planters' Association held in the Victoria Rooms, 1 P.M., on Monday, the 4th March, 1901. PRESENT :—essrs. Windle, C. Rahm, W. Rahm, E. Dickins, W. J. chler, J. C. Large, S. M. Hight, C. G. Lechler, R. A. lby, H. Dickins, and R. Gompertz, *Honorary Secretary*.

. Read and passed accounts up to the 28th February, 1901, owing a balance in hand, on that date, of Rs. 523-7-2.

2. Read correspondence with the Collector of Salem regarding ule-breeding.

Resolved that Honorary Secretary be requested to inform the llector that several of the planters are willing to keep country ny mares if Government will supply the Association with a good ck stallion and consent to purchase the foals produced when they e six months old at Rs. 50 each for a term of three or four years.

3. Read letter from E. C. Duff & Co. stating that the coffee sent wn from the Shevaroys for Lumsden's Horse had not yet been sold d would only fetch Rs. 5 or 6 per bushel.

Resolved that the coffee be sold for what it will fetch and the proeds returned to the Honorary Secretary, S. P. A.

4. Read letter from Mr. C. G. Lechler complaining that letters nt to the cutcherry were invariably returned when the Tahsildar as on circuit.

Resolved that, owing to the continual refusal at the cutcherry of tters addressed to the Deputy Tahsildar, while absent on circuit, e District Magistrate be requested kindly to have a locked letter-box fixed to some prominent part of the cutcherry for deposit of such tters, as it would be a great convenience to planters sending mmunications from a distance.

5. Read letter from the Collector saying that H. E. the Governor ould prefer a deputation of the planters to wait on him to receiving formal address.

Resolved that the following gentlemen compose the said deputaon : Messrs. W. J. Lechler, J. C. Large, F. Short, and R. Gompertz.

The following papers were read and recorded :—

10/01. Circular from Secretary, U. P. A. S. I., Madras. Forwarding opy of letter from the Chairman *re* the "*Indian Tea Cess.*"

11/01. Circular from Secretary, U. P. A. S. I., Madras. Chairman ks Government for expert advice *re* whether harbours can be kept pen in south-west monsoon and solicits support of Bombay, Madras, d West Coast Chambers of Commerce.

12/01. Circular from Secretary, U. P. A. S. I., Madras. Forwarding opy of S. P. A.'s resolution about compulsory coffee cess. Other ssociations have not expressed their opinions about it.

13/01. Circular from Secretary, U. P. A. S. I., Madras. Planting ember and Central Travancore Planters' Association resolve to pport Wynaad in endeavouring to remove duty on Tea in Ceylon—eylon Planters also wish it removed.

14/01. Circular from the Secretary, U. P. A. S. I., Madras. Central ravancore is in favour (almost unanimously) of a compulsory cess.

15/01. Circular from Secretary, U. P. A. S. I., Madras. Forwarding inions of various Associations about Mr. Shaw's proposal *re* r. Langdale's proposed tea and coffee shop in Paris.

16/01. Circular from Secretary, U. P. A. S. I., Madras. Forwarding plies from gentlemen invited to serve on Committee for taking eps to put down adulteration of coffee.

The following papers were laid on the table :—

Planting Opinion, dated February 9th, 16th, 23rd, and March d, 1901.

Brazilian Review, dated December 25th and January 1st, 8th, and th, 1901.

Proceedings of the Wynaad Planters' Association, dated 6th Febary, 1901.

Proceedings of the Indian Tea Association, dated January 22nd d 30th and February 16th, 12th, and 18th, 1901.

Vol. II, Bulletin No. 43 (sugarcane in the Godavari and Ganjam istricts).

YERCAUD, *h March*, 1901.

(Signed) ROBT. GOMPERTZ,
Honorary Secretary, S. P. A.

WYNAAD.

Proceedings of a General Meeting held at Meppadi Club, on Wednesday, 6th March, 1901. PRESENT :—Messrs. Abott, Behr, deFonblanque, Hockin, Lance, Mackinlay, D. Mackenzie, Nicolls, Parry, S. H. Powell, Junior, Taylor, Trollope, and G. Romilly, *Honorary Secretary*.

Mr. M. D. Taylor in the Chair.

1. Proceedings of last meeting were taken as read.

Several members present complained that they had not received copies of the proceedings.

2. **Import duty on Tea in Ceylon.**—Read letter from the Chairman, Madras Chamber of Commerce. The Honorary Secretary was instructed to ask the Chairman of the U. P. A. S. I. to take combined action with the Madras Chamber of Commerce in the matter.

3. **Crisis in the Tea industry.**—(*a*) Read letter from the Honorary Secretary, Central Travancore P. A., suggesting (1) that the district be asked to pluck only two leaves and a bud ; (2) that the district exploit India with not less than 10% of the lower grades of tea, or as an alternative sell the same in Colombo for the Russian trade.

Resolved (1) that this Association considers it unnecessary to give advice to individual planters in this matter ; (2) that it is in favour of the suggestion to exploit India with a proportion of lower grade teas and the Honorary Secretary be instructed to address the Central Travancore Association with a view of drawing up a scheme whereby this object might be effected, especially with regard to the funds for carrying it out, and the method of distribution.

(*b*) Read circular from the Indian and Ceylon Tea Associations in London recommending a reduction of output. This Association has already recorded its opinion that the scheme is not practicable.

(*c*) Read proceedings of the Indian Tea Association, 12th February, with a return attached showing the subscriptions to the voluntary tea cess only 250,000 acres out of 514,000 being subscribers.

4. **Differential duties and the French Tariff.**—Read letter from the Honorary Secretary to the Chairman, U. P. A. S. I., asking him to again address the Government of India on the subject, as the respite from the increased taxation is only till the 30th June.

5. **Harbour on the West Coast.**—Read correspondence between the Chairman, U. P. A. S. I., and the Chief Secretary to Government, Public Works Department. Recorded.

6. **Pepper Thefts.**—Read letter from Mr. H.B. Winterbotham. Numerous cases of undetected thefts of pepper were reported. Resolved that the Honorary Secretary address the Collector of Malabar, calling his attention to the great increase in pepper robbery during recent years, and to the comparative helplessness of the Police in dealing with such cases, owing to the absence of special legislation for its protection, as in the case of coffee.

7. **Absence of the Deputy Collector.**—Attention was called to the continued absence of the Deputy Collector on duty in the low country. The Honorary Secretary was instructed to address the Collector of Malabar on the subject and ascertain if anyone was to be appointed to do his work.

8. **Coffee-shop in Paris.**—Read Circular No. 15, dated 18th February. The Honorary Secretary was instructed to point out that this circular recorded opinion expressed as long ago as November and December and that apparently neither Mysore nor Coorg, (the Association most largely interested in coffee) had expressed any opinion on the subject. This Association recorded its desire to support the scheme by donations, in January last, and at the same time asked for information as to what action these two Associations were taking in the matter.

9. **Proposed Coffee Cess.**—Read Circular No. 12. The Honorary Secretary was instructed to point out to the Secretary, U. P. A. S. I., that this Association had already declined to join in levying this cess.

10. **Adulteration of Coffee.**—Read Circular No. 16, giving the answers from gentlemen in London who had been asked to serve on the special Committee. Recorded.

11. **Poodoopady Rest-house.**—Read letter from C. Shangaren. Resolved that C. Shangaren be paid Rs. 50 towards thatching the buildings. Mr. Hockin kindly undertook to see that the work was properly done.

12. The following papers were laid on the table—

Report on cases of coffee-stealing quarter ending 31st December, 1900.

Notice of postponement of sale of occupancy right of Survey No. 692, at Sultan's Battery.

Agricultural Ledger No. 19, on dairy farming.

Do. do. ,, 20, on implements for tillage.

I. T. A. Circulars.—Trade between India and Thibet *viâ* Leh.

,, No. 12, on the work done at the Paris Exhibition.

,, No. 13, outturn of 1900 season.

,, Monthly statistics.

,, Proceedings, 12th February, 1901.

,, Notice of appointment of Mr. de Niceville as State Entomologist.

,, Alleged adulteration of Indian and Ceylon Teas.

Proceedings of Shevaroy Planters' Association.

A vote of thanks to the Chairman terminated the proceedings.

(Signed) M. D. TAYLOR,
Chairman.
(,,) GEORGE ROMILLY,
Honorary Secretary.

IF SMITH HAD EXPLAINED.

My wife says, and she says it with a snap, that never, *never* again will the Smiths get an invitation to eat at our house. And when she once makes up her mind to anything, she sticks to it like shoemaker's wax to a bit of woollen cloth.

You see the Smith's, man and wife, were old and intimate friends of ours. We lived within a stone's throw of each other for many years, and were as thick as treacle. As to our worldly estate. we were about on a level, in very moderate circumstances.

Between two and three years ago Smith's employers sent him to America on some business errand; he would not tell us what. A fortnight since he turned up at home and gave out that he had made a trifle of money for himself while he was away.

Last Tuesday we had them to dinner; the best dinner my wife could get up. And it was a good one, if I do say it myself. Yet, socially, it was a failure. In the old times Smith had the appetite of a cab-horse. Now he picked and winced over the very dishes that used to be his favourites. As my wife pressed him to taste this or that, he thanked her politely, but he didn't eat. Mrs. Smith apologised for her husband, and said he had been ailing somewhat since his return from America. So the dinner ended in disappointment, and the Smiths went home early.

"Poor Smith is ill," said I. "No" said my wife, "he isn't ill. He's proud. He thinks his old friends aren't good enough for him; that's where it is. He's rich, and we are poor, and——" The worried woman here broke down and cried, and I went out for a consolation smoke.

And yet bless your soul!—wait a moment, however. If Smith had been perfectly frank and said, "I am not the man I was. I lived high in America, and I'm all gone to pieces with inflammatory dyspepsia, and this splendid dinner will half kill me if I eat it." If he had said that we should have pulled through without a break. Why didn't he say it?

Here is a lady who does not hesitate to tell us her experience with that wretched ailment. Miss M. J. Barton is her name, and her home, 56, Sorby Street, Sheffield. In a written statement, dated September 19th, 1900. of which the following is the sum and substance, she says that it is now rather more than two years since her health began to fail. At first, she thought it was only some trivial ailment that would soon pass away, for beyond loss of appetite and a feeling of languor and weariness, there did not seem to be much the matter with her.

So she struggled on with her work as do countless thousands of brave women every day, hoping to be right again in a short time.

But alas! her hope was short lived, for indigestion, that demon health-destroyer, had got her in its iron grasp and would not set her free. Instead of getting better, she became worse.

Her tongue was now always foul and nasty, and after taking food —no matter how little—she experienced such a sense of fulness and tightness in the chest that she could scarcely breathe. "It seemed, she says, "as if some heavy weight was resting on my chest and pressing in my ribs." Indeed her chest became so sore and painful that she could scarcely bear anything to touch it, and was al afraid to walk about, the slightest jolting hurt her so.

This feeling of weight and oppression in the chest is one o most distressing and common symptoms of Indigestion. Lik red flag of the railway signalman it counsels caution and war danger ahead. What untold pain and misery might be avoid only we heeded these danger signals of nature, but there, wi the good of moralising. We *don't* take warning, therefore s in consequence. Miss Barton did for she goes on to say:—

"At times, I suffered intensely from wind spasms, and was stantly vomiting sour water. Sleep no longer refreshed me, f only came in snatches and was disturbed by horrible dreams. prived of proper rest at nights, and afraid to eat much becau the fearful pains that were sure to follow, small wonder I go weak and thin, that at last I was forced to give in and take to bed, where I stayed for six weeks. During that time I vomit quantity of blood.

"The doctor said I was suffering from Indigestion and an u ated stomach. His medicine enabled me to get down stairs a but did not cure me, for I still suffered great pain after eating, was always tired and weary.

"In this condition I remained for several months, despairin ever being well again, but providentially I was led to try Sei Syrup, and to that medicine alone is due my present good he Now I can eat heartily and enjoy my meals without fear of p and feel brighter and better in every way than I have done for two years."

Why Mr. Smith didn't mention his illness at our dinner, I d know. He admitted it afterwards to me. Still my wife hasn't given him. "Happy," says Homer, "are those who died under high walls of Troy." Happier yet, say I, are those who live can eat what is set before them.

MARKET REPORT.

COFFEE.

The London Commercial Record of 22nd ultimo says:—Supp at auction have been rather larger this week, but are still moderate for the time of year. East India continues very du sale, and the small quantity catalogued was only partly dispose at easier rates, and there is no probability of improvement in demand till finer quality is to hand, and recent advices from I favor this hope. High prices continue to be paid for the colory sizes of Costa Rica, but for the second sizes there frequently a difference of 20s to 30s per cwt. For Guatemala other Central American descriptions there has been a fair dem at about previous prices. There have been some fluctuation the market for "futures;" the general tendency has bee higher rates, and the closing prices show an advance of 1s per for the week; yesterday business was done in March delivery 31s 9d, May at 32s 3d to 32s 6d, July at 32s 9d, Septe at 32s 9d to 33s, and December at 33s 4½d to 33s 6d.

East India sold to-day somewhat cheaper at the auctions to- whilst other descriptions were unchanged. Catalogues embr 2,254 bags East India, 238 bags Costa Rica, 27 bags Colom 380 bags Guatemala, 515 bags Salvador, and 601 bags unwa Dumont. We quote:—

London ...	... Santos ...	March delivery	...	32s 0d
New York	... No. 7 Rio...	,,	...	6·00 c
Hamburg...	... Santos ...	,,	...	32½ pf.
Havre ...	... Santos ...	,,	...	39½ fr

Imports, Deliveries and Stock of Coffee in London, are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	
Tons ..	13,137	11,948	3,643	
	Home Consumption.		Export.	
	1901.	1900.	1901.	
Tons ...	3,266	2,920	2,217	

The preceding figures exhibit—

In the Imports a decrease this year of ... ..

Home Consumption a decrease of ... ..

Export a decrease of ... ...

Stock an increase of ... ...

uctions this week have passed off as under:—
AST INDIA.—Of 217 bags offered 150 bags sold—*Coorg*, smalls 43s
43 6d, low middling to middling 48s 6d to 53s 6d, bold 60s to
6d, peaberry 60s to 74s.
MOCHA.—100 packages withdrawn.
OST RICA.—3,262 bags offered and 2,200 bags sold, smalls 36s to
6d, low middling 44s to 50s, middling 51s to 57s 6d, good to
middling 59s to 69s, bold 65s to 76s, good to fine bold 82s 6d to
6d, peaberry 48s to 91s 6d.
UATEMALA.—Of 2,350 bags offered 1,280 bags sold, smalls 35s to
good ordinary 40s 6d, low middling 43s 6d, middling 51s to 53s
good middling 55s to 55s 6d, bold 64s to 77s, peaberry 50s to
6d.
EXICAN.—213 bags partly sold, low middling 46s to 46s 6d.
ALVADOR.—471 bags partly sold, smalls 38s to 41s 6d, middling
, bold 57s to 62s, peaberry 52s 6d to 63s.
OLOMBIAN.—105 bags sold, smalls 33s, bold grayish 57s;
naged, middling to bold yellowish 43s to 50s, peaberry 51s.
ERUVIAN.—112 bags sold, smalls 41s 6d, middling 50s, pea-
ry 50s.
RAZIL.—500 bags Rio and 261 bags Santos, quay terms, were
ght in.

Receipts in Rio and Santos.

	1900-1.	1899-1900.	1898-99.	1897-98.
nce July 1	Bags.	Bags.	Bags.	Bags.
Rio ...	2,002,000	2,580,000	2,293,000	3,256,000
Santos ...	6,261,000	5,107,000	4,486,000	5,106,000
Total...	8,263,000	7,687,000	6,779,000	8,362,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange $10\frac{15}{16}$d, previous day —d.
HAVRE, *Feb.* 21.—Good average Santos February opened barely
ady at $39\frac{1}{4}$f. and closed steady at $39\frac{1}{4}$f., March opened at $39\frac{1}{4}$f. and
sed at $39\frac{1}{4}$f., May opened at $39\frac{1}{2}$pf. and closed at $39\frac{1}{2}$f., September
ened at $40\frac{1}{4}$f. and closed at $40\frac{1}{4}$f., December opened at $40\frac{3}{4}$f. and
sed at $40\frac{3}{4}$f.
HAMBURG, *Feb.* 21.—Good average Santos February opened quiet
$31\frac{1}{2}$pf., and closed steady at $31\frac{3}{4}$pf., March opened at $31\frac{3}{4}$pf., and
sed at 32pf., May opened at $32\frac{1}{4}$pf., and closed at $32\frac{1}{2}$pf., Septem-
opened at $33\frac{1}{4}$pf., and closed at $33\frac{1}{4}$pf., December opened at
pf., and closed at $33\frac{3}{4}$pf.
NEW YORK, *Feb.* 12.—Closing prices of No. 7 Rio were as follow:—

	Feb.	Mar.	April.	May.	June.
bruary 21...	6·10	6·10	6·10	6·10	6·10
bruary 20...	6·00	6·00	6·00	6·05	6·05

East India offered in Public sale since 15th Instant.

Mark.	District.	Size.		P. B.	
St. Edmunds	Coorg	33	Not sold	17	70/6
Cota Kadoo	..	18	68/6	7	74/–

TEA.

INDIAN.—Public sales were on a considerably reduced scale, *viz*:—
,000 packages compared with 54,000 packages in the week before,
d 48,600 packages at the corresponding period of 1900.
Partly owing to the smaller quantity brought forward there was
better tone accompanied by more general buying. Prices, how-
er, did not show much change except in the case of a few of the
ent arrivals where quality was attractive, quotations for which
rked a rise. Reckoning what is advertised for Monday next
3,000 packages have been printed during the month, against
3,000 packages last year, making 1,278,000 packages of the 1900
p which will have passed the hammer, *versus* 1,314,000 packages
the end of February twelve months since.
For 22,600 packages on estate account $6\frac{3}{4}$d. per lb. was obtained
sus $8\frac{1}{4}$d per lb. for 40,500 packages and $9\frac{1}{2}$d per lb. for 32,100
ckages in the two former seasons.
CEYLON.—On account of a dense fog prevailing on Tuesday the
ctions were postponed until the following day, when 19,600
ckages were offered. On the 12th instant 30,100 packages were
mitted and 22,000 packages at this time in the foregoing year.
There was an improved enquiry for nearly descriptions above
mmon parcels with "point" receiving good attention. Pekoes
d Pekoe Souchongs under 5d per lb. were about steady, but
voury kinds above that figure were in request and often dearer.
r the most desirable Broken Pekoes and choicest lots competi-
n was keen and as a rule an advance recorded.

The average is $6\frac{3}{8}$d per lb. in contradistinction to barely 6d per lb. on the 14th instant, and $7\frac{3}{4}$d per lb. in 1900.

JAVA.—Rather over 1,400 packages of direct import were included in the catalogues and went off quietly without material alteration in values, though a portion was withdrawn in consequence of limits not being attained.

For the 28th instant, 3,000 packages are declared.

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	20,401	3,629	24,030
Ceylon	18,186	1,390	19,576
Java	877	561	1,438
Total ...	39,464	5,580	45,044

Also 134 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated February 22nd, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1900-1901	1,290,107	947,117	42,832
1899-1900	1,337,967	897,918	43,328

26,522 *pkgs.* INDIAN
21,081 ,, CEYLON
1,438 ,, JAVA
} Total 49,041 packages were offered in public auction this week.

The Indian and Ceylon Associations have issued a Circular urging upon Planters the necessity for reducing the output of Tea, and suggesting various methods for accomplishing this object, such as restricting the plucking area, finer plucking, the manufacture of Green Tea, or the appropriation of tea for the exploitation of the native markets of India and Burmah. It adds a form of undertaking for proprietors to sign, agreeing to reduce their output by one of the above mentioned methods, or by any other practicable means.

The matter is of such importance that it is hoped the Circular will be largely signed.

Unless the output be in some way restricted, the prospects of the Tea producing industry appear to be very gloomy indeed. It has been found necessary and practicable to restrict supply in other trades by the shutting down of machinery and other ways, and thus to afford material relief in times of depression. Therefore there appears to be no reason why the depression in the Tea Industry should not similarly be relieved, if only united action can be assured on the part of the planting community.

INDIAN.—The Indian auction was very small, being less than half the quantity brought forward last week, or indeed in any week since the 4th January. Buyers were thus able to deal more easily with the sale, and prices showed a slight general recovery, which was most marked in useful liquoring Teas, common grades participating, but only to a very small extent; these continue to sell at very poor prices. The official were from Calcutta gives exports for first half of February as 3,310,000 lbs., against 2,200,000 lbs., making the total from 1st April, 1900 to date 159,310,000 lbs., against 148,092,000 same period last year.

Week's average of Tea sold on Garden Account 1901, 22,875 pkgs., av. 6·71d. 1900, 40,946 pkgs., av. 8·08d.

Total Tea sold on Garden Account 1st June 1900 to date, 1,068,962 pkgs. av. 7·33d. 1900, 1,047,388 pkgs., av. 8·35d.

CEYLON.—Only 21,081 packages were brought forward, against 31,521 last week. With reduced supplies of both Indian and Ceylon Tea the market steadied, and prices for all grades tended to harden, medium and good Teas being fully $\frac{1}{2}$d dearer in some instances, while common kinds frequently showed a rise of $\frac{1}{4}$d per lb. Private advices from Ceylon give shipments to United Kingdom for the first half of the month as 4,200,000 lbs., against 4,500,000 lbs. last year, and estimates the quantity for the month as 8,300,000 lbs.

Average for week 6·33d. against 7·65d. in 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 194,471 pkgs., av. 6·42d. 1900, 202,203 pkgs.. av. 7·59d.

JAVA.—The sale passed with fair competition, with here and there slightly improved prices. All the Teas were on garden account, seven invoices being represented in the auction. 3,042 packages are advertised for sale next week. 570 packages are to be offered in Rotterdam on the 2nd March.

Bank Rate 4 per cent. Exchange on London' three months' sight:—Calcutta 1 $4\frac{7}{32}$. Colombo 1 $4\frac{1}{4}$.

COCOA.

There was little or no change in the feeling of the market on Tuesday when 2,572 bags were brought to the hammer. Demand was without life, yet holders adhered strongly to last week's values. Of 461 bags Trinidad catalogued about 200 bags sold—good to fine at 68s to 70s. 20 bags Jamaica realised 61s to 62s, whilst 2 bags St. Vincent brought 62s. Of 1,366 bags Ceylon about 250 bags were disposed of at about valuations, *viz.*, 1,015 to 1,023 for fine bold red 88s for good bold and medium, 62s for common dull small and medium, and 55s 6d to 69s per cwt. for common dark to good bright small. 38 bags Venezuelan, 500 bags Guayaquil and 178 bags Samana passed the hammer unsold.

PEPPER.

Black.—The market has been very quiet, but there is a steadier feeling at the close. About 200 tons Singapore have been sold for arrival—at 6 3/16d February-April shipment, at 6 7/32d to 6 3/16d March-May, and at 6¼d May-July. On the spot only small sales fair Singapore reported at 6 1/16d.

Supplies at auctions on Tuesday offered only 8 bags of grey Alleppy, for which 5¾d per lb. was bid in vain.

Sales of Tellicherry to an Italian outport at 55s 9d c.i.f. delivered weights are reported to-day.

The shipments of Black Pepper for the first half of February compare as follows:—

	1901.		1900.	
U.K.—Singapore	30	30	140	180
„ Penang	*nil*		40	
Continent		60		190
U. S.		170		210
Total tons ...		260		640

White.— is rather easier and business difficult For arrival about 20 tons have been sold, *viz.*, Singapore March-May shipment at 9 1/16d and Penang January-March at 8 7/16d per lb.

At public sale on the 20th instant 35 bags Singapore were bought in at 9¼d per lb.

The shipments of White Pepper for the first half of Febr compare as follows:—

	1901.		
U.K.—Singapore	60	160	80
„ Penang	100		240
Continent		100	
Total tons		260	

GINGER.

Cochin.—A somewhat dull tone has taken possession of market and the top rates of the past week or two are not obtainable. Catalogues embraced 4 cases 428 bags of which bags sold; good bright medium and small washed rough 35s ditto 33s, small to bold bright brownish rather shrivelled and 32s to 32s 6d, very rough and much small Calicut Sorts 31 one lot 32s per cwt.

Jamaica.—Was better represented than for some time past barrels being brought forward, about 100 barrels of which at cheaper prices, *viz.*:—Rhatoon at 33s to 34s, small and mec washed 37s to 39s, and middling washed at 40s 6d to 42s per cw

QUININE.

A considerable business has been done this week at advan prices. The depression caused by the heavy shipment of from Java passed away on the announcement of the figures of " to sale " shipments which were given as 825,000 half-kilos. T comparatively small figures threw doubt on the large half-mon shipments, and have active demand came from the United St and for daily purchases for "spot," so that the market closes at 1s 2d per oz. for spot and March, and 1s 2¼d per oz. for " Three-cachet " brand is selling at 1s 6d per oz. in Paris. B manufacturers have raised the price to 2m per kilo., and there been a strong demand, not only from Germany, but also f America and England, the Governments, it is said, being l buyers for China and South Africa.

(Average for all India 6·71d., February 22nd.)

Garden.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, D and Variou	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Pri
Neilgherry ...														
New Hope ...	137	3¾	...	...	69	3¾	...	...	68	3½	...	...	...	
Travancore ...														
Carady Goody ..	84	5	34	5½	21	4	29	5¼	...	...	...	...	...	

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

CROSSE & BLACKWELL'S, LTD.

By Special Warrant Purveyors to The Queen AND Empress of India.

CELEBRATED OILMAN'S STORES.

[w. 1-10-98—t.f.o.]

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

L. VI.] MADRAS, SATURDAY, MARCH 23, 1901. [No. 12.

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ADVERTISEMENTS.—The charge for line advertisements is As. 4 line for the first; As. 3 for the second, and As. 2 for the third and ceeding insertions. Five-line (or shorter) advertisements from Subscribers l be inserted for three issues for One Rupee; non-Subscribers will be rged Two Rupees.

DOMESTIC OCCURRENCE.—The fee for inserting a domestic urrence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, lanting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 29th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad.

March 18th.—*Weather*—wind north-westerly, tempurature 62° to 90° in shade, local showers. *Crop*—a shower of 55 cents fell on Saturday, and there is more rain in prospect, this should give us a further small blossom. *Works*—Pruning and manuring. *Health*—generally good. *Labour*—abundant. *Interesting item*—March and April being the marrying months for the villagers, processions with tom-toms and horns meet one everywhere.

THE TEA CRISIS.

It has been impossible for us to place before our readers all the many suggestions that have been made in respect to the present crisis in Tea. We have made no attempt to "boycott" those of which we personally disapproved while pushing those that met with our approval. Our selection has been guided rather by estimates of the inherent reasonableness of various suggestions, their practicability, and in a few instances the weight given to them by the names and reputations of the makers. So, in our present issue, we give publicity to suggestions from Mr. James Sinclair and Mr. Wm. Forbes Laurie, not because they meet our views, but because the remarks of such experienced planters merit consideration. There appears to be a feeling that the views of planters and the views of proprietary companies and merchants interested in Tea are at variance. We regard the subject, however, from the standpoint of neither. The sole object we have before us is to consider whether among the many schemes suggested there is one that offers a really good prospect of success, or if we can suggest something ourselves likely to help tea-planters in this time of dire trouble. The principle of "resting" a percentage of tea-shrubs appears to us to be manifestly unsound. It is unsound in theory. It has

been suggested that 10 per cent. of tea grown might be removed in another way, by buying it up, and then destroying it or using it as "samples" to open up new markets, etc. Here, again, there is the difficulty that heavy charges would have to be incurred to place this tea on the market, whence it was simply intended to be withdrawn again! Resting of 10 per cent. has the one plain advantage that it would save the expense of plucking, manufacture, packing, etc., in regard to the tea left alone in order to avoid over-production. Of its disadvantages we need scarcely touch again upon more than one: the grave risk of "rested" areas becoming nurseries of disease.

The Central Travancore planters appear to us to have come nearest to a wise decision. What is wanted is an immediate reduction of output. Well, get this by means of finer plucking, which will at the same time bring about an improvement in quality. Beyond this, expansion of consuming markets is wanted; get this, if possible, with the help of judicious employment of money raised by means of a cess. So far, Central Travancore's suggestions go. We would add to them this: that measures be taken to prevent the export to foreign markets, for consumption as tea, of anything below a certain standard. That all teas below that standard should be utilised for one or both of the following purposes; (1) for sale to chemical manufacturers for conversion into caffeine; (2) for free distribution or sale at cheap prices *in India* and for consumption in India by natives of this country. The initial difficulty in regard to developing a taste for tea among natives of India is to be found in the questions of packing and distribution. As regards the former, we believe that modern manufacturers could supply a cheap *paper* that would be quite good enough for one and two ounce packets intended for *free* (and prompt) distribution; we believe they might even give something that would do very well for "stock" purposes, where there is no special "aroma" to be preserved to the leaf. Such packets available, the Railway Companies would, we feel convinced, gladly quote special rates for the transport of tea, and it should not be very difficult to find petty dealers to undertake (1) the distribution of samples and (2) the sale of cheap teas. All that should be aimed at in the first instance is the creation of a taste for tea. That done, consumers would soon see that arrangements were made for the supply to them of all teas that they might require. The supply is available. Make the demand, and the two will very soon find ways of settling matters together. If India's millions can be led to purchase tea, the increase in demand will soon become clear enough, and the over-production bogie will be 'laid' for a time.

As for foreign markets, we are not unbelievers in Foreign Market Funds, and district advertising. We think, however, that advertising *alone* will not do. The stuff advertised must be available in the localities where it is advertised. Free distribution of samples should be resumed in countries where it has been tried, should be started in countries where it has not been tried, and should be continued until a taste for tea has been effectually cultivated among peoples to whom it is at present unknown. We believe more in stimulating consumption than in artificially checking supply. We believe in a wise appropriation of "tithes" rather than in a deliberate "chucking away" thereof, or a deliberate abandonment of shrubs that are in bearing. Where the planters' position is weak at present is, that he has so little control over distribution, that the price he receives is very generally out of proportion to the price the consumer pays, and that so many potential buyers are shut off because of their ignor These potential buyers do not know what to do with when they get it. They concoct a nauseating inf where they might be taught to make a delicious one, and condemn what they call tea simply because of their own ability to turn the leaf to the best account. It is n easy thing to remedy, but the attempt is worth making. too, is that of distributing tea at a minimum of cost regulating the profits of the middleman. Organisatio essential, however; so is capital. We should like to planters give attention to both points: organise for the pose of distributing good tea on the most economical ter utilise their collective power of attracting capital with a to placing their product in the hands of consumers at lowest prices consistent with the gaining of a fair pr Cheaper railage, cheaper steamer freights, cheap distribu charges, reduced profits to tea-dealers' are all things to aimed at, but always with a distinct recollection of "live let live" principles, without which enemies will be m where friends are urgently needed.

BORNEO COFFEE.

The following notice has been issued to the shareholders t he British North Borneo Chartered Company.

24, Rood Lane,
London, E. C. *December*, 19

The Borneo Coffee Coy., Ltd., is desirous of bringing the Co grown upon its Estates to the notice of those interested in Brit North Borneo. The area of land suitable for the growth of Co in the Chartered Company's territory is very large, and if a price could be obtained for the Coffee grown, the enterprise wo soon assume large and lucrative dimensions. The difficulty in troducing a new thing to the public is however great, and wit view to overcoming this, the Borneo Coffee Coy., Ltd., has b supplied by the Court of the Chartered Company with a lis shareholders, whom they beg to inform can be supplied at the ab address with:—

Pure Borneo Coffee, roasted (ground or whole) ...	@ 1/3	per lb.
Pure Borneo Coffee, raw	@ 1/-	„
Or with a slight admixture of Chicory (French style)	@ 1/1	„

in quantities of 1 lb. and upwards.

The charge for postage or carriage on 1 lb. will be 3d.; on qu tities of less than 5 lbs., 6d.; 5 lbs. or more will be sent carriage f

There is obviously not the same scope for the sale of Co *locally* in Borneo as in India. Yet the above appears offer a useful hint to the United Coffee Growers' Compa as to what it should eventually aim at. If its operations mainly confined to this country, they can scarcely be c ducted on a sufficiently large scale to materially affect prizes of Indian Coffees. The greater the bulk dealt wi the more beneficial will the work of the Company be to industry in behalf of which it was started.

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nic son's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf pe unable to procure the Ear Drums, may have them free.

Address—No. 989 D, The Nicholson Institute,
Longcott, Gunnersbur
[w. 26-5-00—26-5-1901.] *Lon*

U. P. A. S. I. SECTION.

(DER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

An Imperial Tariff.

The *Queensland Agricultural Journal* says:—We have re-ved from the United Planters' Association of Southern dia copy of a letter which has been circulated throughout British Empire to a large number of Chambers of Com-rce and other bodies concerned with trade in British com-nities. . . .

The principle enunciated in the above circular appears to to involve the question of Freetrade *versus* Protection. early it would be quite beyond the province of this *Journal* devote space to this intricate subject. We may, however, te that at the annual meeting of the Association of ambers of Commerce of the United Kingdom held at ris in September, 1900, it was pointed out by the Vice-esident of the British Chamber in Paris that the French overnment had established two tariffs of duties; one, the *rif minimum*, applicable to goods from countries enjoying ost-favoured-nation treatment; the other, called the *tarif neral*, applicable to goods from other countries. For cer-n articles, only one tariff was made, *tarif general*—all untries being treated alike. Some time ago, a difficulty ose with Brazil, which was the largest supplier of coffee to rance. The Brazilian Government considered that the ty of 156 francs per 100 kilos. (£6 10*s.* per 220 lbs.), or 1 per cent. of its value, was too high, and requested the ench Government to reduce it, which it refused to do. hereupon Brazil threatened to discriminate against France putting a heavy duty on French goods. To that, France plied by passing in the Chambers a law increasing the *rif general* to almost double its previous rates, not only for ffee, but for chocolate, pepper, spice, nutmegs, mace, oves, vanilla, and tea (very few of which articles were im-rted from Brazil), and making the previous tariff general o a minimum tariff, so that countries not having favoured-tion treatment—into which category come the British lonies—would have to pay the new *tarif general* rates.

As has been already pointed out, since that date Brazil has me to terms with France, and obtained favoured-nation eatment, as well as a reduction of duty on coffee from 156 ncs to 136 francs (law of 17th July, 1900). Brazil had us won her battle with the curious result that all other untries not having favoured-nation treatment had to pay arly double duty. In August a decree was signed by esident Loubet authorising the application of the minimum riff to such products from certain countries, including itish colonies, possessions, and protectorates until 31st cember, 1900, reserving the right to apply the minimum riff for two years from the promulgation of this law (24th bruary, 1900). If this were not done, however, the neral tariff would be applied on and after 1st January, 01; and even if the present concession were extended to full limit authorised by the law—*i.e.*, to 25th February, 02—the tariff general would then be applied.

The result would be that the following products of British colonies would have to pay the following duties on entering France :—

	Per 100 kilos. (220 lbs.) General Tariff. Fr.		Minimum. Fr.
Coffee (beans) ...	300	instead of	136
Do (roasted or ground) ...	400	,,	156
Chocolate (over 55 p.c. cocoa) ...	300	,,	150
Do (less than do.) ...	200	,,	102·25
Pepper	400	,,	208
Allspice, pimento, amomums, cardamoms, cinnamon, Cassia lignæ ...	400	,,	208
Nutmegs (in shells)	400	,,	208
Do	600	,,	312
Mace	600	,,	312
Cloves	400	,,	208
Vanilla	800	,,	416
Tea	400	,,	208

These were the circumstances which induces the Chamber of Commerce (Paris) to take action in the matter, and which have led to the present action of the United Planters' Associaton of Southern India. . . .

We foresee great difficulty in dealing with the principle of the resolution. Freetraders, to a man, must oppose it on principle, and we question very much if the British Government would run the risk of imposing countervailing duties, however desirable from the protectionist's point of view, which might have the effect of dislocating trade. It is a question which deserves to be argued in all its aspects, but it is one which cannot fail to once more bring forward all the stock arguments which have been used in the fights of Freetrade *vevsus* Protection. . . .

Commenting on the U. P. A. Circular *re* Differential Duties, the *Brazilian Review* says :—

The proposal of the Madras planters is not novel; under one name or another. "Fair trade," "Imperial Federation," or what not, it turns up whenever trade gets bad in the United Kingdom, or some special branch suffer from outside competition or unfair treatment. The experience of the planters in India is, however, no worse, indeed not half so bad as that of British sugar planters in different parts of the world, nor of many other industries that find themselves excluded from particular markets in consequence of the "Reciprocal" treatment of the products of other countries. The United States has in this manner, succeeded in obtaining certain advantages, and is, at the present moment, busily engaged in negotiating a treaty with this country by which flour, amongst other products, will be admitted at lower rates, and competition by her principal rival Argentina be quashed. The same principle will doubtless be extended by the United States and similar advantage be extorted for manufacturers unable to complete on equal terms with those of other countries.

The action of Brazil with regard to coffee shows that other countries will not be slow to follow so eminent an example, and it may easily happen that, in this manner, British produce and manufactures will, one by one, find door after door shut against them and be undersold even in their own markets.

That such a policy can be advantageous to any one in the long run seems scarcely possible. It may, it is true, help in the early stages to build up a new and struggling industry, but is certain to provoke resistance abroad and culminate in over-production and competition at home. An unfair advantage, such as preferential Customs tariffs afford, is invariably counteractive, soothing its beneficiaries into an illusive security, whilst stimulating competitors to renewed efforts. In a few years, in consequence, foreign methods are so improved that the advagtage of protection is lost and competition recommences fiercer than ever. There is no mechanism by which universal production can be kept within bounds except by competition. Let the United States strive and intrigue as they may to obtain preferential treatment for flour, for example, sooner or later, unless they can produce as good and cheap an article as in the Plate, they will be driven from that field. By exacting favours for their product Americans only drive Argentines to renewed efforts, to improve their methods,

and perfect their mechanism, and thus neutralize the disadvantage, until, at last triumphant, Argentine products will undersell American and once more master our markets; meanwhile production in the States will have been artificially simulated with the inevitable consequence of over-production.

The most instructive illustration of the dangers of monopoly is, perhaps, afforded by the coffee industry itself. Virtually without competitors, Brazilian planters, believing they could control the market, gave all their attention to coffee planting to the exclusion, in the coffee districts, of almost any other industry. The natural results followed:- Over-production with a fall of prices that has reduced coffee planting from the most lucrative to one of the most unprofitable of occupations, and involved the country in an economical crisis that threatens its institutions.

Had outside competition existed, things never could have arrived at such a pitch that not only does an area as big as Europe, exclusive of coffee, contribute scarcely anything to exports, but fails even to support its own population. Had foreign competition kept prices within bounds, other employments would not have been abandoned for the exclusive cultivation of coffee, capital and labour would have found their way into mining and other industries, and agriculture have been developed generally on the progressive lines of other countries. As it is, now that we are awaking to the inconvenience of monoculture, we find that we cannot even produce corn as cheaply as our neighbours, and, before we can hope to compete even in our own markets with their products, must learn the lessons they have long acquired, commencing from the A. B. C. of cultivation. It is not merely a prolific soil nor even a stimulating climate, but the knowledge how best to apply human labour to natural agents, and get the greatest advantage from them that enriches a people, which only comes of practice and experience; it cannot be improvised!

It is unnecessary to enlarge on other instances, such as sugar planting, to point the moral of the vanity of human invention when opposed to what say termed the "Nature of things." Production may be stimulated for a time by protection, by "Fair trade" or by absolute prohibition, but sooner or later the nemesis of over-production will destroy such advantages and competition recommence. What will be the position of protected sugar industries the day that "bonuses" cease to be paid and Beet sugar has to compete on its own merits? The moral, to our mind, that experience teaches here and everywhere, is to rely only on our own efforts and strive continually towards perfection in whatever we may be engaged: that is better than all the temporary advantages of Fair Trade or Protection in the World!

Few are, however, ready to adopt principles so fundamental for their rule of life, much less of policy, though their neglect is already threatening to cost England the loss of industries she thought secure. Impatient of results, it is imagined that physical or moral defects can be artificially corrected, and so, imitating others' bad examples, we are ever on the search for a new panacea.

It is true that a policy based only on perfection may and will entail material sacrifice until superiority at least be attained. Until we can succeed by the improvement of our methods in producing everything better and cheaper than our neighbours, any artificial advantages they enjoy will make competition on our part difficult, and sometimes impossible. Men, however, are impatient and care little for ulterior results, they want themselves to touch and to enjoy.

That, from this point of view, the trade of the Empire is exposed to disadvantages, more or less temporary, seems unquestionable. One by one our neighbours' doors are unfairly closed to us, whilst our own hangs open to all the world. But will Fair Trade, Federation or, to put it clearly, Protection help us? Will it not rather lead to renewed carelessness and to the indolence bred of security from competition?

But whilst advocating Free Trade in the fullest sense of the term, we do not believe that it will be long possible to control the feeling of resentment against the unfair treatment that British products are being successively subjected-to, as the ideas of "Reciprocal" treament, from which we alone are barred, spread from one country to another; before long, such a feeling must crystallize into action. To seek the point of least resistance at which the crystallization may be, if not encouraged, at least permitted with the minimum of injury to our own real interests that the process, however gentle, must entail, should be the care and object of those who direct opinion; and if any action must be taken, we believe it should be in the direction, not of prote but of the most absolute Free Trade compatible with fiscal req ments and removal of restrictions from the few remaining fo products yet subject to taxation. Allowing that duties on w spirits, and tobacco are indispensable for revenue and other poses, would it not be possible to abolish the only others that re on tea, coffee, etc., and thus place ourselves in a position to exact all countries equitable treatment for our own products on the favoured nation basis? If refused, reprisals in the form of d minating duties would then be justifiable and, if immediate an ulterior results only are aimed at, successful. Because afte Great Britain and her colonies are not only the greatest bu most progressive consumers in the world, whom no country w lightly sacrifice.

What Great Britain and her colonies want is, not protectio fair treatment, and that we can only ensure by treating all ali

COFFEE IN DISTANT LANDS.

XXIV.

B. C. Africa.—A Mlanje correspondent of the *Ca Observer* wrote on 7th January, 1901 :—

With regard to money-making in B. C. A. I know of two planters who have left the country for good hav made money at coffee planting, Messrs. J and D, the for some £6,000 and the latter about £3,000. The former only about six years here, and was fortunate in getting s 10 cwts. per acre from a coffee estate he opened up du that time, and his other investments proved good; so he out and has gone to S. Africa to start business in one of coast towns. The other was some 25 years in B. C. A. only about 10 years planting coffee, and he sold out—clear I was told, the above amount and is now living with Mrs in Scotland. It must be remembered that this countr young, and that the agricultural resources of the land h not yet been developed. There are few men with capita enable them to prove what can be done with the diffe products which might be, and are, grown successfully he most private planters have really got very limited means, everybody knows what uphill work it is anywhere work under such circumstances. We all know it requires mone make money, especially quickly, so give us a chance. I safely say, however, that there are no planters or others h up in this country, and all seem able to make a decent li either at planting or trading or something else.

The same gentleman wrote: We are going to have a short crop in Nyasaland this year; the blossoming se was upon the whole very unfavourable, being too Although we, in Mlanje, began well, the latter end of season was a scorcher, and with the dry heat came on unusual number of spotted bug, and thrips; the latter i bad as a severe dose of leaf-disease, carrying off the le and killing back the branches and withering up the c which drops off to single berries. Fortunately this latter only comes with a very dry season. I never saw ther Ceylon. Our trees are now making wood fast and throv off the thrips.

British North Borneo.—The following letters from T. H. Hill were considered at a general meeting of the Un Planters' Association, Straits Settlements, held at Serem on Monday, September 10th last.

1.

Mr. Gibson, the late Secretary, was good enough to write m letter dated March 4th, 1900. I went to see the coffee tha advises had been sent by Mr. Carey to Messrs. Sanderson & C had the smell that is so much objected to here.

This smell can be got rid of; as coffee that was cured by

rcher specially to send home was free of the smell. I believe it s got rid of by exposure to the sun only—after curing. I had ne coffee that was sent home *supposed* to be free of this smell, t it was not, but I managed to get rid of it by exposing to an en fire in a tin dish. So it is probable that heat exposure is all at is necessary, it is most important as affecting the value of e coffee here.

There will never be any market for this coffee up to its full ndard of value until the shipments have been made regularly d in fair quantities and of the best *sized* qualities. When a fair ality of Liberian is sold in London, it fetches from 7s. to 10s. re than the ordinary quality sold in London, which continues be "fair merchantable," a most distressingly low standard and e at which any planter would express disgust.

I am convinced that if the U. P. A. were to arrange to ship nthly 100 piculs of really good quality and of the best sized rieties with a good aroma, that Straits Crown Liberian could be rked up to sell at the standard of the higher priced Coffees, ich are now selling at 20/- to 40/- per cwt. over the ordinary azilian standards. To realise this position for the Straits coffee pears to me a matter for the planting community and not for the dividual, who would not be able to deal with it in so thorough a nner, or to such general advantage; when the Association have for me time sold to a high standard (and thereby created a market) e individual planter by curing to such standard will be able to ap the benefit of the exertions of the Association in which he has rne his *part*. As far as I can learn no extensions of Coffee Estates ve taken place during the last four years, the consumption has mittedly overtaken production and the out-look for growers is cidedly *bright*. It may be of interest to the Association to know at the Milreis of the Brazils worth at the time of the large areas ing planted 5d. is now worth 8d. and some time 8½d. and that ing to the redemption of its paper money and increased pros- rity from other trade than coffee-planting, it is more likely that e Milreis will increase in sterling value than fall, and thereby the raits planters are in a position to compete on more favourable rms than they were with the largest coffee country.

"Fair Merchantable Straits Liberian" has always (not with- anding its poor quality) sold for 3/- to 4/- more than Santos per t. and I can only get the opinion that this is because it has some the qualities of *Mocha* coffee. I hope that these matters may be interest to the planting community and if I can aid the Associ- ion in any way, please command me I shall be in London until ptember.

II.

London, 1*st August*, 1900.

Enclosed is a copy of certain remarks that I addressed last year the United Planters' Association in more general terms.

Having had the advantage of being in constant consultation and ceived the willing advice of one of the leading Brokers in Mincing ane, I feel that in putting these remarks before the leading plant- g community that I am doing as I would wish to be done by. he proposal does not appear last year to have received the consi- eration that I think that planters in their own interests might give , if the matter were under consideration in their own homes. I ve therefore posted copies direct to the leaders of the planting mmunity and I trust that this letter may be read at a meeting, at if inadvertently I have left any one out from having only a mited number of copies or inadvertence, they will not be offended think of the matter personally.

III.

9th July, 1900.

The bulk of the Malayan coffee is eventually absorbed by one arket, New York, a small proportion being taken by Germany his I have on the best authorities.

This coffee is, as a rule, sold on one standard or grade, *viz.*:—"Fair erage of the Season" at time and place of shipment but is some- nes sold on a standard or type sample which shows picking and eanliness only.

There are not as in all other coffees several standards.

The great fault is the careless preparation of the coffee, conse- uently a great deal when it comes here has a bad stinking rank smell. This can be eliminated by exposure to the sun in the East (ex- sure to open fires in this country *removes it*) but I do not see how e latter can be done.

What I recommended last year and would still recommend to the lanting Community is:—

1*st*.—That the Association should deal in coffee to the extent necessary to send some 100 cwts. or thereabouts to be monthly auctioned in the Sale Rooms in Mincing Lane as "Malayan Plantation Liberian" it should be subject to rigid inspection before being shipped, by at least two members of Committee, and freight should be engaged for it under guarantee, that it was not shipped with hides and pepper.

It should be carefully sized and lots as large as possible, (the bulk being 40 or 50 bags) *i.e.*, of one description as to size and quality.

It should be free of all rank smell and properly picked.

If this were auctioned monthly it would introduce a new standard on the London Market, *viz.* "Malayan Plantation Liberian." Such planters that desired to do so might avail themselves of this standard and reap the benefit by curing up to it, through the higher price their coffee would fetch.

It appears that such steps are well within the scope of the Association although outside the power of an individual.

To day the position of the Coffee Market is this:—

Consumption has greatly increased and production is likely to be smaller, as large areas of coffee were planted in the Brazils with exchange, Milreis (worth 2s. 7d. par) at $5\frac{1}{16}$d, now the Milreis is to-day 1s. $0\frac{1}{8}$d. and has been 1s. $2\frac{1}{2}$d.

Whilst the coinage of the Malay States has been 2s. and remains there for a 4s. 3d. dollar par value coin.

At a meeting of one of the largest coffee Companies at which I was present it was stated that the rise of 1d. in exchange on the Milreis increased the cost of production by 2s. 3d. per cwt.—since that speech was made exchange has risen 3d. to 4d.

It was also stated that the old Coffee planted by slaves, which had not been planted with maize between the rows was very much better than that planted by free labourers, *whose* inducement to plant coffee was that such free labour was permitted to *plant* maize amongst the coffee, and without such inducement, the position of labour would be trying and unsatisfactory. The injury to the coffee was *undoubted* and *admitted*.

Remedies difficult and doubtful.

The cost of realizing the proceeds of crops as shown in some accounts seen by me varies from 26,3 per cwt. to 29,6 per cwt. before the sale proceeds are banked, exchange $6\frac{1}{2}$d. and $7\frac{1}{2}$d. per Milreis respectively. Different amounts of crop form different averages. It follows that coffee cannot in this instance, *i.e.*, higher exahange, be produced under a cost of realising sale proceeds of 36s. $4\frac{1}{2}$d./39s. $7\frac{1}{2}$d. per cwt. This is fully borne out by figures that I made out before I left the Federated Malay States from papers handed me by Mr. William Coates. It is evident that the Malay Peninsula can compete with the Brazils in the cost of production of coffee. In the interest of all concerned the standard should not be left as it now is, *viz*:—"Fair average of the Season" and as I have already said it will be seen it is unreasonable to expect any one man to be able to deal with the matter, even if willing to face the delay and expense. I am informed that 24 monthly sales would probably suffice and when it is remembered that the export duty on Coffee is fixed on a sliding scale, and that the higher standard would pay the higher duty, it appears equally to the advantage of the Government and the planter that such further standards should be sought for, and the Government might fairly be asked to grant a sum per cwt. towards the expense of the Coffee shipped as indicated. The value is advancing and if such should be the case in the future each shipment would result not only in benefit to the members of the Association but possibly in actual cash profit as well.

Whilst at the worst the loss on each shipment could not be very large. There should not be any disappointment, if the first shipments sold at little above ordinary rates and it would be useless I am advised if the systematic shipments were interrupted. Therefore 24 shipments should be arranged for from commencement.

If the two standards are now established in future I believe it would be a step in the right direction to make Liberian coffee more popular and enable estates to carry on better in times of depressed markets.

The Brokers in London are most considerate and good-natured, but I deprecate individuals writing upon those matters separately; they would aid themselves and others by using the United Planters' Association to further the general interests, which would cover the interest of each member individually, and naturally received more attention than that accorded to individual effort.

NOTES.

"The Agricultural Ledger."

No. 21 of 1900 deals with The Cattle of Rajputana, No. 22 with The Cattle of Madras and of H. H. The Nizam's Dominions, and No. 23 with Moth-borer in Sugar-cane.

Tea and Cinchona in Bengal.

Agricultural Statistics of the Lower Provinces of Bengal for 1899-00 show that 132,900 acres were under Tea, and 1,300 acres under Cinchona.

Cinchona from Java.

It is reported that the shipments of bark from Java for the whole month of February are 727,000 Amsterdam lbs. against 705,100 lbs. last year.

The Coffee Problem.

The *American Grocer* remarks that the coffee problem is an enigma. "With a world's total supply for the year of 20,000,000 bags or more to meet requirements of 14,000,000 bags, what will be the future trend of the market? What always results when supply is in excess of demand."

Colombo Tea Sales.

At the public sale of tea at Colombo on the 18th instant about 11,600 packages = 905,371 lbs. were offered, of which about 8,655 pkgs. = 688,901 lbs. were sold. The last tea sale before the Easter holidays will be held on Tuesday, the 2nd April, and the first sale after the holidays on Wednesday, the 17th April.

Pushing Ceylon Tea.

The "Thirty Committee" has resolved, subject to the sanction of the Government of Ceylon, that Mr. Webster be granted a sum of £500 to be expended in advertising and pushing Ceylon tea in Honolulu, West Indies; South Africa, or North Africa, on the understanding that Mr. Webster do spend £1,000 for a like purpose furnishing accounts and statements; payment of the amount to be deferred until the middle of 1902.

Quinine in London.

The *Chemist and Druggist* remarks: —Quinine is again the feature of the week, and a considerable business has been done, principally in second-hands, at rising prices. On Wednesday the German makers advanced their quotation to 1s. 3d., but they have since sold at this figure and refuse to go on. The advance last week in citric acid is well maintained, and the tendency is still upwards owing to the higher prices asked for juice. Pressed camphor has been sold at full prices by the monopoly this week.

French Duties on Coffee.

Le *Journal Officiel* publishes a decree to rule to the 30th June, 1901, applying the minimum tariff to coffee produced by the German, British, Danish, Spanish, Dutch, Portuguese, and American colonies, the Central American Republics, Cuba, Porto Rica, Equador, Peru, Chile, the Congo, Abyssinia, Corea, China, Siam, and the Philippines. Coffee from other countries that entered French deposits between 24 January and 30th August, 1900, will enjoy the privilege of the minimum tariff to 30th June, 1901.

Coffee-retail.

It is useless, says the *American Grocer*, to attempt to build up a large and profitable trade in coffee unless the stock is fresh every day and the quality is of the best. Buy green of the right grade and have enough roasted for requirements. If your trade does not warrant such a then make connections with some reliable firm having quate roasting facilities, let them understand the exact of your trade, and then give them your orders and your dence. For the majority of retailers this latter cour preferable. There is more money to be made in selling than package coffee.

Tea for Caffeine making.

The *American Grocer* states mixture composed of about 90 cent. in volume of tea dust or sweepings, or refuse or d tea, the remaining constituents being slacked lime and tida, and which compound is intended to be used in caffeine, is exempt from duty under paragraph 548, A July 24, 1897, according to the recent decision of the U States Circuit Court for the Southern District of New *in re* United States *v.* Hensel *et al.*, and Hensel *et* United States, reversing G. A. 4188, which held tha merchandise was dutiable at one-fourth of one cent. per p and 10 per cent. *ad valorem*, as a drug advanced in v under paragraph 20 of said Act.

Brazilian Coffee.

The *Rio News* says:—A in the *Jornal de Commercio* pre a gloomy picture of the coffee industry in the State of rito Santo. The poverty of the planters, and the sca negligence, and inefficiency of the labourers employed, led to improper methods of cultivation and of harve which have greatly reduced the productiveness of the and injured the quality of the coffee. The average pr tion is less than thirty arrobas (960 pounds) per 1,000 The situation is aggravated by burdensome taxation. export duty, nominally 12 per cent., is really abou per cent. Besides, there is another tax of 200 reis per Many of the colonists on the coffee plantations have be disheartened and are leaving the State.

Adulterated Coffee in the U. S.

Food Commissioner J. E. B barn, of Ohio, has commenc campaign against adulterated c This was preceded by a notice to the trade that every in whose possession adulterated stock was found February 1 would be prosecuted to the full extent of the The following instructions were sent to every Deputy C missioner and Inspector throughout the State:

Columbus, O., Feb. 1, 190

To All Assistant Commissioners and Inspectors:

You are hereby directed to obtain, in the open market, six samples of every brand of roasted coffee and three samples of green coffee, known or believed to be adulte sizing, coating, or covering with any wax, drug, or other material or ingredient not a necessary part of the or berry.

Use great care in securing evidence and samples, and samples in hands of nearest chemist for chemical and microsc examination.

London Tea Sales.

Weekly telegram, dated 14th inst. from Messrs. Gow, Wils Stanton to the Colombo papers reports that the market g rally is steady, and that the market for medium Eq Pekoes and broken Pekoes shows a fractional advance; the market for common Pekoes and broken Pekoes is

udy. The price of fair liquoring Ceylon Pekoe Souchong 5d. (same as last week) and the average price of Ceylon sold on garden account this week was 6½d. (also same last week)—as against 6¾d. and 7½d. respectively in corresponding week last year. Reuter reports that fine alities of Ceylon tea realized full rates. Pekoe Souchongs quoted at 3¾d. (same as last week) and the average for week at 6½d. (one-eighth of a penny down) as against 7d. oted for Indian tea. 29,000 packages of Ceylon tea were ered for sale, of which 27,000 were disposed of; while of 49,000 packages of Indian tea offered 46,000 found purisers.

e Use of Coffee.

In a paper read before the New York County Medical Society, Dr. N. Love, of St. Louis, Mo., said: "Coffee, tea, and cocoa ntain practically the same active principle, but coffee conins the largest proportion of this substance—in other words, the strongest. The psychical satisfaction produced by these verages at meal-time is of much importance. Coffee-houses diciously placed and managed would undoubtedly solve the loon problem. "Taken with the meal, coffee is likely to sturb digestion. When I desire to restrict the diet in the eatment of obesity, I advise the use of a cup of black coffee the morning, sandwiched in between two cups of hot water. hen used in this way, it stimulates peristalsis and favours gestion. At the same time, it removes the desire for food, id enables one readily to become a member of the 'noreakfast club.' "The after-dinner cup of black coffee is an xample of the wrong use of coffee. Coffee taken as indited, without cream and sugar, acts admirably, and represents hat should be the proper and habitual use of this beverage. he emergency use of coffee for night-work is all right, if one judiciously; that is, only as an occasional practice."

ea Consumption in the U. S. in 1900.

The following statement, compiled from the reports of the United States Bureau of Statistics, shows that consumption of tea in this country is below the average of the n years, 1887—96:—

		Pounds.
ea in Warehouses, December 31, 1899		41,729,509
mports in 1900	96,384,696	
ss exports in 1900	1,176,736	
Net Imports		95,207,960
Total supply		136,937,469
ss stock in Warehouses, December 31, 1900		54,968,778
Consumption in 1900		81,968,691
nsumption in 1899		73,063,072
verage yearly Consumption, 1887—96		86,782,955

The above does not take into consideration stocks held by bbers or retailers, the quantity of which is not to be tained. As the *American Grocer* observes, the figures show at the consumption of tea is not increasing. In 1887 and 888 the average net imports, regarded as consumption, ere much larger when the population was 16,000,000 less. Evidently the people are drifting away from the use of tea, favour of coffee, cocoa, and beer."

eylon Green Teas.

A further appropriation of Rs.30,000 has been sanctioned for the payment of rants on Ceylon Green Teas. By the way, the *Ceylon bserver* writes:—We understand that the most recent Canadian advices received in Colombo point to an oversupply of Green Teas in the Canadian market. This being so, the present and intending makers of greens will be well advised to hold their hand for a while and not take their share in increasing the supply too rapidly. In spite of the fact that Canada *does* provide a good market for our greens, it is none the less true that its development is only beginning and, if it is hurried by an occasional rush, much harm will be done; it needs slow and steady cultivation. Upcountry there are factories to be found where green tea machinery is all ready, but is not yet being used for its purpose, practical caution being exercised and delay made, until the demand for Ceylon greens becomes more definitely marked. Nevertheless when Green Tea makers have once got to work, it is as well they should continue a regular supply to the local market, for nothing is more likely to put off the American buyers than irregular deliveries by their agents here, who are entirely in the hands of the producer as far as constant shipping of the same kinds is concerned. Local sales, however, have not been encouraging to the growers who have hesitated to go in regularly for greens—several lots recently being withdrawn on account of insufficient bidding.

LETTERS TO THE EDITOR.

THE PROPOSED TEA CESS.

DEAR SIR,—I notice that in your issue of 9th March you perpetuated an error made in reporting by a Calcutta Daily paper and in doing so you not only put into Mr. Topping's mouth what I said, but you make me out an opponent in conjunction with Sir Patrick Playfair of the proposed tea cess. Instead of "Mr. H. S. Ashton and Sir Patrick Playfair have spoken" you should read "Mr. H. S. Ashton said Sir Patrick Playfair has spoken" and so on.

Inasmuch as I have just been elected Chairman of the I. T. A. it is perhaps advisable that it should be clearly understood that I strongly approve of the proposed cess. The proposal has been made as an alternative to the present method of obtaining voluntary subscriptions for advertising purposes which for seven years has resulted in an annual collection of about a lakh. In 1893 this sum might be considered respectable, but I think I am justified in saying that the failure to increase subscriptions as the output of tea has increased daums the voluntary system as inefficient and justifies a resort to other methods if new markets are to be thoroughly exploited by Indian tea. Of course there are proprietors who deny the value of advertisement by other than private enterprise, and their influence may be sufficient to block the way, but it is also quite certain that there are a number who are willing to share the cost of exploiting new markets, and who do not now subscribe, if provision is made to protect them against subscribing more than their share. The cess will meet their views, whilst I think it must be pretty obvious that those who have for years been doing more than their share will get tired of the present system, because, if for no other reason, "it is so difficult to tax aud please" and there is just as little pleasure in the process whether you impose the tax yourself or not.

There appears to be another body of people interested who approve of all the exploiting that can be done, and who suggest far more expensive schemes than any yet attempted.

At the same time they deprecate the intervention of Government, who they seem to fear would keep the tax on when the object for which it was imposed ceased to exist or, in other words, would divert at some time or other to their own uses, funds specially here marked. In view of the proved efficacy of the Ceylon system and in view of the practical failure of the Indian voluntary system I would ask such people whether it is worthwhile opposing the tax because they hold the theory that the Government of India is shameless, for that is what their argument amounts to. Sir Patrick Playfair's suggestion is to distribute over 5 million lbs. of tea (3 per cent of the crop) this year in India and he thinks the cost of administration may be covered by sales, but not any part of the value of the tea. I thoroughly approve of something of the kind being done, but after seven years' experience on the I. T. A. Committee during which the difficulty of obtaining money has been in constant evidence and the crippling effects upon all operations of the uncertainty as to funds voluntarily subscribed I would rather see the Committee, which will shortly be formed to exploit India, commence operations with a solid fund behind it such as the proposed cess would bring in. The industry has never risen beyond a lakh a year by voluntary effort. If you value the 5 million lbs. of tea above referred to (the cost of which it is thought will not be recovered) at -/1/- a lb. It will cost the industry over 3 lakhs, at -/2/- over 6 lakhs and it is at least fair to infer that it will be difficult to get such a subscription responded to after past experience. The Committee having to find ways and means will undoubtedly be greatly handicapped and any scheme they may decide to adopt will consequently be delayed to the detriment of practical work.

To those who believe in advertisement and yet hesitate to support the cess I suggest the above points.

H. S. Ashton.

GENERAL ARTICLES.

THE PRESENT CONDITION OF THE BRITISH TEA INDUSTRY.

A SUGGESTED REMEDY.

Mr. Wm. Forbes Laurie writes :—

My best introduction to show that something must be attempted to improve the condition of the British Tea Industry is by bringing to notice the result of the last public sales. The average price for the week for Indians was 6·12d. for Ceylons 5·88d.—say a joint average of 6d.

The capital invested in the British Tea Industry, three years ago, was computed by one of the best authorities in London, to be *fully 30 millions sterling*. One question naturally arises, is the position urgent enough to induce all producers to unite in an organised system which would place the regulation of price entirely in their own hands? If so, I can point out an automatic and simple process by which this can be accomplished.

If any one will take the trouble to enquire among grocers, he will be told that for one customer asking for better *there will be ten asking for cheaper teas*. So pronounced is this preference that two years ago when a large quantity of inferior Oolongs were *condemned as unfit for human food* in America, they were shipped to London, where, wholesome or unwholesome, they were consumed with every satisfaction. The present condition of the market means that a large proportion of British-grown teas are in the true sense of the word not competed for; also most first-class teas do not attain any stability of value.

What is wanted is *immediate relief*.

Were it not for the arbitrary action of the Indian Government in th interests of British stockholders, and naturally by no means disap proved of by the services, our position to-day would not be s desperate as it appears; for if the so-called exchange had not inter fered with the natural condition of the industry, its 30 million involved would yield at least 4 per cent. more than it now affords, an no *special* action would be necessary. Since then, the increase of dut from 4d. to 6d. has aggravated the position. Also taken in connec tion with all this, that five years is necessary for tea gardens to com into full bearing and it will be seen that the industry as now con ducted is practically "*out of hand*," and that some systemati regulation is necessary; for as now working any slight rush of tea would in the future place us *again* as we are at present.

In Great Britain, means of overcoming the evils of over-pro duction and competition are becoming general, so we cannot d better than follow their example. Labour, Brewers, Distillers Coal, Iron, Thread, Screws, Fish, and Wall-paper have all com together under Unions and Associations for this purpose, and hav mitigated extreme competition and unwise over-supply, otherwis profit would, sometimes, have disappeared. Two years ago I mad this subject a special study and, although I found only one industry went so far as to declare, "That my trade is my politics," inter course showed me that in most cases *they were by no means* behin "The Trade." They admit that if the pendulum can be kept at fair figure of profit, neither too low nor too high, that over-com petition can be regulated and that over-supply is checked. Thus if the tea-growers can maintain Indian and Ceylon teas, *say*, withi a joint average of from 8d. to 8½d. (inclusive of all grades sold i the market), the object desired will have been accomplished. Te could never under-supply the market for over four months together there are sufficient abandoned tracts of tea-land which a rise woul bring into production.

The position now is one in which it is considered that there ar 20 million lbs. more tea in stock than the market requires.

The tea market is an extremely sensitive one, so I should not pu the surplus down as much more than *half this*, with a possibility o a slight access of increase when the new season teas arrive.

There are already two reducing factors at work,—the making o "greens" and finer plucking, but these, like all economical adjust ments, work fatally slowly and in the meantime we are losing a least £50,000 weekly for mere want of control.

THE REMEDY.

Nothing can be done without a central organisation which I shal hereafter call "The Association," formed, say, from the Indian and Ceylon Associations. This being accomplished, let all British tea growers agree to submit to a Cess on the sales of their teas of ⅛ to ¼d. per lb., to be in all ordinary cases collected by the Brokers, and with this Cess form a fund. If London would initiate the project Calcutta and Colombo would readily join on quitable lines. The Fund would be used to buy up all teas say under 5d. to begin with in the open market; then higher, if necessary, and so on; which inferior teas would be treated as a by-product, for it is open to doubt whether these benefit the market, the trade, or the consumer. The public would get better tea, *and growers a living wage*, for I presume the Association would fix the average price of tea at about 8d to 8½d.; more than that would lead to excessive new production It will be seen that the scheme once started is self-operative. I believe we need go no further than London for a precedent

To proceed, say the average sales weekly in London, Calcutta, and Colombo are $\frac{1}{52}$ of 364 million lbs. *i.e.*, 7 million lbs. The Fund would become a new buyer in the market of, say, to begin with, at least 350.000 lbs. weekly at 5d and of the very teas which clog the markets. It would also be more affective in a low than high market although the choice of teas operated upon would be altogether in the hands of the regulating board. Personally, I do not believe the market could stand this strain a fortnight without going up ½d at least.

Suppose we then increase the Cess to that ½d. instead of ¼d., *we should even then be no worse off than we are at present*. There is no doubt as to the result,—what would it be? In the first instance the over-supply would be *practically non-existent*. The tea price average would automatically become 8d. to 8⅓d., of course *plus* the Cess. In three months the Cess might be reduced to ⅛ or $\frac{1}{16}$, or it might cease altogether. In no case do I believe, at the severest period, more than 5 per cent. of tea would be set aside and that the average would be less than 2 per cent. of what the market would be better without.

Now let us see how this would affect the consumer. In the long run *not appreciably*, for he would still be protected by supply and demand. It the Association exceeded a fair price, it would know that the market would in consequence be over-supplied. After all the consumers would not feel the Cess when the duty, already 6d., is fully 80 per cent. of the value; the addition of the Cess would be absolutely immaterial, yet providing a fair return to the growers.

When a sensitive market is supplied by a product 6,000 to 9,000 miles away, requiring five years to bear to its full, any extreme rise of price, or the reverse, must be severely felt. The result is, either, *such as unduly increases extensions;* or, on the other hand, establishes a price *disastrous to the grower.* So unless the pendulum can be reduced to a shorter swing, the sooner the owners of 80 per cent. of the aforementioned 30 millions sterling make up their minds to write down their capital the better.

I most thoroughly maintain that being in possession of any commodity we can by disposing of 5 per cent. of this in any way we choose, establish a fair price; in the interests of shareholders, superintendents, and others, all of whom must suffer, if we fail in doing so, then we shall be guilty of culpable unwisdom. I may again repeat, that any forcing up beyond a fair price would be suicidal, as a quiet sufferance of the present conditions will be.

How far growers in London are prepared to enter into a project of this nature could be determined in a few days, and three months afterwards the market would be in hand and a living wage secured.

London, *February 20th*, 1901.

NOTES.

Great Britain will not tax food products, but taxes luxuries, in which alcoholic drinks, tea, coffee, etc., are included. The London industry, I would use as a precedent, deals with food.

Showing the immaterial proportion that ¼d. Cess would have upon cost of 1 lb. of average tea to consumer:—

5½d.	Cost to producer sold in London	32·35 p. c.
1¾d.	Fair return to grower	10·30 „
1 d.	Cost Distribution, Blending, etc.	5·88 „
2½d.	To Retailer	14·71 „
6 d.	Duty	35·29 „
¼d.	Cess (1-68th of 17 pence)	1·47 „
17 pence.		100·00 of 17d.

N.B.—¼d. Cess would mean that high-priced teas paying 4d. per lb. profit, would only pay 1-16th of the profit in Cess; while ordinary teas paying, say, 2d. would pay ⅛ of their profit to the Cess.

OVER-PRODUCTION WORKING ITS OWN CURE IN FINER PLUCKING.

Mr. James Sinclair writes to the Colombo paper:—

With your permission, before leaving for London, I should like to make my contribution to the subject which is occupying all our minds at the moment, *viz.*, the question of restriction of the output of tea.

The "bogie" of over-production which has been rung in our ears now, almost ever since the industry came to any proportions in the island, has apparently overtaken us, and is acting like a nightmare, causing curtailment of credit and crushing the very life out of many a hard-working planter, to say nothing of causing hard-headed men in the city to lose their heads and to devise impracticable nostrums in their anxiety to mend matters.

No doubt the position of the tea market is serious, but looked fairly and squarely in the face, is there any reason to suppose that the natural laws which are set in motion when any market becomes glutted will not operate if indeed they are not now in full force here?

If we examine carefully how this glut of tea has come about it will, I think, enable us to arrive at a true appreciation of what has happened, and how it will mend itself long before a scheme of the kind we have had sent to us from London, could operate at all, even if it would accomplish the object arrived at.

I am one of those who hold that if Ceylon had continued to supply the quality of tea it did seven or eight years ago, instead of there being a glut in the market there would have barely been sufficient to meet consumption. It is overlooked I think, the almost indefinite *quantity* a tea bush can yield if quantity not quality is the object.

The competition amongst packet dealers when prices were cut so low to consumers, led the way to planters going for quantity produced at a low cost, and this became emphasized when the rupee was artificially raised. In fact production of large quantity was the only means at the disposal of most low-country tea-growers by which a profit at all could be worked out. The limit the market can take has been reached sooner than might have been the case but for the rush of leaf last October-November and the fact that dealers had their funds locked up in larger purchases to meet a possible rise in the duty. Otherwise it might have taken still coarser plucking, and another year, to glut the market as it has

Now, fortunately, the working of the natural law which is already in force remedying this condition is simplified by the fact that a reversal of the system which has brought us to this pass can be put in force in a day, and is thus different from, say, a cereal crop which, when sown, must be harvested and thrown on the markets and no reduction of stocks can take place for at least a year.

What has the most dense planter been saying to himself for the last three months, I allude chiefly to growers of the more common teas? He has been saying "unless I turn out a much finer tea than I have been doing, I shall finish my season at a loss," and from my recent visits to most of the districts much finer plucking is being resorted to, nay has been since the beginning of this year. Now any experienced planter will tell you that the difference in yield between medium and fine plucking may be all the way from 50 lbs. to 100 lbs. per acre less, and between coarse and fine almost anything. Well, let us suppose that half the area under plucking in Ceylon (and I am certain I am on the safe side) plucks 100 lbs. per acre less than last year. That is from 200,000 acres (half of 400,000 acres which is the total) we see no less than 20 millions disappearing without the introduction of drastic schemes. We must, however, add to this reduced output, that which will come from fields not plucked last year, which would probably amount to 3 million lbs., and so a fair estimate of what will disappear from the output of last year may I think be set down at from sixteen to seventeen millions —and but for the abnormally suitable weather for the tea bush which has ruled all through these months since the year began, and usually the worst of the year, a very pronounced restriction would have been visible in the shipments ere now. There is, however, a certain comfort in the knowledge that there cannot now be the usual rush of leaf for April-May when a great deal of our worst teas are made—a dearth of flush through the usual dry weather is invariably followed by rapid growth during April and May, but not so in the event of weather such as we have had prevailing through January, February, and March.

But there is another factor, and a very important one, which must also be reckoned with in dealing with tea yields.

Every one is agreed that all round, taking the last two years, the most splendid weather for tea flushing has ruled. If we could not prove this by examination of the different Companies' annual reports where the same tale runs through all of them, *viz.*, estimates of crop largely exceeded, it could be done by a walk over the tea districts. I know the greatest difference since I was here three years ago in the increased size and freshness of the bush, whether manured or otherwise. Consider then what one untoward season as regards weather may effect in restricting output. If you ask an experienced planter to what extent a bad year may reduce his yield, he will put it at from 50 lbs. to 80 lbs. per acre. and we all know *individually* that it will. It would be entirely misleading to point to our ever-increasing annual output in disproof of this. Young fields have been coming to the pluck yearly so far, and makes it appear that weather will not affect or vary the total output, but a day is fast approaching, if indeed it has not arrived, when Ceylon crops alone will vary one year from another owing to good or bad seasons as much as 20 millions a year. That is when all young fields are in full yield.

I have been dealing with Ceylon alone, but if I am right regarding what I have here set forth about tea it applies to India as well and I do happen to know that instructions to planters there have arrived to the effect that finer plucking must be the order of the day. Consider then the restriction this must cause in dealing with an area of half a million acres.

I cannot, therefore, but think that serious as the market position is City merchants are playing into the hands of the dealers by over-estimating its seriousness, for its reversal is entirely in our hands, and at the moment is being worked out. I would ask those gentlemen who feel inclined to throw up the sponge to have a little patience, to perhaps bestow, on the whole, a little more attention to their factories and the details of manufacture; exorcising from their minds some of the senseless cuckoo cries always rampant in Ceylon, such as "Tea is made in the field"—which is only the case in the same sense that porridge is made in the oatfield—"Manuring is the curse of the enterprise" on the one hand; "It is the sole cause of over-production," on the other; "it is a most

dangerous thing to do" as "it must force growth and so end in killing the bush." Surely if there is ground for the latter the gentleman who takes credit for *unselfishly* abstaining from its use should be pleased, as according to him the days of the manured fields are numbered, especially if he uses sulphate of ammonia as an ingredient.

No, I firmly believe before August next there will be a dearth of tea visible, and a very different complexion will come upon the tea market, credit, etc.

I had almost omitted to notice one point in favour of the early disappearance of the excessive stocks in London. The fact that dealers are overloaded with teas at 3d. and 4d. will prevent orders going to China for that class of tea; hence I should expect this year to give that trade the *coup de grace* and so work off the surplus stocks of Indian and Ceylon teas in a very short time.

I feel satisfied nothing can come of the present scheme for restriction of plucking area, and when I arrive in London I intend to endeavour to have one agreed upon which I submit would be more workable and efficient in reducing yield.

If those interested in the enterprise will sign assent to give instructions, say on the 1st December next, so far as Ceylon is concerned, that no tea shall be made in their factories for that month, and in the case of India for October, their last manufacturing month, we should see an immediate response in price, because the dealers would know that restriction was meant.

I would propose to put this in force only if most of my contentions are not verified before that date by a considerable falling off in shipments, or a much better price ruling for teas.

By this scheme evasions as in the other one for restricting plucking area would not be possible. A man might contrive to sweep off every shoot at 30th November and would take care to have a good flush coming on early in January, but it would certainly reduce output from 8 to 10 per cent., whilst my opinion is the other would not take 2 per cent. off. Save the loss of the tea for December, which would be more than made up for in price. The only cost it would probably entail would be the labour, going round, say, about 20th December to break down the runaway flush and to have the bush in condition for January.

FREIGHT ON COFFEE.

The arrival in the port of New York of the Lamport & Holt's Line steamer Rossetti with a cargo of 126,000 bags coffee from the port of Santos is quite significant as marking a new era in the coffee-carrying trade. The Lamport & Holt Line is the oldest established line of steamers in the coffee-carrying business from Brazil to the United States, and this line owns an enormous quantity of tonnage. So also do the other two important lines engaged in this trade, the Prince line and the Robert M. Sloman Line.

Going back some twenty years it was considered quite an event to get a cargo of coffee from Santos in excess of a total of 10,000 bags or from Rio of about 30,000 bags, and in the old days of the Baltimore clippers it was quite a circumstance to have a whole cargo of 12,000 or 15,000 bags of coffee come in here belonging to one firm. The enormous jump during the interval can be understood when we look at the cargo by the Rossetti, of which nearly 75,000 bags belong to one house in New York, representing a total value of about $750,000. It may be interesting to our readers to see the manifest of the cargo with the names of the consignees as given below:

Santos — Bags—in New York.

73,000	to W. H. Crossman & Bro.
300	to Heidelbach, Ickelheimer & Co.
18,240	to London & Brazilian Bank.
4,300	to Brown Bros. & Co.
1,000	to National Bank of Commerce.
4,000	to Guaranty Trust & Co.
500	to Winter & Smillie.
2,000	to Merchants' Banking Co.
3,000	to London & River Plate Bank.
6,026	to The Bank of New-York.
250	to Schulz & Ruckgaber.
1,006	to The Thomson & Taylor Spice Co.
1,499	to British Bank of South America.
6,550	to "Order"
*7,500	to various parties.

*About.

The first conclusion to be drawn from the above is the present enormous producing capacity of the coffee plantations in Brazil, the combined Rio and Santos crops having increased from an average of about 5,000,000 bags in the 14 years from 1882 to 1896, up to an average in excess of 9,000,000 bags the past four years, and which prospects of going far beyond this figure in the next crop. It is not alone that an occasional steamer like the Rossetti, with a capacity of 130,000 bags of coffee, comes here from Brazil, but the entire coffee carrying fleets consist of much larger and better boats than those belonging to the old school

The necessities of the business have led to the building of such steamers, and without such good tonnage available in that trade Brazil would find it a very difficult matter to be able to store the surplus of their crops. As it is the port of Santos is strained to its utmost capacity to store the coffee, there being some 1,400,000 bags of coffee now held in warehouse in that city. New York is not alone in receiving large coffee cargoes as mentioned above, the ports of Hamburg, Havre and the Netherlands receiving at times very heavy cargoes.

The stocks of coffee held in the principal seaports of Europe are now the largest ever known, say about 8,000,000 bags, which goes to show how the stocks have accumulated as the result of the increased production the world over, besides which the stock of coffee now in the seaports of the United States run up to over 1,000,000 bags.

The development of the shipping capacity for handling coffee is an evidence of the enterprise of the different steamship lines engaged in this trade, and it can further more be stated not only are the steamers of extraordinary capacity, but they are well built and the arrangements such as to offer best ventilation of the coffee during transit.—*New York Journal of Commerce*, Dec. 17.

COFFEE AND CINNAMON IN LONDON.

The "Rooms" bore a more cheerful aspect during the present week than they have done for some time past, says *The London Commercial Record*. An improved state of trade was, of course, the sole reason for it. From the animation in the coffee trade and from the loud bidding and counter-bidding emanating from the corner behind the pillar, it was evident to the most casual observer that a change for the better had come over the market. As a matter of fact the bulls were at last having a few "field-days" in the terminal market and were driving prices up at a most satisfactory rate, much to the discomfiture of bears, who had calculated on much lower prices ere a change for the better would set in. No doubt their anticipations would have been realised had not the American Copper Ring taken it into its head to buy up Brazilian Coffee, its low price appearing to the members of the Ring attractive and safe enough for an investment. The purchases of this clique have been the reason and unfortunately the only one, for the recent spurt in prices. The disquieting point in the whole affair is that nobody appears to have any knowledge how far the American bulls are determined to drive prices, the moment therefore, America stops buying, the terminal market immediately displays signs of weakness and prices give way. Possibly the example set by the Yankees will encourage the bolder element on this side of the "herring pond" to follow suit and lend by their purchases additional strength to the market. So far participation has not been very much in evidence, and the fact that actual coffees have not been affected by the rise in the terminal market appears to us not a very promising omen for the future of coffee. Spot lots of all descriptions—except the very finest—continue to realize wretched prices. It seems altogether a most thankless task to hold goods on the spot, the demand for them as a rule does not exceed the limits of a retail trade, and the profit in the end is generally swallowed up in heavy dock charges, interest, and incidental expenses. It is a wonder that the total of consignments to our port is still such a considerable one as it really is. Evidently, in spite of all we hear about the marvellous doings on the Continent, we are still holding our own although the competition from the other side of the Channel is getting keener almost every day and the absence of the pleasant little orders which used to find their way into our market is painfully felt. The result of this week's quarterly cinnamon sale would probably have been a vastly different one were London still the distributing centre of the world. Being dependent on its own consumption and a few stray foreign orders, the quantity offered

for sale, about 2,000 bales, proved far in excess of the requirements, and a dull, uninteresting sale ensued. Holders seemed determined to meet the market, and in order to do so had to accept a decline of ½d. per lb. for ordinary, 1d. for good, and 1d to 2d. for fine quality. Even at this reduction the demand was but a poor one, and not more than about three-fifths of the whole quantity offered found buyers. So far Colombo has remained unaffected by the result of the sales, but, hard as it may try, it cannot fail to feel the effect of a bad London Quarterly Sale, and lower values may be expected unless, indeed, something unexpected should happen, like it did this week in pepper and quinine, when a sudden demand prompted planters and manufacturers to put up their prices, thereby frightening bears into covering and encouraging bulls to buy. The tone in these latter markets has become a firm one, and it remains to be seen whether bulls are strong enough to maintain the improvement.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange—*February 2nd*, 1901.—Ninety days' rate on London opened on Monday 28th ultimo at 19 1/32d., rose to 10 3/16 on Friday 1st instant, and closed in the evening 10 5/32d. Saturday being a holiday.

Happy the country that has no history and the market when exchange and all relating to it is as dull and unprofitable as now. For over five months exchange has oscillated between the narrow limits of 9 3/4d and 10 1/2d. to the advantage of business of all kinds. If only it would go on in the same manner for a year or so! But such a prospect is too bright to last, and within two or three months at least we shall have the annual boom upon us once more. One thing is evident, that the "bears" have been able to make no headway whatever and that in spite of our being now nearly into the dullest season of the year when bills always commence to get scarce, not only is the rate steady but there seems no inclination whatever to go for the fall. The explanation is the scarcity of money: from Dan to Beersheba, money, money, is the cry and, instead of a loaf, the unfeeling Minister presents a stone, and goes and burns a lot more shinplasters! All the same it is the scarcity of money to play with that alone keeps up exchange just at present, that and the equilibrium of foreign payments.

Sales were a little better last week 164,000 bags at Rio and Santos against 156,000 the previous week and 121,000 last year; but coffee prices again relapsed to an average of 7·01 cents and f.o.b. value to 34s. per bag.

A few bills were reported to be offered from Pará and Pernambuco, but not enough to lift the market out of its lethargy.

The value of the coffee sailed last week was £114,352 against £269,726 the previous week and £321,279 last year. From 1st July to 1st February the total value shipped is £13,298,938 as compared with £10,643,270 during the previous corresponding period.

During the month of December paper money to the amount of R13·613:448$ was exported by this market of which R4·500:000$ went to Pará and Manáos and R8·000:000$ to Sao Paulo. In return only R1·593:565$ were received, half from Pernambuco.

The movement of money along the coast shows that the total exports by this market to other States during the past year amounted to R74·096:679$ and receipts to R51·106:900$ including the movement on the Central Railway.

Coffee.—Entries at Rio and Santos during the week ending February 1st were again very considerable in spite of the rain, being 67,616 more than the previous week's and 78,455 in excess of those of the corresponding week last year.

The weather continues to be wet and stormy and to give much trouble to the railways. What state the country roads must be in when even railway traffic is interrupted we shudder to think! Innumerable bridges have been completely destroyed, and in the present general hard-up condition scarcely seem likely to be replaced. The Bananal branch line has lost two bridges and had a lot of the permanent way washed away. The proprietor says he has no money and can't repair the damage; so unless something is done to assist, it seems likely that that district will have to return to the primitive system of mule back for transport. That of course means extra expense, about 400 reis per *arroba* more than before. As we pointed out before, such continuous rain cannot be good and in the long run seems bound to affect the volume of the coming crop as well as its quality. Sad stories, too, are coming-in regarding the lack of labour and of money to pay for it, but if the coffee is there we do not doubt it will be picked somehow and marketed even if prices keep above the absolute cost of delivery. However hard up *fazendeiros* may be there are always people ready to buy on the trees or work on shares rather than be idle. The trouble will come when exchange begins to boom again unless stocks can be worked off before that. The current crop is turning out much bigger than anyone expected, already exceeding that of 1899-1900 by 459,000 bags whilst there is said to be a lot up-country waiting to come down. Anyhow it will go over 9,800,000 for Rio and Santos alone. Such a crop if followed by a bumper year cannot fail to weaken the trees and result in a smaller crop in 1902-1903.

A Coffee Trust.—Coffee is going down and, consequently schemes to bolster it up are again putting in their appearance, the favourite being an invention of Dr. Salvador Mendonca's, originating, we believe, in the fertile Yankee brain, to give the monopoly of export to a Syndicate that, on its side, shall undertake to purchase all the coffee offering at a fixed rate, actually considerably over market prices. If it were not for the interference with individual rights and the sacrifice of principal that such a scheme would entail, the best way to quiet such visionaries would be to let them try the experiment, when after dropping a few millions they would probably get tired of it and discover, as the Copper and similar Syndicates before them, that the laws of supply and demand may be interfered with but cannot be abolished by Syndicates or anyone else. If we have too much coffee it will go down in spite of all the Syndicates in the world.

S. Paulo.—The yield of coffee in Theophilo Ottoni promises to be enormous this year. Hands for gathering are very scarce there.

The weather in S. Paulo and district appears to be engaged in a record-breaking enterprise. the downpour of rain having been such for the last day or two that floods and inundations may be looked for.

During last year, on account of the contract of 6th August with Fiorita & Co. and Jose Antunes dos Santos & Co., 10,755 immigrants entered the port of Santos: Italians 7,047, Spaniards 2.097, Hungarians 795, Portuguese 245, and Sundry 31.

In Mogy-Mirim the crop of pine-apples (*abacaxis*) is so large that many planters have given up gathering them, the price obtained in the market not being sufficient to pay the labour.

The Secretary of Agriculture will shortly distribute seed of a new variety of *capim* (long grass used for forage) which gives two crops during the year and is extraordinarily nutritious.

Accounts from Ribeirão Preto state that the coffee, maize, rice, and bean plantations give promise of heavy crops this year.

Experiments are to be made with Egyptian coffee in this State, the seeds having been imported and offered to the Secretary of Agriculture by Messrs Lion. & Co. of S. Paulo.

In Casa Branca the flowering was good, but the fruit is so unequal that some planters will probably have either to incur the expense of two gatherings, or lose a third of their crops.

ORANGE CULTURE IN SOUTH CALIFORNIA.

The following excellent article on Citrus Fruit Culture in California is taken from *Chambers's Journal*, and may be accepted as authoritative :—

The culture of the orange-tree has greatly increased in South California within the last few years, despite the many difficulties the growers have had to contend with. Florida was once the largest orange-producing State in the Union; Riverside, a country in the South California, is now the largest orange-producing district in the world. Even Covina, a comparatively new orange-section, also in South California, last season (1899) shipped 100,000 boxes more than the whole State of Florida. Given suitable soil and plenty of sunshine, irrigation and cultivation have done to the rest; and

the result to-day is thousands of acres of beautiful trees in bearing, averaging about a hundred trees to the acre.

The celebrated "seedless navel orange," first produced in Riverside, practically gave South California its world-wide reputation for orange-growing; and this orange has completely thrown into the shade other varieties—such as Mediterranean Sweet, Valencia, Ruby and Malta Bloods, St. Michael's, and others less known. Growers have discovered that, for size, flavour, and steady bearing, no other orange can compete with it.

The first year of the orange-tree's life in the orchard is a most critical period in its existence, because it has just been transplanted from the nursery, in which, during its growth for three or four years from the seed, it has been carefully nurtured, and is then worth from 50 cents to 1 dollar—that is, 2s. to 4s. The young trees are planted in the orchard in rows accurately measured off, 18 by 20 feet apart.

The Washington navel orange-tree fruits the first year in the orchard, but is only said to be in bearing the third year; and from that time it must be fed and watered with the greatest care if, at the age of twelve years, it is to produce 700 lbs. of fruit. Many of the most successful groves are of comparatively old growth, planted some twenty-two to twenty-five years ago; but the health and productiveness of these trees have been maintained by the generous expenditure of fertilisers—often amounting from 1 ton to 1½ tons to the acre, consisting of guano with necessary proportion of potash and sulphate of iron—and also by the regular irrigation in Summer every thirty days, and by incessant cultivation of breaking up of the soil which is so apt to become baked by the sun. In the first instance the virgin soil, is extremely fertile, but it cannot be drawn upon year after year with impunity; and the pioneers discover this, to their loss, when the decadence of their orange-trees became evident. Young orchards pay while the soil is virgin, but it is no economy to spare either water or manure, after the first year or two of bearing, if the orchardist wishes his trees to maintain their productiveness. Some growers state that slight blemishes on oranges denote too rich feeding of the trees; but I believe this opinion is held by a minority.

The grower has practically nothing further to do with the oranges after they leave his orchard; the sorting, cleaning, grading, and final packing for the market are in the hands of the Association packing-houses—unless, of course, the grower himself has been able to establish a brand and a packing house of his own. Usually the grower is supplied with boxes by the Association, and into them the oranges are loosely packed by his pickers, piled up on waggons, and taken into the packing-house. There the teamster receives a cheque or credit note for the owner, and these are kept three or four months, and used to check the amount then receivable from the Association. The price depends on the kind of season, also upon the grade of orange and runs from about 90 cents (3s. 7d.) or 1 dollar (4s.) up to 2 dollars 50 cents (9s.) a box, the average being 1 dollar 15 cents (4s. 7d.).

The first process at the packing house is to weigh the fruit, and label it with the name of the owner, then put it aside for the brushers. In large houses the brushing is done by machines; in smaller houses by boys and girls, who use small hand-brushes. Generally the packing machine is conveniently placed so that the oranges roll down an incline to the sorter's table. Here imperfections only are noted, the quick and critical eye of the sorter rapidly rejecting the "culls" as they are called—namely, those oranges even slightly discoloured or blemished. Great piles of these "culls" may be seen in labelled bins ready to be sold to the peddler for 10, 25, or even 50 cents (½d., 1s., 2s.) a box; if totally unsaleable they are returned to the owner, and scattered over the orchard and ploughed in as a fertiliser. The next process is that of grading, by which the oranges are sorted according to size. The grader is a somewhat intricate machine. From the hopper at one end, the oranges roll down an incline by the side of a revolving cylinder, along each side of which are two long slits widening towards the end, each size falling through its own special chute into a box below. The three grades of marketable oranges are the fancy, the choice, and the standard. After being graded, the oranges next come into the hands of the packers, who are marvellously dexterous in their handling. They stand in front of the box to be packed, with the bin of oranges on the right and a bunch of tissue-paper wrappers on the left. Swiftly the right hand takes an orange, simultaneously the left hand seizes a wrapper, a sound of crumpled paper, and-hey, presto!—the orange is in the box. The last layer is left slightly protruding above the side of the box; over this are nailed three or four thin laths, with a space between so that the air may have free access; and from the nailer the box goes direct to the road car. Many houses have a siding to the warehouse door. About 36 boxes, weighing 13 tons, are piled carefully into a car; the car is then sealed up, ventilators only being open; a large ticket is tacked to the side to tell where the fruit came from; and at last the oranges are ready for the swift freight train to carry them eastward.

The packing-houses are extremely interesting, and in many instances have cost from 10,000 dollars to 15,000 dollars (£2,500 to £3,750) each, being equipped with the latest machinery run by electricty, gasoline, or steam-power. Quoting from the annual mid-winter number of the *los Angelos Times;* "Last Spring the assessment returned 2,072,417 bearing orange-trees and 1,227,397 trees in their first year's growth. These citrus trees produced in 1897, in cart-loads in 1899. The value of the output of 1899 is given by the Chamber of Commerce as 7,000,000 dollars."

Lemons are included in these assessments, as the railroad lines make no difference between the two shipments when reporting for the trade; as a rule the shipment of oranges is nearly double that of lemons. To the uninitiated there is little difference at a first glance between an orange orchard and a lemon orchard; there is the same precision in planting the same glossy leaves, the same fragrant white blossom; but, unlike the orange, rarely does one see the lemon in its yellow rind, for it is picked green, and thus the tree is divested of its beauty, for the green lemon is an insignificant object. Latterly the orange, owing to the rivalry among the growers to be the first to ship the oranges to California, has been gathered unripe; but these early shipments have brought so little profit to the growers that the fruit is generally allowed to remain three months longer until it is ripe and luscious for the table. Lemons are picked every month in the year; while oranges blossom in April, and the fruit ripens and is shipped from December of that year to June of the following year.

As yet nothing has been done to utilise the large number of "culls" but, as in France and Italy, manufactories will, no doubt, be started to obtain acids and essential oils from these "culls" when the enormous water-power available in the mountains at whose feet so many orchards lie, has been fully developed.

Many difficulties have been encountered in the orange-culture of South California, of which not the least has been the white scale, an insect pest which threatened at one time the entire destruction of the orchards. Hundreds of acres have been ruined; the trees seem to be covered with snow, so greatly infected had they become. The climax was reached in 1888—99, when meetings were held by the growers, and the idea was mooted that some parasitic insect should be found to wage war upon this white scale. Half-a-dozen lady-bird beetles were imported from Australia by the Agricultural Department, and liberated in an orchard; and in about a year the white scale totally disappeared. Other scales caused trouble, but to no great extent. Fumigation is successfully resorted to, each tree being covered with a tent, inside which is liberated cyanogen gas. The fumigation is done at night to prevent decomposition of the fumes by the sunlight. It is a curious sight to see a whole orchard enveloped in these coverings, like a huge encampment on a field of battle. Frost, too is an always expected danger, but it is not experienced to the same extent as by the Florida growers, and frequently two or three years will pass without any danger being done. Wind is almost as great an enemy as frost, for the waving of

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

he branches causes friction between the leaves and the oranges, he latter being more or less scarred thereby. Great loss, too, is aused by the windfalls, hundreds of oranges being lost to the grower before they have come to perfection. Frost, however, may e considered an insidious enemy, and on that account it is more ifficult to fight, for its effects are not immediately apparent; instances have occurred in which the oranges have actually been hipped eastwards in good condition even to the eye of the grower nd the packer, only to be declared unsaleable, as, on being cut open, he pulp was found almost rotten. An experiment to obviate the ction of wind and frost has been tried—to house the trees collectively nder one immense framework of wooden laths so placed at intervals s to admit the sunlight and air, but sufficient to break the force of he wind. This scheme has been carried out successfully on the Everest Ranche, Riverside county, with such good results that the production of 17 acres thus covered in has far exceeded that of any previous ear. The more common expedient is to plant eucalyptus trees in long ows across the general direction of the wind, thus forming a breakvind, much in the same way as the tea and coffee plants in Ceylon re protected.

Notwithstanding all drawbacks, orange-growing is a pleasant and ucrative occupation, especially when carried on in such a healthgiving and equable climate as that of South California.

THE PROSPECTS OF COFFEE.

Regarding the prospects of coffee in 1901 Messrs. Duuring nd Zoon express their opinion as follows :—

"Prospects for the new year are scarcely in favour of strong narkets, whilst advices as to the next crop, 1901-1902, report it as ikely to be very heavy. Besides, there seems to be considerable nisunderstanding as regards the extension of consumption in aking the heavy deliveries of 1898-99 as a basis, which were chiefly ttributable to heavy transfers of *Visible* to *Invisible* stocks during he period of very low prices then ruling, and explains why deliveries have ceased growing this year, but allows expectation of a resh extension in 1901."

Le Bulletin de Correspondance du Havre is of a somewhat similar pinion to that we expressed sometime back, that coffee prices will e firm or rising during the first half of the current year, and weak r falling during the second half.

There are, however, so many and complicated factors to be taken nto account, that prophecy is, to say the least of it, extremely azardous. It is true that a tremendous crop, probably considerbly in excess of immediate consumption, must be faced, that alone would certainly entail a heavy fall of sterling prices. But against his the almost certainty of a much smaller crop for 1902-1903 must e placed, and the influence that rising rates of exchange may imultaneously exercise. We do not pretend to fix a minimum urrency rate at which coffee will cease to come from the interior, ecause it must vary with the circumstances of planters and of ocality, but believe that the prices already reached are to say the east of it, rapidly approaching that point. No doubt the coffee lready in stock will be shipped at any price, but will new coffee be ent down if it is certain to leave no profit and perhaps, a loss?

There is unquestionably a minimum currency price that, as far as ew coffee is concerned, cannot be passed. Once that price be eached, it does not matter what the relations of supply and demand may be abroad, sterling prices cannot fall any further unless ccompanied by a fall of exchange, by which currency prices might e maintained. On the contrary, in spite of the prospects of a ecord crop, should exchange happen to rise, as there seems some xpectation of its doing, sterling prices would be obliged to rise *ari passu* also.

The danger of the situation lies in the possibility of a gigantic ear movement during the second half of the current year when he bills sold in advance are being delivered, and the reaction to he periodical rise, that accompanies the opening of each coffee eason, has set in.

The scarcity of available bills might then force down exchange nd enable foreign markets to buy more cheaply whilst maintaining he indispensable currency minimum. In this manner the fall of coffee prices and of exchange would react upon each other and inevitably give rise to a dangerous (bear) movement in both, that, if unchecked, might have the most serious consequences.

It is possible, however, that the prospects of a small crop for 1902-1903 may correct these tendencies to some extent, but, in face of the inevitable speculation for the fall, this cannot be much relied on. It would be far better to meet the enemy squarely and fight him with his own weapons, by restricting the supplies and holding back our produce for better times.

If it is true, as is generally believed, that the 1902-1903 crop will be, perhaps, only half of that for 1901-1902, the policy that planters should pursue is unmistakeable—to keep all the coffee they can and only market what is absolutely unavoidable.

On their side we believed that the Bank of the Republic and Government should make preparations for the bad time awaiting exchange at the close of the year, by accumulating every possible note that can be laid hands on and taking all the exchange possible when rates are booming in April or May, to resell when they commence to fall again towards the end of the year and thus, perhaps, save the situation and prevent a *debacle* in both Coffee and Exchange.

It is a pity that the 25,000 contos that are to be burned this year cannot be applied to this object. No doubt the restriction of the currency will have a steadying effect upon exchange, which would, however, be certainly neutralized and counterbalanced by speculation. Utilized as we propose, the results would be to greatly reduce oscillations and, by preventing too violent a rise, to restrain speculation and restrict the subsequent fall. In compliance with the terms of the funding arrangement, it might be agreed to burn the paper as it came in against re-sale of the bills. A double effect would be thus produced just at the critical moment, the supply of bills would be augmented and the supply of money, which consitutes a considerable factor of demand for bills, would be reduced.

Heaven helps those who help themselves; so let us look to it and not trust only to luck in this, perhaps, the most critical page of our financial history.—*Brazilian Review.*

DISTRICT ASSOCIATIONS.

NELLIAMPATHY.

Proceedings of a Meeting held at the Victoria Bungalow on the 8th instant. PRESENT :—J. C. Abbott (*in the Chair*), H. de Coucy-Dening, A. R. Jones, G. H. Welchman, and W. R. M. McKenzie, *Honorary Secretary.*

Roads.—Read correspondence with President, Malabar District Board, on the state of roads near the boundary. The Association notes with pleasure repairs have been carried out. Read letter to Chief Engineer, Cochin State, asking for a new bridge in place of No. 4, Western road, Plateau section. Read letter asking Chief Engineer to expedite the erection of new bridges on Karidi Mulla section, materials being all ready. Read letter calling attention to the urgent necessity of improving or re-erecting bridge No. 2 between Poliyampara and Padagherry.

Police.—Read correspondence on this matter and Honorary Secretary instructed to write and ask Acting Superintendent of Police for his report on the local police.

Sanitary Board.—Read letter from Dewan that the revised scheme had gone up to the Resident for sanction. Read telegram from Dewan that scheme has been sanctioned and orders were being issued. Recorded with satisfaction.

Postal.—Read correspondence with Postmaster-General and his consent to give the local Postmaster hill allowance.

Isolation Hospital.—Read correspondence on urgent need of above. Honorary Secretary to write to Mr. Jones, of Padagherry, asking him to recommend his proprietors to grant a portion of abandoned land near proposed hospital site.

(Since the meeting the Dewan has issued orders on the above).

Salt and Abkhari Peons.—Read correspondence with Assistant Commissioner complaining of frontier peons. The Assistant Commissioner has kindly ordered up an Inspector to hold an enquiry.

Apothecary.—Honorary Secretary reported that the Apothecary had agreed to accept horse allowance and reduced fee of Rs. 2 for each private visit, having provided his own horse.

Mr. G. H. Welchman was appointed Acting Honorary Secretary.

The proceedings closed with a vote of thanks to the Chairman.

(Signed) J. C. Abbott,
Chairman.

(„) W. R. M. McKenzie,
Honorary Secretary.

INDIAN TEA ASSOCIATION (CALCUTTA).

The following are extracts from an abstract of proceedings of the first meeting of the General Committee elected for the year 1901, held on 6th instant. Present :—Messrs. H. S. Ashton, H. C. Begg, H. W. Boyd, R. H. A. Gresson, W. Holder, A. Magor, A. Tocher, and R. R. Toynbee.

On the motion of Mr. Begg seconded by Mr. Toynbee, Mr. Ashton was unanimously elected Chairman, and Mr. Tocher, Vice-Chairman for the current year.

Considered a letter No. 492, dated 21st February, from the Director of Land Records and Agriculture, Assam, asking for the average prices realised for Assam tea during each of the three-quarters ending respectively on the 30th June 1900, the 30th September 1900 and the 31st December 1900. It was asked that the prices for the Brahmaputra Valley and the Surma Valley should be shown separately. At the Committee's request Mr. O. B. Griffiths, of Messrs. Moran & Co., had kindly compiled the following averages :—

Average prices of Tea in Calcutta.

				As.	P.
Brahmaputra Valley—					
For Quarter ending	30th June 1900 ...	1,916	packages...	5	7
Do.	30th September 1900 ...	53,174	do. ...	7	1
Do.	31st December do. ...	47,096	do. ...	5	9
Surma Valley—					
For Quarter ending	30th June 1900 ...	14,569	packages...	4	9
Do.	30th September 1900 ...	94,656	do. ...	5	3
Do.	31st December do. ...	84,661	do. ...	4	6

Average prices of Tea in London.

				d.
Brahmaputra Valley—				
For Quarter ending	30th June 1900 ...	53,942	packages ...	9·03
Do.	30th September 1900 ...	100,340	do. ...	9·80
Do.	31st December do. ...	224,075	do. ...	8·46
Surma Valley—				
For Quarter ending	30th June 1900 ...	41,355	packages ...	6·24
Do.	30th September 1900 ..	70,590	do. ...	6·35
Do.	31st December do. ...	131,913	do. ...	5·85

It was decided to forward these figures to the Director of Land Records and Agriculture, Assam, in response to his request. But a note was to be added to the effect that they could not be considered as accurately representing the average prices for the season of 1900-1901; as the tea season extended in Calcutta from the 1st April to the 31st March, and in London from 1st July to 30th June. For the same reason the London averages for the quarter ending 30th June 1900 referred to tea manufactured chiefly during the season 1899-1900.

Copies of a circular, relating to the proposed reduction of output, which had been issued, on the 14th February, by the Indian Tea Association (London) and the Ceylon Associations in London were to be distributed immediately among all Agents of Tea Estates. In the circular support was invited to a scheme for curtailing production, which had been prepared by a Joint Committee of the two Associations in London.

INDIAN TEA ASSOCIATION.

The following are extracts from an abstract of proceedin of a meeting of the General Committee held on 12th Marc Present :—Messrs. H. S. Ashton (*Chairman*), A. Toch (*Vice-Chairman*), H. C. Begg, H. W. Boyd, W. Brow W. Holder, R. Magor, and R. R. Toynbee.

The Hon'ble Mr. J. Buckinghan, C.I.E., was present by invitati

Before the ordinary business of the meeting was proceeded wi the general arrangements under the new Assam Labour a Emigration Act were discussed ; and a hearty vote of thanks w unanimously accorded to the Hon'ble Mr. Buckinghan and t Hon'ble Mr. Henderson for the valuable services they had render to the industry in connection with the measure.

Letters of 1st, 8th, 15th, and 22nd February, from the Secreta Indian Tea Association, London, were brought up for final conside tion and disposal after previous circulation. The chief matters de with in these letters were :—

Proposed restriction of output.—In the proceedings of the meeti held on the 6th March, it was stated that copies of a circular, dat 14th February, which had been issued jointly by the Indian T Association (London) and the Ceylon Association in London we to be forwarded to all agents of Tea Estates. In remarking up the circular in his letter, dated 22nd February, Mr. Tye stat that the following firms had signified their intention to reduce ou put, *viz.*, Messrs. Jas. Finlay & Co., P. R. Buchanan & Co., Octavi Steel & Co., and Stewart McLeod & Co. The list of Compani included the Assam, Nedeem, Imperial, Lungla, Derby, Easte Assam, British Assam, Looksan, East India and Ceylon, and Ch gola Tea Companies.

The General Committee noted this list of adherents with satisfa tion. They also had before them a number of letters (in reply their Circular No. 6 of 19th January) containing many sugge tions for reducing output. Judging by the letters, however, the did not seem to be much likelihood that any one plan would generally supported. Seeing, therefore, that in accordance with t terms of the London circular, producers could decide for themselv within certain limits, as to the method by which the reducti should be effected, the Committee recorded their unanimous opini that it should receive the support of all who favour restriction output. They thought it desirable to call attention to the fact th the only question asked in the circular was weather each produc would agree to reduce his output by a certain percentage, provid that producers generally agreed to reduce the total crop by t million lbs. for India and eight million lbs. for Ceylon. T Committee also wished specially to point out that no produc would be bound by his undertaking to curtail his output unle sufficient support were received to ensure the reduction of t total crop by the amount indicated.

It being of importance that prompt action should be taken, t Committee hoped that the replies of producers would be return as speedily as possible.

Bounty on Green Teas.—It was stated in the proceedings of t meeting held on the 22nd January, that the London Committ were to be asked if there was any objection to the bounty bei allotted on their green or *namuna* teas; and also if the quanti upon which the bounty might be paid could extend to 250,000 l From the remarks made, in reply, in Mr. Tye's letter, of 15 February, the General Committee understood there was no obj tion to their proposal being put into force. But in view of the fa that the manufacture of green tea is one of the methods whi (according to the London Committee's circular of 14th Februar producers may adopt to reduce the output of black tea, they agre to take no steps in the way of again offering the bounty pendi the decision of the industry upon the question of reduction.

It was, however, agreed that a Sub-Committee should be appoint to consider, in the meantime, the general question of the princip upon which the bounty should be allotted in the event of its bei offered. The Vice-Chairman and Mr. H. C. Begg consented to a as the Sub-Committee; and it was understood that they would co sult the experts engaged by the Association regarding any poin upon which expert advice might be required.

Messrs. Finlay Muir & Co. were to be asked to procure fro

ylon a chest of each grade of a good standard Ceylon "green" tea r distribution in samples among Managers.

British import duty on Tea. In Mr. Tye's letter, dated 22nd ebruary, it was stated that in London it was considered extremely probable that any addition would be made to the import duty in e forthcoming Budget. A joint letter from the Indian and Ceylon ssociations would be sent to the Secretaries of State for India d for the Colonies asking that the Chancellor of the Exchequer ould be approached with a view to the partial remission of e duty.

French import duty on Tea.—With the same letter Mr. Tye for-arded a copy of a communication from the Secretary to the ritish Chamber of Commerce in Paris upon this matter. In this tter paper it was stated that negotiations were proceeding be-reen the French and the British Governments for some arrange-ent which would enable British Colonial produce to come under e tariff minimum. Nothing definite had, however, so far been ttled.

Considered a file of papers in connection with the question of the le of tea in India.

After some discussion the following resolutions were unani-ously adopted:—

(1) "That a Sub-Committee be appointed to consider generally e question of increasing the sale of tea in India; to submit a efinite scheme and to advise as to the provision of the funds and e organization which would be required to put the scheme into ractical operation."

(2) "That a recommendation be made to the London Committee the Association to the effect that a sum of Rs.5,000 be appro-riated from the American and Foreign Market Fund for the rpose of meeting the initial expenses of any scheme that may be ventually decided upon."

The Hon'ble Mr. Buckingham, Mr. H. C. Begg and Mr. W. Brown nsented to serve on the Sub-Committee, and the following entlemen were also to be asked, *viz.*, The Hon'ble Mr. R. H. enderson, Mr. D. King, of the Bank of Calcutta, Mr. H. R. cInnes, of Messrs. J. Thomas & Co., and Mr. W. T. Carter, of essrs. W. S. Cresswell & Co., with power to add to their number.

Considered a letter, dated 14th February, and a telegram, dated 1st February, from the Honorary Secretary to the Kangra Valley lanters' Association, respecting the sale of Indian tea in Persia. the letter it was stated that the Kangra planters proposed to send caravan of a hundred camels (carrying 32,000 lbs. of tea) into ersia by the Nushki-Seistan route from Quetta. It was under-ood from the telegram that the caravan would start some time uring June or July, and the General Committee were asked if the ssociation were desirous of supplementing the quantity mentioned. ooking to the fact that Mr. Foley had recently started for Quetta a similar mission, the Committee decided to await his report, nd to take no further action at present beyond drawing the atten-on of members by circular to the opportunity of sending tea into ersia which would be afforded by the proposed caravan.

Considered a letter, No. 640-P, dated 27th February, from the overnment of Bengal. Political Department, covering a copy of communication from the Government of India, Foreign Depart-ent, regarding the possibility of facilitating the trade in Indian a with Chinese and Russian Turkestan. On the 3rd November st the Committee approached the Government of Bengal upon is subject. They pointed out that there was no doubt that tea, some form or other, was extensively consumed in both the ountries indicated. It certainly was in Chinese Turkestan; but was almost entirely China tea. In localities comparatively near the Indian frontier the consumption was said to be about 80 per ent. Chinese to 20 per cent. Indian. In the more remote pro-nces the proportion of Indian tea was believed to be very much ss. The Indian trade with Chinese Turkestan appeared to be ractically unfettered so far as import duties or restrictions were oncerned. Not that no duties had been levied by the Chinese overnment, but that they were not enforced. The supreme ob-acle in the way of establishing a trade upon an extensive scale emed to the Committee to be the difficult and hazardous nature the journey from India to Kashgar—the chief centre of trade. he only route believed to be open was that *viâ* Kashmir, Leh, nd Yarkand. The longest section of the journey, that between Leh and Yarkand, occupying thirty days—was over one of the worst possible roads, in some places rising to an altitude of 18,000 feet. There were, however, as the Committee were informed, two other roads from India to Kashgar, both of which were much shorter and offered fewer obstacles to the transport of heavy merchandise. One of these roads was that known as the Peshawar-Chitral road; and the other was a road running from Abbottabad through Gilgit and Hunza Nagar and thence to Kashgar. The journey by either of these roads would take only one month, while by the Leh-Yarkand route across the Karakorum mountains it occupied at least two months. The Committee, however, understood that the two shorter roads were kept closed by the Government of India for political and strategical reasons. And as there appeared to be no possibility of an extensive trade in Indian tea in Chinese Turkestan being established if the roads were to remain closed, they asked if there was any likelihood of the two roads, or even one of them, being opened to traffic in the near future. The matter had been referred to the Government of India by the Government of Bengal; and in the Foreign Office letter already mentioned it was dealt with in some detail. The letter stated that both the road from Peshawar to Chitral and the Gilgit-Hunza roads are open to traders from India. The drawbacks to the former are that through Dir and Swat traders would be exposed to some risks which, in the present state of the country, cannot be obviated; that for a portion of the year, the Lowarai Pass is closed by snow; and that in Wakhan (through which State the road runs) traders would probably be compelled to pay the same heavy customs and transit duties as the Amir levies in Badakhshan. Regarding the Gilgit road it was pointed out that beyond Gilgit the physical difficulties of the country and the scarcity of baggage, animals, and supplies are such as to render it improbable that the road can come into general use for the purposes of trade with Chinese Turkestan. Several improvements which have been lately carried out on the Leh-Yarkand route were also specified in the letter. And it was added that even if the difficulties of the Gilgit and Chitral routes were fewer, it was improbable that they would attract much of the trade from the older and better known road.

The Committee noted that the information in the letter from the Government of India differed materially from that previously before them. And they decided in the first place to forward copies of the letters to the Honorary Secretary to the Kangra Valley Planters' Association and to the other correspondents with whom they had been previously in communication upon the matter.

MARKET REPORT.

[*Per Mail advices of* 1st *March* 1901.]

COFFEE.

The London Commercial Record says:—The principal feature this week has been the larger supply of East India offered at public sale; many of the samples shewed a great improvement in quality, and these met with good competition and sold at full prices, whilst for less desirable kinds, although the demand was slow, there was much more bidding than hitherto, and the bulk of the supplies sold at rather easier prices. Privately fine short-berry Mocha sold at 92s. A small quantity of colory Ceylon sold at firm prices. Colory Costa Rica continues to attract attention, but other qualities are rather in buyers' favor, and the same may be said of Central American descriptions generally. There have been some changes in the market for "futures," but the general tendency has been to higher prices, and the market, closes with a steady tone at the improvement. Auction supplies to-day totalled 664 bags, of which about 1,800 bags were of East India growth. The sales to-day went off very well and dearer for fine qualities. We quote:—

London ...	... Santos ...	May delivery	... 33s 10½d.
New York	... No. 7 Rio...	,,	... 6·35 cents.
Hamburg...	... Santos ...	,,	... 33½ pf.
Havre ...	... Santos ...	,,	... 41 francs.

Imports, Deliveries and Stock of Coffee in London, are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	13,139	11,782	4,585	4,021

	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	3,849	3,223	2,573	3,766

The preceding figures exhibit—

	Tons.
In the Imports a decrease this year of	564
Home Consumption a decrease of	626
Export a decrease of	1,193
Stock an increase of	1,357

Auctions this week have passed off as under:—

Ceylon.—*Plantation.* 9 casks 5 tierces 6 barrels 9 bags mostly sold—smalls 35s to 47s, good middling 95s, bold 107s to 111s 6d, peaberry 90s.

East India.—5,045 bags partly sold, as follows:—*Mysore*, smalls 43s 6d to 54s 6d, low middling to middling 47s to 56s, good to fine middling 57s to 73s, common to good bold 59s 6d to 80s, fine bold 87s 6d to 93s 6d, peaberry 55s to 97s 6d; *Coorg*, smalls 39s 6d to 60s, low middling to good middling 50s to 58s, fine middling blue 65s to 72s 6d, common to fair bold 63s to 70s, good to fine bold 78s 6d to 99s 6d, peaberry 65s to 98s 6d; *Wynaad*, smalls 40s 6d, low middling 41s to 44s 6d, bold 53s; peaberry 55s; *Neilgherry*, smalls 39s, low middling to middling 41s 6d to 52s, beaberry 46s.

Nyasaland.—298 bags nearly all sold, low middling 43s to 43s 6d, peaberry 52s to 52s 6d.

Mocha.—25 half-bales withdrawn.

Jamaica.—189 barrels 65 bags mostly sold—good to fine ordinary greenish 36s 6d to 41s, low middling to middling brownish 47s to 54s, bold 63s 6d, peaberry 50s to 53s.

Costa Rica.—Of 4,045 bags cataloued 3,670 bags sold—ordinary 33s 6d, smalls 34s 6d to 50s, good ordinary 40s, low middling 46s to 50s, middling 51s to 57s, good to fine middling 59s to 67s 6d, bold 63s to 77s, good to fine bold 82s to 88s 6d, pea-berry 47s to 89s.

Guatemala.—1,285 bags sold—smalls 34s 6d to 44s, low middling 45s 6d, middling 51s to 54s, bold 55s 6d to 77s, pea-berry 60s to 70s.

Colombian.—641 bags sold—smalls 31s to 37s, middling 45s to 50s 6d, bold 52s to 56s 6d, peaberry 50s to 52s.

Mexican.—1,312 bags sold—smalls 32s 6d to 40s, low middling to middling colory 41s to 48s, bold 45s to 56s, pea-berry 53s to 57s.

Ecuador.—23 bags sold—good ordinary pale and yellowish 34s 6d to 35s.

Nicaragua.—94 bags sold, low middling 43s, bold 54s to 68s 6d, peaberry 52s to 58s.

Salvador.—185 bags sold, smalls 41s, middling 52s to 52s 6d, bold 60s, peaberry 61s.

Brazil.—76 bags Santos sold, foxy greenish 33s to 34s quay terms.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	2,049,000	2,662,000	2,367,000	3,314,000
Santos ...	6,401,000	5,146,000	4,552,000	5,169,000
Total...	8,450,000	7,088,000	6,919,000	8,483,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange $11\frac{5}{32}$d, previous day $11\frac{1}{16}$d.

Havre, *Feb.* 28.—Good average Santos February opened steady at $40\frac{1}{2}$f. and closed steady at $40\frac{1}{2}$f., March opened at $40\frac{1}{2}$f. and closed at $40\frac{1}{2}$f., May opened at 41pf. and closed at 41f., September opened at $41\frac{3}{4}$f. and closed at $41\frac{3}{4}$f., December opened at $42\frac{1}{4}$f. and closed at $42\frac{1}{4}$f.

Hamburg, *Feb.* 28.—Good average Santos February opened steady at $32\frac{1}{2}$pf., and closed steady at $32\frac{1}{2}$pf., March opened at $32\frac{1}{2}$pf., and closed at $32\frac{1}{2}$pf., May opened at $33\frac{1}{2}$pf., and closed at $33\frac{1}{2}$pf., September opened at $34\frac{1}{4}$pf., and closed at $34\frac{1}{2}$pf., December opened at $34\frac{3}{4}$pf., and closed at 35pf.

New York, *Feb.* 12.—Closing prices of No. 7 Rio were as follow:—

	Mar.	April.	May.	June.	July.
February 28...	6·20	6·25	6·35	6·35	6·40
February 27...	6·05	6·10	6·20	6·25	6·25

East India offered in Public Sale since 21st February.

Feb.	Mark.	District.	Size 1		Size 2		P B.	
22	Gubgull	Mysore	16	71/6	25	52/	19	71
	Craig's Tilly	Coorg	32	66/	42	52/6	7	71
	Easts	,,	11	75/	8	50/6	3	not s
	Craig's Eliza	,,	40	74/6	51	55/656/	10	73
	Walker's Touramulla ...	Wynaad	39	52/	89	44/44/6	19	55
	Do. ...	,,	21	48/	69	41/6	10	46
	Rasselas	,,	14	67/	36	48/48/6	10	67
	Karlicolam Bramagherry ...	,,	13	not sold	17	48/	13	70
	Dubarry Bamboo ...	Coorg	50	64/	46	50/6	19	70
	Mangle's Hallery ...	,,	17	75/6	3	55/6	3	64
	Arbuthnot's Polli Betta ...	,,	36	62/	44	not sold	15	63
	B L	,,	26	63/	23	not sold	10	64
	Occ Alexandrar ...	Nlmpty	22	59/	39	47/6	15	59
	Occ Victoria	,,	28	60/6	44	not sold	11	60
	A & Co. Iyencovil ...	Palnis	2	46/	28	46/	7	48
	Arbuthnot's Temma Goondi.	Coorg	61	60/	96	not sold	22	60
	Do. do.	,,	33	65 6	46	50/6	13	64
	Do do. ...	,,	28	64/	37	50/	11	62
	Do. Kembu Kollie...	,,	24	65/6	34	50/651/	13	66
	Igglore	Mysore	10	65/	12	51/6	3	60
26	I M Balakadoo	Coorg	13	66/	25	50/6	4	69
	Santicoopa	,,	13	70/	41	52/653/	5	70
26	Kowrie Cadoo	,,	20	68/	20	52/	6	69
27	M B Honeyvale 2 ..	Mysore	52	92/693/6	8	71/	7	95
	Do. ...	,,	48	87/6	5	73/	5	97
	M B Merthikhan ...	,,	41	70 671/	67	51/	13	68
	C I Pulkimad ...	Coorg	24	70/	39	51/	13	71
	W M B Attymangla ...	,,	8	78 6	18	62/6	6	75
	A M Nellore	,,	10	70/	24	53/6	6	70
	G M M Closeburn ...	,,	5	not sold	15	50/		
	S Kerekhan	Mysore	17	72/6	24	58/6	13	71
	Faith ...	Coorg	27	84/6	29	65/	10	86
	Wood Sunhkoppa ...	,,	20	80/	23	58/	7	77
	Dubarry Bamboo ...	,,	36	68/6	35	51/6	14	70
	Mangle's Hallery ..	,,	64	78/6	140	56/	3	66
	M P & Co. Barekodie ...	Mysore	2	79/6	13	64/	2	80
	Macdougalls	,,	11	65/6	24	53/	6	62
	B S S Someswarkhan ...	,,	46	59/59/6	53	48/6	9	55
	S Channahadloo ...	,,	7	76/	19	62/	5	69
	M Hoosul	,,	18	61/	40	49/	7	56
	Oddukul	,,	18	60/	33	not sold	6	56
	Irwin Jumboor... ...	Coorg	8	70/	22	55/	6	71
	Harsanda Huckloo ...	Mysore	35	69/	34	50/52/	8	67
	Utollalu Mockett ...	,,	64	89/692/6	47	67/68 6	13	92
	Walker's Touramulla ...	Wynaad	33	53/	51	44/44/6	13	55
	Dataypore Mockett ...	Mysore	15	87/6	15	67/	4	77
	P Umbidy	,,	4	79/6	21	65/	3	70
	Guntanaik	,,	23	61/	36	49/650/	16	58
	Murkull V	,,	54	not sold	51	55/	18	not s
	Igglore	,,	34	not sold	34	not sold	9	78
28	Aynsley	Coorg	39	73/	66	54/6	13	71
28	Cannon C B	Mysore	15	not sold	31	not sold	10	not s
	Teccan V	,,	5	not sold	20	54/	4	68
	Woger	,,	30	78/6	15	55/6	16	79
	Harris's Chick	,,	37	not sold	36	55/	16	73
	Robinsons Kaima Betta ...	Coorg	13	63/	21	51/6	6	63
	Buchanan's	Mysore	23	65/6	39	53/6	9	65
	Mangles Santagherry ...	Coorg	36	73/6	49	56/	7	73
	Do. Allicutty Mountain.	,,	11	85/	37	57/6	5	81
	The Engadine	Mysore	12	76/	31	54/	2	66
	Devarakhan	,,	9	68/	24	not sold	16	65
	Maynard Hitlow ...	,,	8	81/	26	61/6	7	76
	A B Heroor	Coorg	25	87/	39	62/	22	86
	Meslies	Mysore	15	62/	32	51/	5	63
	Mangles Covercoly Mountain.	Coorg	10	99/6	35	72/	13	98

TEA.

Indian.—Rather more was brought forward, *viz.*, 31,500 packag contrasted with 24,000 packages in the previous week and 46,8 packages a year ago.

The improved tone recently noticed was maintained, and althou inferior common did not show any alteration, the grades just abo were taken up more freely at a little recovery from the depress prices ruling a fortnight ago. Competition was also keener for desirable invoices, particularly for several of the closing once

ell-known marks. A few of the Darjeelings were of very attractive character and commanded brisk bidding, notably 115 packages Thurbo Estate for which 2s 3¼d per lb. was obtained, and 67 packages Okayti Co. which sold at 1s 9¼d per lb.

For 28,800 packages on Estate Account 7⅓d per lb. was realised, compared with 8⅜d per lb. for 37,600 packages and 9d per lb. for 3,200 packages in the two former seasons.

CEYLON.—Auctions were larger, comprising 30,100 packages *versus* 19,600 packages on the 20th ultimo, and 31,000 packages twelve months since.

Low class pekoe souchongs and pekoes did not harden in value, but useful parcels were in stronger request and occasionally dearer. Many of the late arrivals possessed better flavour, and were this was the case both home and export buyers were eager to secure pekoes and orange pekoes at enhanced quotations. Broken pekoes with poor cup under 7d per lb. were not so much wanted, but above that figure those with strength and point received increased attention and marked an upward tendency.

Owing to the small proportion of choice lots the average is barely 6½d per lb. On the 21st ultimo it stood at 6⅜d per lb. and 7⅝d per lb. in 1900.

Total printed for public sale during the month:—

1901.	1900.	1899.
107,700 pkgs.	101,000 pkgs.	73,300 pkgs.
(Avge. 6¼d per lb.)	(Avge. 7⅝d per lb.)	(Avge. 8½d per lb.)

Judging by advices and samples lately to hand from Colombo it is satisfactory to notice that finer plucking is being resorted to, and shorter supplies may be looked for in the near future, especially as in some parts the weather was not conducive to heavy flushes.

JAVA.—Somewhat over 3,000 packages passed the hammer, the market being week for common, steady for medium and firm for fine descriptions. About 1,100 packages are advertised for the 7th instant

1901.	1900.	1899.
7,200 pkgs.	2,900 pkgs.	6,100 pkgs.
(Avge. 5¼d per lb.)	(Avge. 6½d per lb.)	(Avge. 7¼d per lb.)

Deliveries.—The clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 26th February,	1901	... ...	40,002,373 lbs.
Do. do.	1900	... ...	15,968,823 „

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	29,200	2,323	31,523
Ceylon	28,332	1,794	30,126
Java	1,792	1,250	3,042
Total ...	59,324	5,367	64,691

Also 148 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated March 1st, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE:

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1900-1901	1,321,821	977,493	45,874
1899-1900	1,384,861	929,567	43,983

31,714 *pkgs.* INDIAN
30,376 „ CEYLON
3,042 „ JAVA
} Total 65,132 packages were offered in public auction this week.

Many signatures have already been obtained for the circular which the Indian and Ceylon Associations sent out with the object of restricting the output of Tea.

In spite of the slight rise which has taken place from the lowest point of the market, prices are still too low to cover anything like cost of production on a large number of estates, and unless the circular be largely signed, there is every reason to believe that the present unsatisfactory position will become still more acute during next season.

Next week's sales are heavier, comprising 42,975 pkgs. Indian and 34,903 of Ceylon.

The quantity of British Grown Tea taken by North America last year showed a slight decrease, *viz.*:—

1900.	1899.	1898.	1897.
Lbs.... ... 16,132,194	16,776,819	13,608,696	11,361,840
1896.	1895.		1894.
Lbs.... ... 9,623,283	7,816,467		4,723,370

If suitable Green or Uncoloured Tea could be manufactured, more progress might be made.

INDIAN TEA.

	1900.	1899.	1898.	1897.
Re-exports from U. K. ...	1,956,557	2,435,946	2,212,020	1,746,963
Transhipments via U. K. ...	1,628,644	581,652	1,366,931	3,309,114
Direct exports via China ...	1,174,557	1,300,863	805.377	607,167
Direct exports from Calcutta	2,198,612	4,168,982	1,587,373	*nil*
Total lbs. ...	6,958,370	8,487,443	5,971,701	5.663,244

	1896.	1895.	1894.
Re-exports from U. K. ...	1,808,216	1,731,950	1,420,205
Transhipments via U. K. ...	3,123,224	2,299,781	896,025
Direct exports via China ...	*abt.* 327,333	*abt.* 40,000	*abt.* 112,000
Direct exports from Calcutta	*nil*	*nil*	*nil*
Total lbs. ...	5,258,773	4,071,731	2,428,230

CEYLON TEA.

	1900.	1899.	1898.	1897.
Re-exports from U. K. ...	3,118,167	3,476,796	3,362,898	3,153,284
Transhipments via U. K. ...	1,303,477	797,363	1.207,708	1,855,150
Direct exports via China ...	1,262,463	1,384,490	1,185.445	690,162
Direct exports from Colombo	3,489,017	2,630,727	1,880,944	*nil*
Total lbs. ...	9,173,824	8,289,376	7,636,995	5,698,596

	1886.	1895.	1894.
Re-exports from U.K. ...	2,828,104	2,542,573	1,769,204
Transhipments via U.K. ...	1,165,926	880,732	370,414
Direct exports via China ...	370,480	321,431	155,522
Direct exports from Colombo	*nil.*	*nil.*	*nil.*
Total lbs. ...	4,364,510	3,744,736	2,295,140

INDIAN.—Sales this week were again comparatively small, and the slight recovery in prices noticed last week was distinctly more pronounced, common Teas showing a hardening tendency, while useful and fine liquoring descriptions showed a further advance of ¼d to ½d per lb. Several "last of the season" invoices have recently been catalogued.

Week's average of Tea sold on Garden Account 1901, 28,960 pkgs., av. 7·05d. 1900, 37,553 pkgs., av. 8·23d.

Total Tea sold on Garden Account 1st June 1900 to date, 1,097,922 pkgs. av. 7·28d. 1900, 1,084,941 pkgs., av. 8·34d.

CEYLON.—Although the Ceylon auction was rather heavy, the market showed a steadier tone with somewhat brisker competition. Prices of good Teas occasionally advanced about ½d. per lb., while commoner grades showed distinct firmness.

Average for week 6·37d. against 7·60d. in 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 223,824 pkgs., av. 6·46d. 1900, 231,990 pkgs., av. 7·59d.

JAVA.—A fairly large quantity was brought forward and was well received by the buyers, competition for all grades being general at prices showing a further improvement on recent rates. 216 packages from Goalpara Estate averaged 8½d. per lb.

Bank Rate 4 per cent. Exchange on London, three months' sight:—Calcutta 1/4 7/32. Colombo 1/4¼.

COCOA.

Auctions on Tuesday presented 8,234 bags, which met a fair demand, about 3,870 bags selling at rather irregular rates. Of 2,183 bags Trinidad catalogued 1,650 bags were placed at fully valuations—71s to 72s for very fine red, and 67s to 69s for middling to fine 1,540 bags Grenada sold out 1,672 bags offered, at 65s to 66s for very fine, 63s 6d to 64s 6d for good to fine, and 62s for common, these figures showing a depreciation of 6d to 1s on the best lots, ordinary qualities being firm. 245 bags Dominica realised 63s 6d for fine, and 62s to 63s for common to good, exhibiting a similar movement to Grenada growth. 93 bags St. Lucia sold at 62s to 64s for common to fine. 70 bags Cuba partly sold at 65s. 32 bags St. Vincent were quitted at 70s for very fine red, and 62s for common. 2 bags wormy Seychelles brought 59s. Of 561 bags African 120 bags sold at 61s for good red, but very small. Of the large supply of 2,345 bags Ceylon catalogued only 160 bags sold, common dull medium and small 60s 6d to 70s 6d, fine small 70s, common to fair small 56s 6d to 62s 6d per cwt. The following were bought in—168 bags Jamaica, 31 bags Venezuelan, 121 bags

Samana, and 707 bags Guayaquil. Private business includes 100 bags Bahia at 64s, 200 bags Guayaquil at 80s to 82s per cwt. for Arriba, and 300 bags Ceylon on secret terms.

PEPPER.

Black.—The market is quiet, with only a small business. On the spot sales of fair Singapore have been made at 6 1/16d, and March-May shipment at 6¼d, at which price about 50 tons have been sold.

At auction on the 27th ultimo 43 bags Alleppy bought in at 6d per lb. also 32 bags Penang character.

White.—Next to nothing done and value is nominal. About 9 3/16d is the value of Singapore February-April shipment and 8 9/16d for Penang.

At public auction on Wednesday 17 cases 121 bags Singapore passed the hammer unsold at 9⅜d to 10½d, as in quality. 10 bags fair brownish Ceylon sold "without reserve" at 8½d per lb.

GINGER.

Cochin.—Is very firm, 36s being the value of fair medium and small washed rough. Catalogues comprised 94 cases 211 bags, of which 95 bags sold at 40s for good plump small to bold washed, partly limed, and 31s per cwt. For ordinary rough, partly shrivelled and limed, medium and small Calicut.

Bengal.—99 bags bold plump bought in at 25s per cwt.

Jamaica.—207 barrels offered and 150 barrels sold as follows:—middling bright washed 40s to 42s 6d, small and medium 37s to 39s, lean dark 34s 6d to 36s per cwt., being steady.

Green.—10 barrels received a bid of 24s per cwt., which is to be submitted.

INDIA RUBBER.

The market for fine Para has shewn continued weakness, with sales of fine hard cure near delivery down to 3s 6¾d, ditto more distant at 3s 7d, ditto old import 3s 9d. Soft cure fine sales at 3s 7¼d, hard entrefine down to 3s 5d. Negroheads lower; scrap pies sold down to 2s 7d and sellers at this price, Cametas at 2s 2¾d Peruvian.—Sales of fine at 3s 6½d, entrefine 3s 4½d, ball 2s 5¾d, an slab at 2s 10½d spot and forward. Considerable supplies wer brought forward to-day in auctions, but demand was very slow an only a small quantity sod at lower prices.

CARDAMOMS.

In slow demand at irregular but unchanged prices for mediu qualities, and dearer for picked. Ceylon-Mysores, fine bold pal selected (1 case), sold at 4s; good medium to bold pale, 2s 11d t 3s 4d; dullish ditto, 2s, 7d; small to medium pale, 2s 5d to 2s 6d medium to bold brownish, 2s 5d; small to medium pale, 1s 8d t 2s; very small, 1s 4d to 1s 6d; specky splits and pickings, 1s 4d t 1s 5d; seeds, 2s 4d to 2s 6d per lb.

CINCHONA.

Two bales of Loxa quill sold at 9½d per lb., and of 30 bales of fla Cartagena 18 sold at 4¾d for damaged. The shipments from Jav for February, amounted to 800,000 Amsterdam lbs.

QUININE.

Dearer. After the close of our last report the second-han market dropped to 1s 1d for spot and 1s 1½d for May, but the open ing of the week saw a considerable improvement, and quotation have gradually advanced to 1s 3¼d, spot (paid), and 1s 3⅞d to 1s 4 for August. Early in the week some of the German makers sol at 1s 2d, and later at 1s 2½d, and on Wednesday the quotation wa officially advanced to 1s 3d for 1,000-oz. lots. To-day factories hav sold at 1s 3d, and refuse to go on at this figure, the second-han market closes strong. "P and G" brand (French make) is quote 1s 2½d. At the auction of quinine in Batavia on Wednesday, 3,50 kilos. of Ed. II. were offered, of which 3,400 kilos. sold at an averag of 20½d kilo., against an average of 19d paid at the auction o December 28.

(Average for all India 7·05d., March 1st).

Garden.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price.
Neilgherry ...														
Prospect ...	139	5½	31	7	108	5 5¼	...	...	...	...	...	...	...	..
Travancore ...	**1105**	**4·80**												
Atchencoil ...	74½c	4¼	...	...	26½c	4¾	13½c	5¾	23½c	3½	6½c	2	6½c	3 4¼
Braemore ...	61 p	4¾	15	5¼	21	4	10	7¾	7	3½	4	3¼	4½c	3
Isfield T Co Isfield ...	191	4¼	...	...	92	4	86	4¾ 5		..	...	..	13	3 3½
Kan Dev H Co M ...	327 p	5¼	72½c	5¾	132	4⅓	75½c	7¼	18	3¾	...	...	60½c	6
Lockhart ...	98½c	5¼	19½c	6¼ 10	39½c	5	...	...	25½c	4¼	13½c	3¾ 4¾	2½c	3¼
Poonmudi ...	188 p	4½	36	5¼	59	4¼	31	4¾	24	3¾	11 p	3¼3½	27½c	3¼5¼
Sth Trav Co Ven ...	136	5	...	...	61	4½	50	5½ 6½	25	4	...	...	...	...
Wynaad ...	**289**	**5·10**												
Cholah Peak ...	45 p	4¾	18 p	5½5¾	10½c	4¾	...	...	17	4	...	...	...	...
Pootoomulla ...	55 p	4	...	...	18	3¾	25½c	5	10	3½	..	...	2½c	3½
Wynaad T Co Per...	189 p	5½	29	5¾	58	5 5¼	65½c	7¼	31	4	...	...	6½c	5½

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Wednesday, the 3rd proximo. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad. *March 25th.—Weather*—Sun very powerful in middle of the day, temperature going up to 89° in the shade. Wind from the east by day, and a sea-breeze from the west by night. *Blossom*—There is a nice little blossom out to-day, from the rain of the 16th, and there is every prospect of its setting well; we shall not have large crops but a small profit should be made if the price is over seventy per ton. *Works*—Pruning and manuring. *Health*—Good. *Labour*—Abundant. *Interesting item*—The Volunteer Corps is now beginning to wake up from its crop-time sleep, and notices are going round of drills, etc.

CHANGE OF SEEDS.

CERTAIN remarks made by a writer in the *Revue Agricole* (Réunion) convey a salutary warning to planters who reckon that change of seeds leads of necessity to improvement of strain or of crops. M. P. D'AYGALLIERS asserts that it is almost a general rule in what he terms "our countries" to change the seeds periodically. After the seeds grown on an estate have been employed for sowing purposes for two or three years consecutively, recourse is had to seeds foreign to the estate, which are obtained in the market from quarters the most renowned for seeds of good quality, which are sown in order to renew the strain. He remarks that we might ask if this traditional practice is justifiable, and if it would not be more profitable, in the majority of cases, to allow seeds to produce their own, and that to an indefinite period. He thinks, that that would be much better and that "in our district at least" they would be much benefited by it. M. D'AYGALLIERS argues that the only reason which militates in favor of the change or of the renewal of the seeds, consists in the degeneracy of those that agriculturists collect themselves,

degeneracy that grows worse year after year. But, he asks, why should this unfortunate state of degeneracy be allowed to take place? Could we not avoid it by removing its causes? This appears to him not only possible, but easy as well. He rightly says that we have recourse to new varieties originating from soils and climates differing from those where we place them, it must be naturally expected that these foreign varieties growing under unfavorable conditions would unfortunately degenerate gradually. In order to preserve all these advantages in their cultivation, we would be then obliged to renew the seeds all the oftener, inasmuch as the deterioration would be more rapid, and to fetch them from countries where these varieties enjoy the most favorable conditions. But we cultivate only plants naturalized in our midst for a long time, and local varieties established for a number of years. These besides go to prove clearly that it is not the change of place, not more the result of the soil than that of the climate that can bring about deterioration. When we wish to renew the seeds we do not go to fetch them from different centres. If our seeds degenerate or deteriorate, the only cause to which this can be attributed is to defective cultivating conditions. Now, while powerless to modify the effects of climate and soil, we are perfectly free to modify as we like the procedure and care of cultivation. It will suffice us to bring them to perfection so that we may ourselves obtain strong and sound seeds.

It is apparent from these remarks that the writer's line of reasoning is that a planter should rely rather upon seed carefully cultivated under his own care than upon seed grown by others. A good deal might be said in support of this, but it must be remembered that the careful cultivation of seed makes a heavy call upon the time and attention of planters, and that there must be many instances in which it is better to import seeds from a well-known cultivation rather than devote special care to the raising of one's own. The writer states that it is specially important to set apart specially, for the cultivation of plant-bearing seeds, a piece of land proportionate to the quantity of seeds we wish to obtain. We can thus give to the plants producing seeds for sowing purposes the care which it is not always possible to give to plants of large growth, by way of tilling, weeding, watering, etc. The crop will take place after complete maturity; the thrashing will be carefully done; the seeds thus obtained will be cleaned and picked with care. The picking is an indispensable operation in order to obtain sowing seeds of the soundest quality. It is to the want of sufficient care under this head that the deterioration of seeds in our estates must be solely attributed. They are, in fact, satisfied with cleaning them with a winnowing-machine, which still leaves seeds of good quality, mixed with bad and unsound ones and what is worse, with those of ill-weeds. If after the cleaning of the seeds by the winnowing process, they are allowed to pass through a cellular picker, not only would the bad seeds fall apart, but the good ones also would be separated according to their size into two classes—the first and second quality.

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nicholson's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf people, unable to procure the Ear Drums, may have them free.

Address—No. 989 D, The Nicholson Institute,
Longcott, Gunnersbury,
London.

[w. 26-5-00—26-5-1901.]

It seems needless to say that the seeds of the first qualit alone—bigger and stronger than the others—should b employed for sowing purposes. Even good cultivators, hov ever, have been several times seen to mix up the two qualitie for sowing—thus rendering useless the separation made b the picker. Others again sell the seeds of the first quality sowing only those of the second and thus lose the best advan age that the picking gives them. For a slight immedia profit they compromise the success of their future cro It is only in modifying this system of vitiating the seed and in striving to make a good selection of them by a possible means, that we could ourselves succeed in produ ing sound seeds for sowing. Then alone could we do awa with the practice of going about the market to find suitab seeds for sowing, and for which we generally pay very dea

HYBRIDS OF COFFEE ARABICA-LIBERICA FOUND IN THE ISLAND OF REUNION.

[*From the Revue Agricole.*]

(Specially translated for "Planting Opinion.")

During these recent years, Arabica-Liberica hybri found in India especially[1] have been pretty frequently talke about. Unfortunately, the particulars given on this subje of primary importance have never been complete, and, for m part, I have never been able to read correct information o the two most interesting points of this problem of hybridiz tion of coffee plants: 1*stly* The quality of the berries ob tained. 2*ndly* The amount of resistance offered by th hybrids to the various parasites and to cryptogamic diseases

It is, therefore, with a real pleasure that I have been ab recently to collect some correct informations on these tw points, in examining a very pretty specimen of hybrid ob tained by Mons. Henri Manès.

Mons. H. Manès, who is an intelligent and an indefatigab observer devoting himself passionately to all what concer the improvements applicable to the cultivation of coffee plant had observed, since the year 1896, in his garden at Sai Denis, a coffee plant perceptibly different by the appearanc of its foliage from the ordinary Liberian and Arabian coff plants. This plant had sprung from the seed of a fru collected from the *Coffee-Liberica*.

With its growth, qualities quite peculiar to this youn plant manifested themselves. There was not the least dou that the plant in question was a hybrid. Its growth mig have been operated perhaps by the wind, which may ha carried the pollen of a flower of *Coffee-Arabica* to the stigm of a flower of *Coffee-Liberica;* but it is more probable th this might have been effected by a bee or some other inse

The coffee plant in question is now six years old and almost 3·60 metres high. [3]If not previously informed, an person possessed of the least powers of observation will b

[1] In the district of Coorg.

[2] It is however proper to add that all the Arabica-Liberica hybrids which mention has been made in the reviews referring to Colonial Ag culture, have manifested the remarkable and important feature of nev having been attacked by the *Hemileia Vastatrix* in India as well as Java and Ceylon; and yet some of these hybrids are now eight years o *Vide Bulletin Agricole, Martinique* (May—July, 1899). *Planting Opinio* Madras (10th June, 1899), and *Tropical Agriculturist*, Java, Colom (May, 1899).

[3] The plant would have attained a greater height if the top had n been cut.

t once struck with the entirely peculiar appearance of this lant.

I thought it would be interesting to publish—with the ind permission of my friend Mons. H. Manès—a short ketch of the principal botanical properties of this hybrid, and hen to dwell on the numerous and valuable advantages vhich might result from its propagation.

Beginning with the description of the leaves, I will say hat they are of a medium size between those of *Coffee-Liberica* nd those of *Coffee-Arabica*. They may attain a length and preadth of 21 and 10 centimetres respectively. The leaves f *Coffee-Liberica* are a little longer and generally a little iarrower and the largest of them measure 22 centimetres in ength and 9½ centimetres in breadth. The color of the leaves f the hybrid, like unto that of the leaves of *Coffee-Arabica*, s slightly lighter than that of the leaves of *Coffee-Liberica*. n fine, the free end of the leaf of the hybrid terminates in a harp point like that of the *Coffee-Arabica*. While in the eaf of the *Coffee-Liberica*, this narrowing to a sharp point is ar from being conspicuous.

The flower of the hybrid is exceedingly pretty. Its liameter reaches 48 to 50 millimetres on an average, but it nay even go up to 55 millimetres. It is, consequently, much onger than that of the flower of the *Coffee-Liberica* (36-37 nillimetres on an average, and far greater reason than that f the flower of the *Coffee-Arabica*) 30—32 millimetres.

The Corolla and the Androecium of the flower of the ybrid have most frequently 7 or 8 parts,[1] 1, the type with parts being comparatively rare. It is so also with the Corolla and the Androecium of the flower of the *Coffee-Liberica*; but setting aside this unique property, the flower of he hybrid resembles more closely that of the *Coffee-Arabica* han that of the *Coffee-Liberica*.

The Corolla and the Androecium of the flower of the *Coffee-Arabica* are generally of the Type 5, which must be he standard. The Type 6 is pretty scarce now. As for Type 7, I have not yet been able to ascertain whether it is o be found in the flower of the *Coffee-Arabica*. But it is ertain that should this type exist it must be very rare.

Due allowance being made, the tube of the Corolla nanifests the same development in the flower of the hybrid nd in that of the *Coffee-Arabica*. It is comparatively horter in the flower, more clustered in some way, than in hat of the *Coffee-Arabica*. (*See statement at the end of this rticle.*)

The shape of the petals of the flower of the hybrid is bsolutely similar to that of the petals of the flower of the *Coffee-Arabica*.

The distorted shape of the flower is quite apparent on its petals, and this contorted tendency continues even after the opening of the flower. The petals of the flower of the *Coffee-Liberica* are larger with circular ends.

Let us remark cursorily a minor detail. While the Corolla of the *Coffee-Liberica* gets loose and falls off a short ime after flowering,[2] the Corolla of the hybrid, on the other hand, like that of the *Coffee-Arabica*, stands still for a ong time. For months together, the Corolla of the hybrid, lthough loosened from the ovary, remains hanging, held back by the two branches of the stigma. It then gets dry gradually and loses its color.

[1] The Type with 8 parts is very scarce.

[2] Within 24 hours at the most.

In the hybrid, as in the *Coffee-Arabica* and *Liberica* the stamens and the parts (petals) of the Corolla are equal in number. When the Androecium of the hybrid and that of the *Coffee-Liberica* are formed according to Type 7, we sometimes observe striking irregularities regarding the tendency and the shape of the stamens. What is most frequently observed are two adjoining stamens bending towards each other so as to form a kind of arch and to bring in contact their Anthers which are then united.

Due allowance being made, the stamens of the flowers of the hybrid are absolutely similar to those of the flowers of the *Coffee-Arabica* so far as the relative dimensions of the Filament and the Anther are concerned. For the flower of the hybrid, we have the ratio $\frac{\text{Filament}}{\text{Anther}} = \frac{9\text{ mm}}{11\text{ mm }5}$ and for that of the *Coffee-Arabica* $\frac{\text{Filament}}{\text{Anther}} = \frac{5\text{ mm}}{6\text{ mm }4}$.

These two ratios are equal.

In the flower of the *Coffee-Liberica*, the filament of the stamen is comparatively much shorter with reference to the Anther. ($\frac{\text{Filament}}{\text{Anther}} = \frac{3\text{mm}}{8\text{mm}}$, instead of $\frac{6}{8}$ which would be necessary to correspond with the two foregoing ratios). If, now, we pass on to the examination of the gynœcium, we would ascertain that the ovary, which must, as a rule, possess two cells, possesses only one in half the number of cases. The fruit on attaining maturity contains then only a single round seed.

The following short statement gives full particulars on this point.

Name of Plant.	Fruits with two cells complete.	Fruits with a single seed or round fruits.	Fruits with a single normal seed and a stunted or specked seed.	Empty fruits.
Coffee-Arabica ...	89%	5%	9%	0
Coffee-Liberica ...	76%	9%	7%	6%
Hybrid ...	26%	38%	28%	10%

With Mons. Cornu, the eminent Professor of the Museum of Paris, we have reason to believe that the fecundity will become more and more marked in the succeeding generations obtained by means of successive seedlings. [1]

The style is proportionably more developed in the flower of the hybrid than in those of the *Coffee-Liberica* or *Coffee-Arabica*. A short time after the opening of the flower, it bends itself and the stigma then comes in contact with the stamens.

We come at last to the examination of what is properly called the fruit. In size, it occupies a middle position between that of the *Coffee-Liberica* and that of the *Coffee-Arabica*.

As regards color, the fruit of the hybrid, like that of the *Coffee-Arabica* is of a pretty cherry-red, while the color of the fruit of the *Coffee-Liberica* approaches a yellowish red or vermillion.

If we compare the seeds that have been pulped [2] and deprived of their outer covering or skin, we will see that the seed of the hybrid is still of a medium size between those of the *Coffee-Arabica* and of the *Coffee-Liberica*. There is also some difference in the color. While the seed of the *Coffee-*

[1] Mons. Cornu. The sterility of certain hybrids of coffee plants. (*Revue des Cultures Coloniales*, 5th January, 1900.)

[2] The pulping of the fruits of the hybrid is easily performed.

Liberica is whitish, that of the hybrid, like that of the *Coffee-Arabica*, is of a greenish tint almost approaching the color of dry peas when removed from their pods.[1]

Mons. H. Manès has already brought up seedlings by means of the seeds of his hybrid. As much as can be judged till now by the qualities of the leaves, the young plants thus obtained do not seem to have degenerated.

The germination is produced quite fully on condition that the seeds sown are from fruits entirely ripe, but quite recently collected. It is thus that Mons. H. Manès has obtained 22 germinations from 25 seeds sown by conforming himself to this condition, while he has not been able to obtain a single germination from 150 seeds from fruits collected three months previously.

The young hybrid plants at their origin display very frequently an anomaly in the appearance of foliaceous and cardiform Cotyledons. The latter are so deeply cut or incised; that their general appearance often assumes the shape of three or even four divisions absolutely distinct. This anomaly is much less frequent in the young plants of the *Coffee-Arabica* and *Coffee Liberica* whose two Cotyledons have very often the normal appearance.

I give below a short statement of the comparative dimensions of the principal organs of the three plants as well as a statement of the comparative weights of the fruits.

Comparative sizes of the principal organs.	Coffee-Liberica.	Coffee-Hybrid.	Coffee-Arabica.
Length of the leaf ...	22 c. m.	21 c. m.	14½ c. m.
Breadth of the leaf ...	9½ c. m.	10 c. m.	7 c. m.
Diameter of the Corolla ..	36–37 m. m.	48–50 m. m.	30–32 m. m.
Depth of the Corolla ...	9–10 m. m.	18–20 m. m.	8–9½ m. m.
Large axis of the circle ...	22–25 m. m.	18–20 m. m.	13–14 m. m.
Small axis of the fruit ...	19–20 m. m.	15–16 m. m.	10–11 m. m.

Comparative weight of fruits (per 100 fruits).

Condition of the Fruits.		Coffee-Liberica.	Hybrid.	Coffee-Arabica.
		Grammes.	Grammes.	Grammes.
Full fruits	Fresh	491	261	116
	Dry ...	160	103	45
Dry fruits pulped	Pulp ...	115	68	20
	Seeds ...	45	32	25

In 1899 Mons. Manès having been able to obtain a sufficient quantity of these berries, was in a position to appreciate their taste and flavour. Messrs. Andrè Blay, President of the Chamber of Commerce of the Island of Réunion, A. de Villile, Editor of the "*Revue Agricole de la Réunion*" and I, have had occasion to drink coffee prepared with the berries of the hybrid. Its taste was unanimously found to be very pleasant and in no way comparable to that of the *Coffee-Liberica*. For my part, I found it exquisite and *softer and smoother to the palate*—if I can so express myself—than that of the *Coffee-Arabica*, which always leaves in my mouth a slightly bitter after-taste.

After all, the hybrid in the possession of Mons. H. Manès very closely resembles the *Coffee-Arabica* by t shape of its leaves, of its flowers, of its berries, and—wh is invaluable—by the quality of these last[1]. On the oth hand, this hybrid appears likely to present much great resistance to the various parasites and to cryptogam diseases. Viewing it in this light, it would bear a clos resemblance to the *Coffee-Liberica*.

We have been able to prove that it is not attacked by t *Hemileia vastatrix*, and that its thick leaves struggl triumphantly against the destructive attacks of the larv *Cemiostama Coffiella* and *Gracilaria Coffeifoliella*. In fi the fruit, thanks to its outer covering which is thicker th that of the fruit of the *Coffee-Arabica*, will be better guard against the injuries caused by the caterpillar (*Heliptocer Octoguttalis*).

One can easily understand how invaluable the advantag are and how profitable it would be to propagate this hybr which, while quite as resisting as the *Coffee-Liberica*, produc berries which might be favourably compared with those the *Coffee-Arabica*.

We cannot too highly praise Mons. H. Manès for h intelligent and persevering efforts in the pursuit of obtaini by seedlings, by slips and by graft[2] the largest possib number of plants originating from his hybrid.[3]

(Signed) Edmond Bordage,
Manager of the Museum of Nat. Hist. of the Island of Reunion (Bourbo

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S.

The General Committee of the Indian Tea Associati (Calcutta) give the following figures in the Monthly Retu of Sailings and Daily Customs Entries of Tea from Calcut and also a Return of Exports of Ceylon Tea for four years to 4th March, 1901.

Exports of Indian Tea from Calcutta.

	1901. Lbs.	1900. Lbs.	1899 Lbs.
Sailings to Great Britain in February.	5,625,739	3,456,616	5,205,6
Sailings to Great Britain from 1st April to 28th February .	158,526,355	149,042,657	134,596,6
Sailings to Australia and New Zealand in February	459,502	*Nil*	267,6
Sailings to Australia and New Zealand from 1st April to 28th February	9,579,176	8,224,290	6,293,9
Sailings to America in February ..	329,725	51,754	55,6
Sailings to America from 1st April to 28th February	4,176,927	6,170,385	3,212,9
Sailings to other places in February.	757,558	289,098	400,7
Sailings to other places from 1st April to 28th February ...	10,633,197	7,847,651	8,922,3
Total Sailings from 1st April to 28th February	182,909,655	171.290,983	153,025,5

		Lbs
Daily Customs Entries for Export to Great Britain from 1st April to 28th February ..	1901 ...	160,902,3
Do. do. do.	1900 ...	148,737,5

[1] When the fruits are dry, the difficulty of removing the seeds of the *Coffee-Liberica* is well known. A regular process of pulping becoming therefore necessary. This inconvenience does not exist with regard to the fruits of the hybrid, which like those of the *Coffee-Arabica* fall off easily from the pulp covering them.

[1] Certain hybrids—much less interesting—would, on the other ha bear a much closer resemblance to the *Coffee-Liberica* than to the *Cof Arabica*. Such is the one of which Mr. A. J Thierry speaks in a w published in the *Bulletin Agricole de la Martinique*. (Nos. 4 and 5, M and July, 1899.)

[2] The two last modes of propagation would be especially important the case where the plants obtained from seedlings would degene too often.

[3] I am indebted to the kindness of Mons. Jacquier, merchant at S Denis (Isle of Reunion) for the illustrations that appear in this article.

Exports of Tea from Ceylon.

Total Exports from	1st January	to 4th March	... 1901	...	23,445,981
Do.	do.	do.	... 1900	...	22,881,142
Do.	do.	do.	... 1899	...	18,150,326
Do.	do.	do.	... 1898	...	18,181,110

Yours faithfully,
W. Parsons,
Secretary.

Statement showing the Exports of Tea to Sundry Ports during the month of February, 1901.

Foreign Ports.

	Lbs.	
Trieste	6,838	
Antwerp	464	
Marseilles	2,961	
Piraeus	40	
Bremerhaven	15,873	
Hamburg	19,100	
Genoa	420	
Naples	30	
Constantinople	9,345	
Cape Town	1,000	
Mombassa	180	
Suez	2,515	
Mauritius	80	
Natal	80	
Ceylon	120	
Hong-Kong	43,101*	
Shanghai	4,745	
Jedda	100,141	
Batoum	7,955	
Singapore	3,600	
Bushire	5,806	
Bagdad	14,880	
Bussora	9,000	
Samsoun	8,694	
Smyrna	2,655	
Trebizonde	116,171	
		375,794 lbs.
Bombay	350,334	
Kurrachee	2,880	
Other Indian Ports	28,550	
		381,764 „
Total		757,558 „

NOTES.

Consumption of Coffee in France.

According to official French Statistics, "Special" imports of coffee for consumption in 1900 attained 67,031,500 kilos., as against 65,510,200 kilos. in 1899 and 65,684,700 in 1898.

German Quinine.

The exports of quinine, quinine-preparations, etc., from Germany, for the twelve months ended December were as follows:—

	1900.	1899.	1898.
Kilos	184,800	210,900	2,009,000
Marks	7,022,000	8,014,000	6,630,000

Indian Tea for Indians.

The Provisional Sub-Committee of the Tea Association met on the 19th instant, and formulated a proposal for selling tea retail in India, especially along the railway stations, to fourth-class passengers. In this part of India, "fourth-class passengers" are non-existent.

S. Paolo.

All over this State during the past week, says the *Brazilian Review* of the 12th ultimo, tremendous rainstorms have been general; rivers have overflowed their banks, and large tracts of land have been laid under water. Nevertheless the general belief appears to be that all kinds of cereals are flourishing, and that the coffee crop will be a "bumper."

Quality of Tea and Manure.

Thus the *Ceylon Observer*:—A planter in one of our high districts declares that he attributes his better prices, during the past two years, to having given up the use of artificial manures;—but Mr Mann and other scientists would probably reply either (1) the effect of the said manure has lasted longer than you believe; or else (2) you did not have the proper manure to improve quality!

Java Cinchona.

The N. V. Nederlandsche Veem cinchona-bark department at Amsterdam reports that the shipments from Java to Europe during February, 1901, have amounted to 748,000 Amst. lbs., against 641,000 lbs. for the corresponding period of 1900; 539,000, 1899; 700,000, 1898; 456,000, 1897; 546,000, 1896; 756,000, 1895. The total shipments during January and February have been: 1901, 1,748,000 Amst. lbs.; 1900, 1,256,000; 1899, 1,048,800; 1898, 1,656,000; 1897, 1,516,000; 1896, 1,516,000 Amst. lbs.

The Tea Crisis.

At a meeting of Colombo Estate Agents, held at 11 a.m., on Saturday, March 16th, it was proposed by the Chairman, the Hon'ble Mr. W. H. Figg, seconded by Mr. H. G. Bois, and carried:—"That firms representing local Tea Companies in Ceylon be asked to approach the Directors with a view to calling meetings of their shareholders to consider the advisability of supporting the scheme contained in the circular of the Indian and Ceylon Associations in London, dated 14th February, and also that private proprietors be approached with the same object."

Packet Tea in Canada.

We learn that an important change has taken place in the affairs of two package tea concerns in Canada. It is the amalgamation of the "Blue Ribbon" and the Monsoon Tea Companies. The two brands of tea will hereafter be put up by the Blue Ribbon Company. The names of the brands will not be changed, neither will their characteristics. There are two distinct tastes for tea in Canada, said a member of the Blue Ribbon Co., "one being for thick, rich tea, like 'Blue Ribbon,' the other for a delicate and highly-flavoured tea, like 'Monsoon.' 'Blue Ribbon' will be packed as formerly, while the demand for high flavoured tea will be supplied by 'Monsoon.'"

Public Opinion and Tea.

The *Ceylon Observer* writes with reference to some of our recent remarks:—"Public opinion here is as chary as the legislature in interfering with individual liberty, whereas the latter possession will lead all who are taught wisdom by adversity to us extra care in production which is as needful as, or more important even than, reduction of area. This greater care in production, producing the finer teas the market requires, is now strenuously at work." With due deference to our contemporary, we still hold that public opinion has brought heavy pressure to bear upon tea-planters in India and Ceylon with a view to inducing them to agree to a 10 per cent. reduction of output. Moreover, we believe that some of

* It is understood that the bulk of this tea consists of transhipments for the United States and Canada.

the planters who have accorded their support to this policy have done so solely because of this pressure, not because they believe in the efficacy of the plan itself.

Green Tea Manufacture.

Mr. H. Drummond Deane reports the following as using his machine in Ceylon :—

Brunswick Estate. (2)
C. P. Hayley, Esq.
E. Rosling, Esq. (Chairman, Planters' Association).
Ceylon Tea Plantations Co.
Eastern Produce and Estates Co. (2)
Messrs. Geo. Steuart & Co. (2)
Lipton, Limited.
Carolina Estates.
Darrawella Estate.
Messrs. Finlay, Muir & Co. (2)
Hardenhurst Estate.
Elkadua Estate.
The Hon. J. N. Campbell, M.L.C.
St. Leonard's Estate.
Ratnetenne Estate.
Messrs. Whittall & Co.

The London Tea Market.

Messrs. Gow. Wilson & Stanton's cable of 2nd instant to Colombo reports that demand is strong for fine kinds, and that the market for medium liquoring Pekoes and broken Pekoes is steady ; while the market for common Pekoes and broken Pekoes is also steady. The price of fair liquoring Ceylon Pekoe Souchong is 5d. (same as last week) and the average price of Ceylon tea sold on garden account this week was 6⅝d. (an eighth of a penny up)—as against 6½d. and 7⅝d. respectively in the corresponding week last year. Reuter reports that good liquoring kinds of Ceylon tea are rather dearer. Pekoe Souchongs are quoted at 3¾d. (same as last week) and the average for the week at 6¾d. (a farthing up) as against 7⅛d. quoted for Indian tea. 26,000 packages of Ceylon tea were offered for sale, of which 24,000 were disposed of ; while of the 43,000 packages of Indian tea offered, 38,000 found purchasers.

Colombian and other Coffees.

The Civil War that has been waged in Colombia for the last year and a half bids fair to come to an end soon, and the Government has informed its Agents in England that it hopes soon to be able to declare officially that peace has been restored. This may enable the coffee planters of Colombia to compete more freely with those of other countries. Latest quotations for Colombia coffee range from 80s. to 32s., for Costa Rica from 88s. to 38s., for Guatemala and Salvador from 88s. to 39s. (for foxy green), for Venezuela from 80s. to 35s., and for Maracaibo from 48s. to 32s. London advices of the 8th instant state :—Coffee has met a fair demand, and the better grades of East India have realised full rates ; fine Costa Rica 2s. to 3s. cheaper. "Futures" have been actively dealt in, and after much fluctuation quotations show a reduction of 3d. to 9d. on last Friday's, *viz.*, March 33s. 6d., May 34s., July 34s. 3d., September 34s. 9d., and December 35s. 3d., per cwt.

Cardamom Cultivation.

The *Ceylon Observer* remarks :—For the three districts—Medamahanuwara, Nitre Cave, and Rangalla—we showed 1,891 acres in our last Directory as under cardamoms. A planter, thinking of native gardens, considered we were much below the mark in reference to the first named district, but referred to a well-known resident as the best authority. This gentleman, on being appealed to, dissented, as we expected, from the larg estimate and shows that Mr. de Silva's Kandewatte and sor of the bigger gardens might aggregate 200 acres apart fr very small gardens of other natives. We do not think, ther fore, that there can be now more than 3,000 acres und cardamoms in all the three districts, including native garde Even at 100 lbs. an acre, such an area would yield mo than half the total export from Ceylon for last year whi was 538,000 lbs. Of course, the greater the area alrea planted, the greater the discouragement to extend cultivatio but Ceylon has nearly got to the end of its suitable land, a it is in India that there is a risk of over-doing cardamoms, well as tea, unless planters there take warning in time.

The Colombo Tea Sale Averages for 1900.

A year ago—on the 22nd March when reviewing the averages for 189 we remarked says the *Times Ceylon* :—"It may be that the prices paid during the ye have been comparatively better for low, than for high-gro tea ; but signs are not wanting that the tide is about to fl in the other direction." It followed throughout the year, a at its close had reached a disastrously low point, as the follo ing record of the past ten years shows, gratifying though t total quantity sold may be :—

ANNUAL TOTAL AND AVERAGE.

	lbs.	Cents.
1891	9,578,611 ...	41
1892	11,578,869 ...	41
1893	14,365,017 ...	43
1894	15,723,020 ...	43
1895	19,668,116 ...	47
1896	25,402,624 ...	41
1897	26,512,099 ...	36½
1898	28,847,212 ...	35
1899	32,472,040 ...	38¼
1900	38,442,926 ...	34½

Tea in London.

Cable averages are apt to be m leading, as much must depend up the quality of teas offered, and on this point cablegra usually say nothing. London advices of the 8th ultimo sta —Indian tea ruled firm at the auctions ; common sorts w steady at last week's rates, whilst medium to fine experienc a strong demand, generally at advanced rates, some f Darjeelings and Assams especially realising full prices. T Ceylon tea offered by public sale this week showed a decid improvement in quality, and was accompanied by act buying, and we are able to record a further hardening te dency for most descriptions. Common teas under 4d. per showed no change for the better, and Pekoes from 4d. to 4½ with the exception of those which benefited by the Con nental support, were as cheap as ever, but all medium so ruled rather firmer, and the numerous invoices remarka for point, quality, and strength enjoyed brisk competition distinctly improved values. The catalogues included a go many reprinted teas, which realised most satisfactory advan on the original bids. Continental support was also rat more in evidence.

The Brazil Coffee Crop.

The *Rio News* lately took a ve gloomy view of prospects. Our c temporary wrote on the 15th January last :—"Our advi from Espirito Santo are to the effect that coffee production that state is in a very critical condition, owing to low pri and burdensome taxation. Unless some relief is afforded, industry will soon be almost wholly abandoned. The c

nued rains, accompanied by occasional days of hot sun, is ost favourable for the growing coffee, and a bumper crop is xpected this year. The coffee should be superior in quality lso, for the present weather cannot fail to produce large erries, as well as plenty of them. Unless some unforeseen ccident happens, we shall probably see a record crop this ear. The export duties collected on coffee shipped at the ort of Santos during the past year amounted to 27,002,135 195, or over $5,000,000. This will be an interesting bit of ews to the American Congressman who has been objecting o the imposition of import duties on coffee for fear of spoiling vhat he calls a "free breakfast table." Brazil, however, oes not hesitate to tax his breakfast table, and then refuses o reduce her import duties of American products by way of eciprocity"

offee in London.

With the arrival of two steamers from India a plentiful supply of new rop East India and Mysore has been offered, and it is most atisfactory, says the *Produce Market's Review*, to find that ot only is the crop reported to be a large one, but that the uality of many of the marks is much superior to that received rom the same estates in the last two or three years. The nly drawback is in the size, there being a very small proportion of bold, and a much larger quantity than usual of B size. Prices as compared with previous years are moderate, nd there should be a good demand from the home trade for his growth. Of other coffees only a moderate supply of Costa Rica and other Central American growths has been offering and prices have remained steady, though the bold sizes have not fetched quite such high rates as they did at the opening of the season. In the terminal market there has been a larger trade than for many months and prices, influenced by the American speculations, have been forced up about 2s., a steady advance in the Brazilian exchange having also helped the rise. Even the heavy receipts have not checked the upward movement, and it now looks as if the current crop will turn out ten million bags, while eleven to twelve million is still spoken of for the next crop.

GENERAL ARTICLES.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange.—*February 9th*, 1901.—Ninety days' rate on London opened on Monday, the 3rd instant, at 10 5/32 rose to 10 7/16 during the week and closed this evening at 10 1/4d.

The direct cause of this week's upward movement is generally attributed to Pará selling and Bahia offers of repassed paper. Pará seems at length to have absorbed all the bills it required for its own consumption and to be able to supply other markets. At Bahia the stringency of money seems to have prevented bills from being taken up which, with bills from Pará and heavy coffee sales, gave our market more bills than were required. Such appears to be the explanation of the rise although, of course, the usual rumours of a *deus ex-machina* in the shape of a foreign loan to the State of Rio, were not lacking. Declared sales during the week ended 8th February were large, 193,000 as against a weekly average of only 175,000 since the 1st July; and though prices are weaker and the sterling value somewhat less than last year, the monetary stringency is also much more severe and for the present probably more than counteracts depreciation.

Coffee.—Entries at Rio and Santos during the week ended February 8th were 23,552 larger than the previous week's and 68.159 over those of the corresponding week last year. Up to the 8th instant total entries at Rio and Santos exceeded those for the corresponding period of the previous crop by 527,452 bags, and if continued to the end of the season on the same scale will give a total of 9,620,558.

There can be now no doubt that the present crop is much larger than was expected, the lateness of the season having misled the market as regards its true volume. It is also likely that, in view of the heavy early entries expected for next crop, planters are trying to get rid of all their present holdings in anticipation of a new fall of prices.

The weather improved somewhat last week and made transport easier, but in spite of all the tremendous entries at Santos, more than double last year's, are away and above anything that could be expected. Average weekly entries for the current crop are 249,856 bags as against 233,373 for last crop.

Discussion regarding the means to check the fall of coffee prices still goes on in the papers, all kinds of remedies from State monopoly to Dutch auctions being advocated. Nothing however is likely to be done because not only is Government absolutely opposed to any interference beyond a hankering after official assistance in the shape of loans, planters could never be got to agree to anything like concerted action or to stick to it if they did.

JANUARY COFFEE MOVEMENT IN THE U. S.

Last month's deliveries of coffee were large and above the monthly average for the preceding year, says the *American Grocer.* It is apparent that the consumption of the world during the past four months has been on the basis of over 15,000,000 bags per annum, although prior to that time it was much lighter than during the previous year in July, August, and September.

The following statement shows the movement and general position of the article :—

	Bags.	Bags.
Stocks, January 1, 1901—		
United States	1,031,610	
Europe	3,881,735—	4,913,345
Receipts during January—		
United States	345,772	
Europe	817,024—	1,162,796
Total supply, February 1		6,076,141
Less stocks, February 1, 1901—		
United States	797,167	
Europe	3,950,758—	4,747,925
Deliveries, January—		
United States	580,215	
Europe	748,001—	1,328,216
Deliveries, January, 1900 —		
United States	678,862	
Europe	894,227—	1,573,089
Decrease as compared with January, 1900		244,873
Deliveries (United States and Europe), January ...		1,328,216
Do. do. do. December ...		1,180,838
Do. do. do. November ...		1,281,638
Do. do. do. October ...		1,340,059
Do. do. do. September ...		981,198
Do. do. do. August ...		917,608
Do. do. do. July ...		1,219,058
Total for seven months, 1900-1901		8,248,615
Do. do. 1899-1900		9,343,669
Decrease as compared with 1900-1901 ...		1,095,054

The January deliveries in the United States consisted of 488,602 bags of Brazil; 91,613 bags of all other sorts.

The visible supply of the world on February 1, 1901, was 7,217,925 bags, against 7,560,345 bags on January 1 (a decrease of 342,420 bags), and 6,561.767 bags on February 1, 1900.

The visible supply on July 1, 1900, was 5,840,561 bags, so that in seven months it has been increased 1,400,166 bags.

The total receipts at Rio and Santos for the first seven months of the trade year were 7,728,000 bags, against 7,288,000 bags for the same time the previous year, and 6,327.000 bags in 1898-99.

Trading on the New York Coffee Exchange was light, reaching a total of 504,500 bags. Spot coffee, No. 7 Rio, fluctuated between $7\frac{1}{4}$ and $6\frac{7}{8}$ cents. The lowest price for options was 5·25 cents for March; the highest, 6·30 cents for October and December.

BRAZIL COFFEE IN 1900.

(From the *Brazilian Review.*)

Statistics for 12 *months ending December* 31*st.*

	Entries.		
	1st Half-year.	2nd Half-year	Total.
Total entries including all Coffee from States of Minas, Rio, Espirito Santo, S. Paulo, Bahia, etc. received in the Bay of Rio.	1,165,172	1,681,367	2,846,539
Ditto at Santos	1,105,569	5,412,599	6,518.168
Total Entries 1900	2,270,741	7,093,966	9,364,707
„ „ 1899	3,192,084	6,716,135	9,908,219
„ „ 1898	3,320,172	5,553,813	8,873,985
„ „ 1897	2,894,905	7,137,196	10,032,101

Entries at Rio and Santos during the year 1900 were 543,512 bags or 5·5 % less than for the previous year, but 490,822 bags or precisely 5·5 % in excess of those of 1898. The regularity observed by entries during the first and second halves of 1900 at Rio de Janeiro is remarkable, if compared with the enormous difference shown by Santos entries, where those for the second half are nearly five times the first's, although the seasons are the same at both places. This dissimilarity points to some superiority in Rio methods of handling, that enables sales to be spread more uniformly over a longer period. Whether that is the result of the *Ensaccador* (intermediate dealer) system ruling at Rio, or of better banking facilities we will not try to determine, but simply draw attention to the fact to point out that, in spite of the outcry, for money Rio planters can scarcely be in so desperate a condition as is generally represented. . . .

SHIPMENTS.

	Quantities (Bags of 90 kilos.).		
	1st Half-year	2nd Half-year	Total.
Rio de Janeiro—			
Oversea...	1,201,200	2,469,943	2,671,143
Coastwise	108,048	115,092	223,140
Total 1900	1,309,248	1,585.035	2,894,283
„ 1899	1,427,189	2,077,591	3,504,780
„ 1898	1,675,432	1,765,207	3,440,639
Santos—			
Oversea	1,456,401	4,392,713	5,849,144
Coastwise	2,269	693	2,962
Total 1900	1,458,670	4,393,406	5,852,076
„ 1899	2,110,071	4,343,739	6,353,810
„ 1898	2,293,722	3,427,780	5,721,502
Victoria—			
Total 1900	108,191	114,256	222,447
„ 1899	133,773	173,473	307.246
„ 1898	230,299	155,640	385,939
Bahia—			
Total 1900	53,150	133,508	186.658
„ 1899	127,354	121,571	248,925
„ 1898	164.561	140,370	304,931
Grand total 1900	2,929,259	6,226,205	9,155.464
„ „ 1899	3,798,387	6,416,374	10 214,761
„ „ 1898	4,364,014	5,488,997	9,853,011

The figures for 1900 are representative of clearances per manifests and thos e for previous years of shipments (embarques) but are close enough for comparison .

Total Shipments from Rio, Santos, Victoria, and Bahia during the past year were 1,065,331 or 10·4% under those of the previou year and 703,578 bags or 7·2 % less than in 1898.

The proportion of Shipments to Entries was however large i 1900, being 97·7% compared with 96·9% in 1899 and only 90% i 1898.

Comparison as regards Rio shipments is not absolutely accurat because in 1900 the system adopted for estimation of shipment was altered, statistics being compiled directly from Manifests an not from the data of *Embarques* supplied by the Dock Company a previously, but the results are sufficiently approximate to admit c comparison.

As to which is the more accurate system there can be no questio Manifests furnishing an absolutely trustworthy record whilst *Em barques* or loadings fail to take account of the coffee cleared, in transit whether by land or sea.

COFFEE SAILED COASTWISE DURING THE YEAR 1900.

From Rio de Janeiro.

Destination.	1st Half-year.	2nd Half-yea
	Bags.	Bags.
Pernambuco	88,083	38,29
Pará		28,07
Manáos		5,32
Maranhão		5,28
Mossoró		2,90
Maceió		2,16
Ceará		1,90
Parahyba		1,44
Aracajú		32
Macaó		11
Penedo		10
Natal		5
Obidos		3
Total Northern ports ...	88,083	86,01
Porto Alegre	19,965	12,81
Pelotas		7,25
Rio Grande do Sul		7,10
Corumbá		75
Laguna		37
Paranaguá		54
Antonina		18
São Françisco		5
Santos		
Total Southern ports ...	19,965	29,08
Total to all ports ..	108,048	115,09

STOCKS ON 31ST DECEMBER.

Rio de Janeiro	190,380 bags.
Do. Afloat	24,865 „
Do. Niotheroy	3,387 „
Total ...	218,632 bags.
Santos	1,246,078 „
Total 1900	1,464,710 „
Do. 1899	817,274 „
Do. 1899	959,113 „

Stocks at Rio and Santos were never so large as at present, being 647,436 bags or 79. 2% in excess of those on the 31st December 189 and 505,597 bags or 52.4 % over those on the same date in 1898.

In spite of shipments representing a larger percentage of entries the market is congested with the accumulated surplus of former years which it has proved impossible to work off. In 1900 the quantity shipped was 10.4 % under that of 1899 and 7 % less than in 1898, whilst its f.o.b. value was £ 3,602,294 or 23 % greater than for 1899 and 22.9 % than for 1898, the discrepencies showing indisputably that price is not a mere function of supply and demand but is controlled by other factors as well.

PRICES.

	Rio No. 7 per 10^0 kilos.		Santos Good Average per 10 kilos.		New York No. 7 per lb.	
	1899	1900	1899	1900	1899	1900
					Cents.	Cents.
anuary	8$215	10$091	7$503	9$023	6 64	7·94
ebruary	8$437	10$514	7$604	9$377	6·52	8·70
Iarch	8$448	9$455	7$636	8$449	6 15	8·21
pril	8$597	9$325	7$566	8$308	6·22	7·94
Iay	7$688	8$562	6$955	7$910	6·37	7 67
une	7$156	8$512	6$213	7$318	6·07	8·67
uly	6$794	7$680	5$934	6$484	5·94	9 39
ugust	6$449	8$421	5$671	7$240	5·71	8·88
eptember ...	6$341	7$938	5$627	6$908	5·50	8·44
October	7$585	7$762	6$530	6$638	5·83	8·29
November	8$770	7$158	7$904	6$108	6·48	7·85
December	9$520	6$960	8$470	5$896	6·88	7·12
Year average ...	7$853	8$491	6$884	7$371	6·19	8·27

The course of prices during the past year affords to the student of economical phenomena matter for profound speculation.

VISIBLE SUPPLY ON THE 1ST OF EACH MONTH IN 1,000 TONS.
(*From Duuring & Zoon's Report.*)

	1900.	1899.	1898.
January	417·7	386·9	370·0
February	389·9	388·3	357·6
March	387·1	386·0	358·5
April	374·4	385·2	364 2
May	367·6	378·0	340·0
June	357·0	379·2	328·3
July	342·9	378·2	324·7
August	340·4	399·1	338·2
September	388·5	444·8	337·1
October	429·1	468·4	402·8
November	466·1	445·3	419·0
December	461·9	428·4	410·2

In October, 1899, just when visible supplies attained their record, a speculative movement was started in European markets that, without apparent justification, succeeded in pushing prices from an average of 5·50 cents in October to 6·88 cents in December of that year. The ascending movement, encouraged by the lateness of the current crop, continued in 1900 *pari passu* with the rise of exchange until it culminated at 9·39 cents in July, when exchange also reached its highest quotation. Exchange then fell violently from 14 1/2d. to 9 7/8d. in August and since then has oscillated about that point. From January to July, 1900, the rise of exchange and of coffee prices was simultaneous; but from August, 1900, onward the uniformity disappeared and, though exchange was steady, prices fell almost uninterruptedly to an average of 7·12 cents in December last.

Looking at the chart showing the average daily course of exchange and of the sterling and currency quotations of coffee during the previous two years 1898 and 1899, the red line representing sterling prices will be seen to be fairly intermediate between the black, representing exchange, and the blue, that stands for currency prices of coffee, until October 1899 when the coffee prices took a big spurt.

From that date until the end of April all regular relation between them seems to have been lost and from January, 1900, exchange, the sterling and currency prices of coffee all rose together. After that sterling prices rose and fell again, but currency quotations followed the general rule and, allowing for alterations in sterling quotations, preserved a more or less inverse relation to exchange.

The periods that claim particular attention are those extending from October to December, 1899, thence to February, and finally to July, 1900. During the second, not only have sterling coffee prices risen simultaneously with exchange, but much more rapidly, whilst currency quotations have surpassed both, and that precisely when, in accordance with the rules of supply and demand, both sterling and currency prices might have been expected to fall. During the months of September and October, visible supplies stood at 400,000 tons and continued in excess of the previous year's until April, 1900. Under such circumstances it is clear that such a rise could only have been produced by the activity of some extraordinary factor quite independent of the relation of supply to demand.

The question has been debated as to whether the rise of coffee prices was the cause or effect of the simultaneous rise of exchange, opinion running rather in favour of the latter hypothesis. A rise of exchange, it was urged, forces up the gold price of coffee and, the supply of bills being thus supplemented, exchange is forced still higher; in fact—perpetual motion.

If the movement of prices be compared with the variations of the "visible supply," no direct relation is observable. Indeed prices seem to fall generally as the supply diminishes and increase when it augments, as occurred in March and April, 1898, and again in May and June and in October, November, and December. In January, February, and March of 1899 as also in May and June to August, but specially September, 1899 to February, 1900, the same contraction is visible, but, from that date to July, the rise in sterling prices seems to have followed more closely the variations of supply.

Prices, however, are controlled not merely by demand or consumption, or, to speak more correctly, by the relation of one to the other. Without following precisely the variations of this relation, it is, therefore, impossible to state positively that the course of prices has not conformed to the rule. There is, however, another factor that powerfully affects prices for the time being and that is speculation, which, foreseeing events perhaps in the far future, may provoke a rise when by all the rules a fall is due, and *vice versâ*. Such is the only explanation of the rise of prices in the last quarter of 1898 just when supplies reached their maximum and a fall might have been anticipated. In fact, the situation had been already discounted by speculation which, looking always forward, was already providing for the contingency of smaller supplies. In 1900 circumstances altered and prices fell, instead of rising, at the close of the year, in view not only of the heavy supply, but prospect of a still heavier crop in 1901.

In contrast to what occurred in 1900 the course of exchange and that of gold prices in 1898 and 1899 were almost invariably inverted, and only during the first three months of 1898 did sterling prices rise or fall regularly with exchange, except very slightly in August of the same year and in April, 1897. The supposition that sterling prices are affected in any way by the mere course of exchange may, consequently, be regarded as absolutely disproven, though as we propose to show later, there are circumstances under which exchange must always prove a powerful factor in the determination of even gold prices.

Still the fact that paper and gold prices did accompany exchange on several occasions shows that the phenomenon is in no way abnormal and, therefore, that there must be factors of a regular nature to account for it.

The rise of sterling prices that commenced in October, 1899, was at first contemporaneous with falling exchange. In November exchange stopped falling and remained almost level until the close of December, when it commenced to rise and only stopped in July, 1900. Apart from other causes there can be no doubt that, in this instance, the improvement in coffee prices and consequent increase in the supply of bills was the cause and not the effect of the rise in exchange. During nearly the whole of July sterling prices continued to rise in spite of the slump in exchange, but in August when exchange had already acquired a stability that still continues, coffee prices, sterling and currency, collapsed ignominiously and appear to be still falling.

The real cause of the rise of sterling prices in October was speculation and that of the fall in August its collapse. The weakness of exchange may have hastened the catastrophe, but sooner or later it was inevitable, because there was little or no *raison d'être* for such a movement.

Summing-up the lessons conveyed by this diagram, it appears that sterling prices are controlled, like everything else, chiefly by the relation of the demand to the supply of the article. Speculation, which is merely an artificial and transitory expansion or restriction of demand, may anticipate events and send prices up or down for a time, but they can only be maintained if justified by a real shrinkage of supply or growth of consumption.

When supply and demand are fairly balanced, alterations of the rate of exchange will influence gold prices and tend to raise them when exchange rises and depress them if it fall, because the local supply being only sufficient to satisfy demand, local prices will be maintained irrespective of foreign markets.

If, however, the supply be greater than the demand, both sterling and local prices must fall more or less uniformly, but as soon as the depreciation reach a point such as to seriously impair entries and the supply of bills, exchange will fall as well and currency prices react and rise instead of falling. This indeed is the critical point of which speculation invariably makes use to push down sterling prices as exchange falls, whilst maintaining uniform or even improving currency quotations. In this way a kind of endless chain is constructed by which the fall of coffee first depresses exchange and is then depressed by the depression: effect and counter-effect. In reality, however, nothing is endless, and as soon as consumption is stimulated to the point of reasserting the lost equilibrium, gold prices rise again, or currency prices are depreciated to such a point as to affect entries, and the balance is re-established by the curtailment of supply. When coffee prices rise and exchange with them the process is merely inverted; but in all and every instance the real and only true factor that determines price is the ultimate relation of the demand to the supply. Heterogeneous as they may appear, all other factors, speculation, exchange, or what not, are all reducible to that.

Although the price of coffee is at bottom the cause and not effect of alterations in the rate of exchange, it has been shown that speculation in exchange may be utilized to enhance the effect of the depreciation of the supply of bills in such a manner as to react upon sterling prices and drive rates down almost indefinitely. Such factors may, however, be combated by others equally artificial, and to speculation under such circumstances, may be opposed such provision as will ensure the supply of bills being sufficiently supplemented at the critical moment and in such a manner as to neutralize the efforts of the enemy.

Such a period we appear to be rapidly approaching when the excess of supply will alone beat coffee prices to the minimum compatible with profit, beyond which they can only be pushed by simultaneous depreciation of the currency. To prevent utter collapse not only in sterling coffee prices but of exchange, it seems indispensable that steps should be taken to ensure a further and very considerable restriction of the currency, or that a large reserve should at once be accumulated abroad to be drawn against at the critical moment, when currency prices have touched bottom, beyond which they cannot be pushed without affecting the supply of the article.

Forewarned is forearmed; but unless something of the kind is attempted, there appears every probability of the close of the year witnessing a slump in both sterling coffee prices and in exchange, that will, perhaps, put things back to a state similar to that of 1897.

DECLARED SALES.

——	1st Half-year.	2nd Half-year.	Total.
Rio	1,192,000	1,182,000	2,374,000
Santos	1,355,000	3,619,000	4,999,000
Total 1900	2,547,000	4,801,000	7,349,000
,, 1899	3,273,000	5,505,000	8,778,000
,, 1898	3,260,000	5,141,700	8,601,700

CACAO.

POLLINATION AND 10 CWT. PER ACRE.

P. O. D. wrote some little time ago to the Ceylon papers :—Mr. Carruthers, among other things, I believe, is devoting his attention to pollination of cacao flowers, and I have ventured to collect a few ideas on the subject.

If only a tenth of the female flowers that annually appear on a cacao-tree set, 10 cwt. per acre would be common. But there are dangers ahead, and in our endeavours to avoid Scylla it would be well at the same time to have a care of Charybdis.

Thus a tree bearing at the rate of 5 cwt. per acre—and this is surely a low estimate in the event of successful pollination—should yield about 50 average-sized pods per annum. But this is reckoning 300 trees per acre.

It is not probable that the average Ceylon soil will stand the drain of 5 cwt. per acre for very long; therefore systematic manuring is bound to be more or less generally adopted, sooner later. Nor can it be expected, however much it may be hop that so delicate a plant as the chocolate tree has proved itself to will absorb and continue healthfully to assimilate the concentra nourishment of impoverished soil highly impregnated with mulants. Moreover, the best artificial manure for cacao has yet be named.

Ceylon planters have only to look about them to be fully assur of the fact that 20 to 25 years at a remunerative rate of yield, 3 cwt. per acre, and a hundred trees for every hundred-weigh should be the outside life-limit of the cacao-tree. It is useless point to individual trees, whose locality is an open secret, who age may be stated as 30 or 40 years, and whose fecundity is a tonishing. The comparison fails (1) because the individual tree question is not one of a number of others planted at say, 12 fe by 12 feet; (2) because cacao so planted will have been treat far more drastically than the solitary tree which bears so mu ficently; and (3) because, in the case of Forestero (to which the points more especially apply), there is not in the whole island field of any useful extent planted up with only one particul variety. Such trees are altogether exceptional. So that eve twenty to twenty-five years the estate will need to be renewe For canker will help.

Now, the lower a tree, the cheaper the crop-gathering; therefo suckering will continue in vogue. But the tree having been hea ily manured there will be an abundance of "suckers," and th means extra expense. But as the tree will achieve a great sprea this need not be taken into consideration, for these 300 trees p acre will become an impossibility. Probably 150 trees per ac would be nearer the mark.

In order to obtain 5 cwts. per acre from 150 trees, each tree w need to bear 100 pods, and there will probably be no decrease the expense of manure. Being set further apart the trees are like to live longer, however; and this is already a big step in the rig direction.

To qualify this I am personally acquainted (and concerned) wi fields of Forestero cacao whose trees have an average perimeter 25 feet, and they are not yet at their maximum. Let me, therefo suggest that their maximum spread will be 30 feet—a low estima —say, therefore, 50 trees per acre. This indicates that in order obtain 5 cwts. per acre, each and every tree must bear on an ave age of *300 pods per annum*.

But a tree with a perimeter of 25 feet must, of necessity, be so 15 feet to 20 feet in height, and probably much more. The *cost* pollinating, an expensive process at best, now becomes somethi that may be felt. Picking will be dearer, for the trees will be ve tall. Moreover, the cost of seed, and the planting of it is n excessive, so not much will be *saved* by having fewer trees p acre.

Trees planted at 25 feet will find some difficulty at first covering the ground; therefore weeding will become of mo consideration than usual. In order to avoid this, the cacao migh be planted at 12 feet or 15 feet and alternate trees cut out late It is doubtful whether the crop for a year or two will make up f the trees so cut out. There might be two lean years.

Finally, cocoa will drop to 15s. per cwt. through overproductio

Now, the first answer to all this is that there already exist in t Island fields—few indeed!—which give, or recently gave, up to cwt. per acre. But this does not dispose of what may be condemn as a *reductio ed absurdum*, for such fields are of the red variety which planters are becoming more and more shy. Moreover, a attempt at pollination in such fields would be justified only if t owner were willing and prepared to cut out and replant every 15 20 years. Under such circumstances (8 cwt. per acre) even t greediest planter would be inclined, I surmise, to leave well alon

Manifestly, then, there is a point at which pollination as fertile I assume, and apart from the physical capacity of a tree to produ flowers which might set, must cease in order, paradoxically, to b come beneficial. So that pollination is to be welcomed more in re pect of that cacao which is not giving more than two or three cwt. p acre; otherwise the trees will become worn out in a very few yea

Some may say "What though they do become worn? T younger the trees, the larger the pods (the less, therefore, to t cwt.), and the older the trees, the more liable they become to canke Let us plant up afresh two or three years—(and with *graft* cocoa it is hoped this will be possible)—before we cut out eve 20 years, so long as we get our 10 cwt. per acre." Once recogni

the fact that the life of cacao-tree as at present cultivated is as stated, and the answer is obvious.

But if it were possible to obtain 8 cwt. to 10 cwt. per acre without cutting down—if, by means of pollination, a sixth of the trees per acre of a virile and prolific variety of Forestero could be made to bear as well as a Criollo field at 300 trees per acre, can there be any choice as to which of the two methods is to be recommended?

But as there is no fields in the island of only one variety of Forestero, so there is no field of Forestero in the Island which gives—I speak under correction—more than two or three cwt. per acre; and on the top of this comes pollination.

But is there any known jât of cacao—Criollo, Forestero or Calabacillo—which can be depended on for 300 pods per tree per acre per annum?

For purposes of argument I propose to halve this figure: 2½ to 3 cwt. per acre show a very decent profit. There are Forestero fields giving that now, and successful pollination should double and treble this yield.

And the second answer is that cacao, like everything else, is worth precisely what it will fetch in the market. *Verb sap.*

THE AERIAL STEEL ROPE TRAMWAY.

Mr. L. Davidson writes to the *Ceylon Observer*:—

So many enquiries have been made about the Ropeway recently erected from the Plains to the Kanan Devan Hills Produce Company's property in North Travancore that the following notes are penned in the hopes they will interest your readers and answer the enquiries that have been made from time to time.

The first Ropeway line surveyed was about six miles long and the country was very difficult, added to which one span was about 2,700 feet which, as any one acquainted with Ropeways knows, greatly lessens a rope's efficiency because the weight of the rope itself between the standards. 2,700 feet apart, would have been nearly 1½ ton, whereas with the present longest span between of 1,400 feet, the weight of the rope between the standards is about ¾ of a ton and the difference (¾ of a ton) can be carried in line load (*i.e.*, goods) instead of the strength of the installation being expended carrying its own weight. Another disadvantage of this line was that part of it was very flat and part very steep so that there would have been a continual variation of the load on the driving motors when heavy loads left the flatter portions and got on to the steeper ones. The apparent difficulties of this line decided me to try a new trace and it was laid in following pretty closely an old cooly track with the result that we got a line 2·6 miles long at a comparatively even gradient touching a point at the foot of the ghaut to which a railway could conveniently be brought and a point near the top of the ghaut to which a cart road or tramway could be brought and we had then got the skeleton of a complete scheme which has gradually been filled in.

From the end of the old cart road on the plains, a railway trace was laid—10 miles long, 4½ of which ran over the plains and 5½ ran into a narrow valley with grades from one in 80 to one in 25 for the last three miles and curves of 100 feet radius. The bridges are all steel structures running up to 60 feet long and safely capable of carrying narrow-gauge engines and the concession granted by the Indian Government to a Madras Firm (Messrs. Wilson & Co.) for the construction of a narrow gauge railway from Ammanayakanur to Utamapalium includes a branch to the foot of the Ropeway. Fom the top terminus of the Ropeway some 40 miles of cart road and tramways have been cut stretching to Munaar and in various directions therefrom, tapping the Company's estates and factories.

These tramways and roads, the former especially, a Ewing's one-rail tram, may form the subject of a separate monograph; but for the present we will 'return to our muttons' and deal with.

THE ROPEWAY ALONE.

The distance between the upper and lower Termini is 2·6 miles, the difference in elevation 4,000 feet; the steep country is naturally very rough and the lower half a very deadly climate.

The first thing we did was to cut a 5-feet bridle path approximately along the Rope line to transport the material for the Ropeway construction along. Estimates were called for from the most eminent English and local Ropeway Engineers, but not one would undertake *its erection in this deadly* ghaut (which showed their wisdom, as events proved) and an offer was made to the Directors to design, construct and erect the Ropeway locally if they would not hold the worker responsible for any failure, and if they would not protect themselves by engaging a competent Consulting Engineer, and to this they agreed, and the work was placed in the hands of Mr. W. Kemlo, whose great ability and training under Lord Kelvin marked him out for the task. One of first difficulties was how to drive it and the horse-power to be provided (and in this connection the difference in horse-power considered necessary by two great Ropeway Firms was very striking). Another point to be decided was the form of Ropeway, whether of the fixed Rope type, or a moving rope carrying its own loads. After great consideration it was decided that the latter form would be the more suitable, *provided grips could be designed* which would be effective on such a steep Ropeway. Believing that *we* could design what was wanted the plans were prepared

In order to keep the driving station in as healthy a point as practicable we put it half way up the rope, and divided the Ropeway into two halves at this point, the reasons for the latter being: (1) that if a breakdown occurred at any time on one half of the rope, the other one half can still go on working and, (secondly) had the whole 2·6 miles of Ropeway running down 4,000 feet vertical been in one piece, the wear on the rope at the upper end and on the gear there, due to the weight of the rope itself, would have been very excessive.

The next point we decided on was the driving arrangements and as at a convenient point we were able to get in Beeton wheels, having a vertical fall of water operating them of over 700 feet and developing 100 H. P., we fixed this as the Power Station and transmitted the power through a 28 E. H. P. Dynamo one mile over a thin cable to the Centre Station where the motor in its turn operates the Ropeway. By actual results the whole Ropeway requires only about 20 H. P. to drive it, full of loads, at two miles an hour, but of course the power required is greatly regulated by the amount of *up or down loads* at any given time. The dynamo is capable of driving it fully loaded on the *up going side only* at two miles an hour. To save risks of accident we put in duplicated peltons, dynamos and motors.

The erection of the 1,500 feet of pipe and the 1,500 feet of spouting in the watercourse as well as the Peltons, was slow and expensive and was done by Mr. Kemlo's brother. The country is very rugged, and deadly unhealthy, and the spouting as well as much of the pipe had to be carried on iron supports and there were two bridges made for the spouting, one 80 feet long. The Ropewire is ¾ inch diameter best plow steel and was brought out in eight pieces, each 3,000 to 4,000 feet long, wound on a drum. These were all bored for the same axle and the rolls of wire hauled along the track by block and tackle till they came into the Ropeway line where the wheels were fixed and the rope hauled out, the drum revolving on the axle. This was a very neat locally designed arrangement, made at home, and worked perfectly.

Everything comes to him who waits and after much sickness and great trouble, we got the rope up and splices all completed and

PREPARED TO MAKE A START

when the starting resistance sent specially by the providers of the dynamo fused and we had a grand example of pantomime magnesium lights. Part of the current went through Mr. Kemlo's thumb and the place smelt of beefsteaks, while the natives went over that ghaut like another flash.

Mr. Kemlo designed and made with native carpenters a salt and water resistance Box which is working very well and cost a few rupees and that difficulty was got over and the rope started.

You can imagine our disgust and annoyance when we found the rope grips supplied from home so badly made that they would not work, and we had to have new jaws made locally in brass which although not sufficiently strong have worked well and now new jaws of annealed steel are being put in and are working very perfectly.

These jaws, which are the secret of the Rope's success, I will describe later when a patent has been granted. Suffice it to say that they automatically grip the rope at any point desired, go up to the top and automatically leave the rope and run on to the rail. The pulleys on the standard heads have such deep grooves that the rope cannot get off by any chance and the result of this combination of essential points is that the life of the Rope itself is greatly prolonged and probably more than doubled, while, accidents have been reduced till, I believe, 8,000 loads passed over the rope before the last accident, due to a defective pulley and not in any way connected with the grips, and it really did not do any damage to speak of.

The Ropeway *running at half speed two miles an hour* is fully loaded with 66 grips which with loss of time loading and unloading

do three rounds a day. Each load should be two cwts. and this equals 40 tons of out and in traffic a day and assuming that it worked only 250 days in the year this equals 10,000 tons of traffic which is far more than sufficient for present purposes. When it is worked up to 10,000 tons it will certainly show a profit of £10,00 as compared with what it would have cost to move this weight up and down the ghaut by cattle and ponies and donkeys of which we had about 3,000 at work, when the writer came out three years ago. So I think the most captious critic will admit that it is a magnificent success, the greatest credit is due to Mr. W. Kemlo and who has designed and had constructed every detail of it from beginning to finish and to his Assistant.

The automatic working of the Ropeway is very attractive and everyone who has seen it says he or she would not have misseed the sight for a good deal.

KNOWLEDGE OF FERTILIZERS AND MANURES.

The following article, taken from the 1899 Year Book of the Department of Agriculture, relative to the early knowledge and use of artificial fertilizers will be interesting reading. It shows that even in the early days it was necessary to apply artificial fertilizers. The chemical knowledge of the composition and functions of fertilizers at the beginning of the nineteenth century was extremely nebulous. Experience of a wholly empirical nature had shown from the earliest history of agriculture the value of certain refuse products of the stable and the barn-yard in increasing the yield of crops; but the component parts of these materials and the manner in which they acted were entirely unknown. It was the custom in many of the older countries for the farmers to increase the litter of the farm-yard by gathering leaves and twigs, which were used in bedding the animals. As, for instance, it is said of Kliyogg: "He is attentive also to gather all the dried leaves, moss, and rushes from his ground that can serve for litter. A compost dunghill appears to him an object of so great importance to the improvement of land that of all branches of labour he regrets the want of assistance in this the most. In prosecution of this design, in Autumn during the moon's increase, Kliyogg goes into his wood with a hedge bill to prune the supernumerary branches of the fir and pine trees. These he binds into faggots and carries home. At leisure hours, and especially in long Winter evenings he prepares these faggots for the purposes intended. By this method he amasses many many proper materials for good manure." Kliyogg was also careful to preserve the liquid manures which exuded from his stables and for this purpose he constructed trenches in his cow-houses. It is interesting to know that, unwittingly, he had discovered the true function of much of this material, which he regarded as a ferment. The record says: "Thus placed, it receives the urine and dung of his cattle, and being always kept half-full of water; it forms a thick mixture and serves as a ferment, with which a very great quantity of water may in a very short time be converted into liquid manure. One portion of the ferment being mixed with seven portions of the freshest spring water; soon makes the whole become corrupt, especially if the reservoir in which the mixture is made is of wood and placed in a warm situation or if an artificial heat is substituted, in case a natural heat is wanting

By means of this fermentation an excellent manure is produced, which proves the best assistant which can be given to such meadow and arable lands as are naturally dry. The earlier accounts of scientific agriculture at the beginning of the century recognized the great value of gypsum as a fertilizing material. All writers refer favourably to its use. The use of gypsum, as a fertilizer, is said to have been the discovery of Rev. Mr. Meyer, pastor of Kupferzell, Germany. Mr. Meyer published a detail account of the manner of using gypsum. According to the method described by him, gypsum should be spread in its natural state after being reduced to powder, and is useful upon meadows containing both the common and cultivated grasses. Mr. Meyer also found gypsum valuable for peas, vetches, lentiles, oats, rye, and tobacco. Its most surprising effect, however, was upon clover, and this in soils the most dry and arid. On marshy ground it was found to produce no good effect. It is urged that gypsum should be spread upon the grass or grain before it begins to shoot. Upon meadows, the best time for spreading is stated to be at the melting of the snow, and upon fields of grain as soon as they are sown. Benjamin Vaughn the translator of "The Rural Socrates," says that at the end of the last century and at the beginning of the present gypsum was used largely in the United States and he refers to the writings of Judge Peters, Robert Morris, Dr. Mitchell, Mr. Bordley, and others on the subject. The use of marl was also fully understood at the beginning of the century.

Since the time of the Roman conquest and probably before, the marl beds of Northern France and Southern Belgium have been constantly exploited. Great hollows are found in many of the fields of Northern France made by the excavation of marl many centuries ago. Kliyogg calls the marl bed "that mine of the farming gold," and says: "I owe to the marl not only abundant harvest, but the character of my children. It is true that they murmured against me at first for employing them in hard labour, even during the Winter. But at length the rich harvests with which Providence blessed us forced them to confess that I had said nothing which was not both true and useful."

The true function of marl, however, was but little understood and even its chemical composition was practically unknown by those using it. In the article on husbandry, in "The Spectacle Nature," the Prior, in conversation with the Chevalier. says in regard to manure: "This manure which completes what the dew of heaven had begun is the most contemptible substance upon the face of the earth and is chiefly composed of the litter taken from stables and sheepfolds; dove houses, hencoops, and the dwellings of all domesticated animals furnish manures that differ in their degree of heat, and which being blended together, as well as quenched and corrected by each other, replenish the land with all the fertility it had lost." Among other substances which the Prior mentioned as being used for manures, are straw, stubble, shells of pulse, useless leaves, refuse of garden herbage, rotten wood, chimney and oven soot, rags, air of animals, cuttings of leather, skins of beasts, bark of trees, lees of wine, sediments of oil, malt dust, tanners' bark, dyers' lees, soapsuds, of which last it is said, "which are commonly thrown out of the laundry as useless, though soap is impregnated with oil and salts, which are the principal elements of plants."

The Prior also says: "No kind of manure has more prolific qualities than the soil which is swept from populous cities, and especially those where a great number of kitchens and dyers of wool are continually discharging into the streets a fat and oily sediment which is very beneficial to corn."

The value of ashes is fully recognised, in the essay of husbandry by the Prior, who says that they can supply the place of all the rest if a sufficient quantity can be obtained. The ashes of wood are preferred to those of any other substance. He advises the burning of turf for the purpose of securing ashes. The methods of forming composts with ashes are fully described.

The prevailing idea at that time that oil is one of the most valuable of manures is developed in his description, it being stated that "oil and salts constitute the chief merit of manure."

The fact that the principal value of ashes is due to the potash phosphoric acid which they contain was not even suspected by the earlier scientific agriculturists. The early agriculturists in our country were imbued with the customs of their European homes in regard to the use and value of manure, although upon the virgin lands there seemed to be little necessity for the application of fertilizing substances. The necessity of fertilizers, however, soon became evident, especially on lands planted continuously to cereals and to tobacco. When the first abundant crops, due to the virgin fertility of the soil, began to diminish, the colonists received a valuable lesson in the use of artificial fertilizers from Squanto, one of the leading Indians of the new England coast. In Governor Bradford's "History of Plimouth Plantation" is given an account of the early agricultural experiences of the Plimouth colonists. In April, 1621, at the close of the first long dreary Winter, "they (as many as were able) began to plan their corn, in which service Squanto (an Indian), stood them in great stead, showing them both ye manner how to set it, and after how to dress and tend it. Also he tould them, arcepte they got fish and set with it (in these old grounds), it would come to nothing; and he showed them yt in ye middle of Aprill, they should have store enough come up ye brooke by which they begane to build and taught them how to take it."

In George Mourt's Relation; or, Journal of the beginning and proceedings of the English Plantation settled at Plimouth, in New England, by certain English adventurers, both merchants and others," London, 1622, it is said:

"We set the last Spring some twenty acres of Indian corn, and sowed some six acres of barley and pease, and according to the

manner of Indians, we manured our ground with herrings, or other shads, which we have in great abundance and take with great ease at our doors. Our corn did prove well, and, God be praised, we had a good increase of Indian corn, and our barley indifferent good."

Thomas Morton, in his "New England Canaan," London, 1632, wrote of Virginia:

"There is a fish (by some called shads, by some allizers) that at the Spring of the yeare passe up the rivers to spawn in the pond, and are taken in such multitudes in every river that hath a pond, at the end that the inhabitants doung their ground with them. You may see in one township a hundred acres together set with these fish, every acre taking 1,000 of them, and an acre thus addressed will produce and yield so much corn as three acres without fish; and least any Virginea man would infere hereupon that the ground of New England was barren, because they use more fish in setting their corne, I desire them to be remembered, the cause is plaine in Virginea, they have it not to sett. But this practice is only for the Indian maize (which must be set by hands), not for English grain and this is therefore a commodity there."

The following amusing quotation is from the records of the town of Ipswich, Mass., May 11, 1644:

"It is ordered that all the doggs for the space of three weeks from the publishing hereof shall have one legg tyed up, and if such a dogg shall break loose and be found doing harm the owner of the dogg shall pay damage. If a man refuse to tye up his dogg's leg, and hee bee found scraping up fish in a corn field, the owner thereof shall pay twelve pence damage beside whatever damage the dogg doth. But if any fish their house lotts and receive damage by doggs, the owners of these house lotts shall bear the damage themselves."

It is thus seen that even on the old ground cultivated by the Indian before the advent of the colonists it was not possible to raise good crops except by the artificial manuring which has been described above.—*Florida Cultivator.*

GINGER IN LONDON.

A somewhat quieter tone has been ruling in our market this week, which, we confess, says the *London Commercial Record*, has caused some disappointment, as the firmer tendency, and in some cases the inclination to boom, which were evident last week, had raised the hope of a general improvement in the Lane. However, disappointing as the renewed quiet feeling may be to many operators, markets, there is no denying the fact, are still better and more promising than they were some little time ago. There is an absence of that hopeless depression which paralyses all enterprise and effectually destroys all attempts at a revival. Buyers are not keen on purchasing, but on the other side holders and shippers show some determination to maintain values. Spices, above all ginger, form an excellent example of this principle. In spite of a very moderate spot demand, which at other times would be the means of breaking any market, prices are not only fully maintained, but are actually rising, although slowly, and it appears to most people a very extraordinary thing that this sign of strength should fail to attract general attention. No doubt speculative operations in spot lots are not to the taste of everybody, and do not suit the pocket of many would-be buyers, and this may to some extent explain the absence of an appreciable spot demand, but for arrival or delivery terms more interest should be shown in an article possessed of so many possibilities in favour of a buyer. True, the c.i.f. prices asked have generally been over the landed parity, a fact which has deterred most speculators from purchasing lots which, even at the premium demanded at the time, would now show a handsome profit. But the general depression, which then held all minds spell-bound, paralysed the speculative element. Even now, when all reports agree that the crop is going to be a small one, smaller in fact than anticipated, and the non-arrival of new ginger lends a strong colour to these reports, speculators hesitate to invest a small sum in a purchase of it. The result will be that another season will pass without the usual ginger transactions and the annual spurt to which we had become accustomed. Instead of being able to control the market by securing the little that is available, our trade leaves this privilege to the natives who, in case they fail to find purchasers for their crop in India, have no other means of disposing of it than by consignment to London and smash our market the moment it shows signs of recovery. Consignments if they do come will as usual consist of rough and badly cut descriptions; European marks of cuts should therefore gradually increase in value. India, we are told still exhibits exceptional strength; bears and bulls are having a severe fight, and thanks to a strong demand for home consumption and for Arabia, bulls have so far been victorious, and have succeeded in cornering their opponents. The hope of a decline on that side is therefore for the present at any rate destroyed, and as we are steadily approaching the close of the season the probability of doing business is rapidly vanishing. It appears London has ceased to be the controlling market of ginger, it has turned into a speculative and gambling article among native dealers and planters.

GLAZED COFFEE IN OHIO.

The official notice of Dairy and Food Commissioner J. E. Blackburn, of Ohio, that the sale of coffee that had been manipulated by coloring, coating, polishing, or powdering, whereby damage and inferiority are concealed, or whereby it is made to appear better and of greater value than it really is, has, says the *American Grocer*, aroused the trade, and justly. From our latest advices we feel certain that Commissioner Blackburn intends to thoroughly investigate this matter and then notify the trade of the conclusions reached. The following circular has been issued:

Columbus, O., *February* 5, 1901.

Dear Sirs,—Replying to your inquiry about the coffee situation, would say that this matter is now under consideration and investigation by the chemists of this Department. As soon as conclusions are reached, a circular notice will be sent to all the jobbers in Ohio, and a sufficient number will be furnished to supply all their salesmen.

I might say that the following firms have agreed to accept the law as construed by this Department: Andrus, Scofield & Co., Columbus; Dayton Spice Mills, Dayton; and Woolson Spice Company, Toledo. W. F. McLaughlin & Co., of Chicago, have also agreed to comply with the law as soon as construed by the court.

The only firm that has refused, and still refuses to accept the ruling of this Department, or abide by the laws of the State as construed by our Supreme Court, is Arbuckle Brothers, of New York.

Very truly yours,
J. E. Blackburn,
Dairy and Food Commissioner.

Arbuckle Brothers have notified the trade that they guarantee their brands to be a pure food and in strict conformity to the laws of Ohio; facts which they will maintain at their expense in any suit which the Commissioner may bring against any merchant selling their brands.

We have faith that Commissioner Blackburn will take no step to restrict the sale of coffee that meets the requirements of the food laws. The question is rather a difficult one, as the price or market value of coffee is not altogether based on its intrinsic merits in the cup. For instance, a Padang Interior coffee, with less merit in the cup than a Maracaibo, will bring much more in the market on account of the popular prejudice in favour of East India growths. Then the fact that the identity of the raw bean is destroyed in the process of roasting makes it difficult to say that value has been unduly affected by reason of any manipulation of the bean.

In the case of glazing, the primary object is to retain aroma and to facilitate its making, and not to deceive or defraud the consumer.

Unless coffee can be shown to be unwholesome, we can see no justification for interference in its sale under the food laws of any of the States.

FIBRE PLANTS.

"A. P." wrote lately in *Capital*:—

These have been occupying the attention of planters so much during recent years that no apology is required for again reverting to a subject which, according to the ideas of some, is becoming threadbare.

It is difficult to imagine how such a subject can possibly become threadbare or exhausted. Even the fibre plants of India alone would prove an inexhaustible class of economic plants for studious experiment. There are, no doubt, thousands of plants in India which give fibres of sorts. We are informed that there are 300 fibre yielding plants in this country. Of these, we are further informed that at least 100 afford strong and useful fibres, which are regularly

used by the natives of India. Only 30 appear however to be recognised, by Europeans, and those actually utilised for commercial purposes do not appear to exceed ten.

The commerce in fibres is now of great importance, and although some of the new fibres introduced during late years have been of low textile value and chiefly used for adulterating more expensive kinds, a great change has taken place in the quantity produced of all fibres. According to the Cantor Lectures on the subject of commercial fibres the principal vegetable fibres are: Cotton, jute, flax, hemp, of different sorts, paper material (esparto and wood pulp), cordage material, coir and brush material and raffia. This is an exceedingly small list when the available number is taken into consideration. According to Dr. Morris it has been asked whether the general neglect of many really valuable fibres known to exist in many parts of the world arises from some defect in the cultivation, in the want of suitable appliances to extract the fibre, or in the incidents of distribution and commerce.

There are, undoubtedly, many valuable fibres which have hitherto been quite neglected. Even fibres themselves, which have been carefully and exhaustively examined, and proved of great merit, are still unknown in commerce.

It is not the object of the writer in the present instance to bring into prominence all the fibres which are quite as deserving of notice as those already in use. Nor is it intended to even glance at the requirements in cultivation and general treatment (which in some cases are vastly different), of those fibres of real commercial value, which are, by no means, unknown botanically, but, in a great many cases, entirely unknown commercially. A great many of these possess qualities superior to those now in commerce, whilst, to quote Mr. Morris, "their special adaptation for cultivation on a large scale in British possessions in the tropics should bespeak for them the attention they deserve." The writer had the opportunity lately of seeing what is considered the largest sisal plantation in this country which is on the Dauracherra Estate, South Sylhet.

The plants to the number of 10,000 were imported from Florida in 1894, although they had a portion of the consignment sent out from Kew in 1891.

At present about one half of the plants imported from Florida are poling and bearing from 2,000 to 3,000 bulbils (small bulbous plants which grow on the flower stem) each. Large nurseries are being prepared for those bulbils so that in the near future the supply of young plants will be enormous. A few years ago the embargo laid against the export of *Agave rigida* var. *Sisalana* from the Bahamas, and there being practically nonre to be got in this country, was considered by would-be growers to be sufficiently prohibitive to any attempt being made to grow it upon anything like a paying scale in this country. This is all altered now, and it is seen that there will very soon be an ample number of plants for all requirements, and they will be always rapidly increasing. A few years ago this fibre plant was hardly known in this country, and now large landed native proprietors are putting down plantations all over the country, and last year I am informed the Dauracherra Company were unable to supply all the orders received for young plants

The leaves of the sisal plants on the Dauracherra estate had been decorticated, and the fibre has been particularly well reported upon by experts. In one thing the proprietors of Dauracherra have missed themselves in connection with sisal growing, they have made no provision for a permanent crop. The plants have been planted 8 feet between in the row and 10 feet between the rows. These distances have always been recommended hitherto. When the plants got to be about 4 years old a young sucker ought to have been planted in between, so that when a plant poled and died which they almost invariably do within 10 years of planting, the plant which was planted between is ready to take the other's place and keep the constant supply of fibre going.

But after seeing the Daura plantation the writer is convinced that 8′ by 10′ is far too wide apart and would say 4′ by 6′ an ample distance. Whenever a plant has started to give leaf ready to produce fibre, the leaves are constantly cut off just as, or a little before, they come to the horizontal position, and the immature leaves left on the plant are always straight or nearly straight pointing upwards.

The plants, therefore, take up considerably less room than an ordinary sized tea bush and cast no shade whatever. It is difficult to imagine why it was considered necessary to plant so far apart, unless the idea arose when growing a variety of sisal armed with side teeth In this case, if not planted widely apart, they would be difficult to handle and move amongst when leaf cutting. But th right variety of sisal has no side teeth, but only a terminal spin and after the cutting commences this is always pointing upward as already mentioned above, and cannot come in contact with any ou

There is another variety, which is largely grown in Yucata which goes under the name of "Sacqui," (*Agave rigida* va *Longifolia*). Plants of this variety were received at Kew so f back as 1879 and again in 1890. This variety produces equall as valuable a fibre as "Taxqui" (*Agave rigida* variety *Sisalana* Although the variety name of the one is *Sisalana* and the othe *Longifolia* the one has as much right to the name sisal as the othe as they are both grown (it would be stretching a point to say the were cultivated) in Yucatan, and are both shipped at the Yucata port of Sisal, which gives the name to the hemps of both varieti in commerce. *Longifolia*, if anything, is slightly longer in th leaf, as the name indicates, but being armed with side teeth th variety is rejected in favour of the *Sisalana* variety, which much easier to handle and work with But sometime the *Rigid* variety is, less or more, armed with side teeth, but they generall disappear as the plants emerge from this young stage, whic would point to both varieties being fully armed at one tim When Dr. Perrine took his sisal plants from Yucatan to Florid in the thirties he picked the lesser armed variety, not for i superiority of fibre to the *Longifolia* variety, but simply becaus of its smoother leaf. The best fibre districts in Yucatan possess a arid climate with gravelly, stony, or rocky soils, and it is claime that the fibre is stronger and more abundant in dry, hot soi than in rich, deep soils, and the same is found to be the cas in this country. It may be confidently expected that in time th leaves of the sisal plant will lose a great part of their fleshine when grown in this country, as is invariably the case sooner or late with all such plants. But that will be no drawback to its usefu ness as a fibre producer. And as it belongs to a class of plan which is more than any other indifferent to what kind of a soil grows in, it is emiently suitable for planting in poor scrub lan or worn out tea lands. But with all its accommodating qualities will not succeed in every kind of soil. It will not succeed upo stiff clay soil, nor in peaty soils, or in soils which are retentive water. It will grow more luxuriantly and give a longer fibre in good soil than it will in a poor soil. But a soil intended for growin *agaves* for fibre must not be too rich, as in such a case, the fibre wi be of great length, but only at the expense of its strength an quantity And as three feet is of equal value and usefulness i Manila hemp as six feet, the same applies to sisal hemp. The grea desideratum in such hemps being strength and lustre combine with moderate length rather than a long continuance of staple.

PHOSPHATES.

Not only in the Southern States, but also in Tasmania, a rewar either has been, or is proposed to be, offered by the Governmen for the discovery of phosphatic rock. It seems most remarkabl says the *Queensland Agricultural Journal*, that, in a country whe lime, coal, kerosine shale the precious metals, almost, every know mineral, and many precious stones. are found in more or les abundance, as in Australia. no trace of phosphatic rocks has ye been found.

The phosphatic deposits found in such abundance in Carolin U. S. A., in England, and other parts of Europe consist of th fractured and rolled bones of extinct and also of recent giganti sea-animals, such as whales, sharks, sea-lizards, such as th extinct ichthyosaurus, which existed at one time of the world history in millions in our seas and oceans. These fossil bones ar found in enormous quantities on the coasts of Suffolk, Norfol and Essex, and it was not long before the value of the deposi as a manure rich in phosphoric acid was discovered, and the lat Sir John B. Lawes, of Rothamstead, set to work to prepare hi "superphosphate," erroneously known as *coprolite* manure. Many thousands of tons are annually sold, and the demand is still in creasing Some of the deposits are so hard as to require powerfu grinding machinery to reduce them, after which they are dissolve in sulphuric acid to render the phosphate of lime available a manure. In other cases the fossil bones are found in the gree sand, and require very simple grinding machinery and no subse quent process to fit them for agricultural purposes. Phosphori acid occurs in soils principally in combination with lime a phosphate of lime, and this constituent enters largely into th composition of bones, corpolites, and guano and of a variety o

osphatic minerals, such as the Norwegian and Canadian apalite. uracao rock phosphate, the South Carolina phosphate, and others ngland imports some 600.0 0 tons of these minerals yearly, and om Charleston (South Carolina) there are annually exported me 150,000 tons.

We know that the Continent of Australia was at one period of e world's history almost entirely submerged beneath the ocean. ne famous Cloncurry copper-mining district was an island in an ean. At that period vast numbers of huge marine monsters isted in what are now the Pacific, Indian, and Antartic Oceans. an it be possible that the solid remains of these creatures have een completely swept away? This can scarcely be the case, for e know that huge skulls and bones of antediluvian land animals id remains of marine fauna have frequently been disinterred om the black soil banks of various creeks on the Darling Downs. omewhere beneath the surface there must be immense deposits of eir bones, possibly solidified into a rocky mass. At Clifton a one, apparently the leg bone of gigantic prehistoric bird, such as ne Dinornis, was found a few years ago, completely petrified, and me immense thigh bones, also petrified, were picked up in the reek. In the neighbourhood of Chinchilla there are masses of roken bones to be found, amongst which were discovered skulls of ne Australian marsupial tiger in perfect preservation. That nosphatic rocks have not been found is no argument against their xistence, and deposits may yet be found in some portions of the tates not yet visited by scientists.

DISTRICT ASSOCIATIONS.

TRAVANCORE CARDAMOM HILLS.

The following are the Minutes of Proceedings at the Annual eneral Meeting held at Pambanar Bungalow, on 16th March, 901. PRESENT:—Messrs H. M. Knight (*Chairman*), F. issett, E. Latter (*Honorary Secretary*), Attorney for Hon'ble . B. Wilbraham, C. V. Muthusamy Iyer, Ramasamy Chetty, inar Rowther, and (by proxy) Angoor Ninar Rowther.

Minutes of meeting held on 8th October last were taken as read nd confirmed.

Rules which had been printed and circulated were confirmed.

The Honorary Secretary read a letter from Superintendent and istrict Magistrate of Cardamom Hills, dated 15th instant, which was reply to the deputation that waited on the Dewan of Travancore so ng ago as 28th November last,—and stated that H. H.'s Government o not see their way to modify Rule X-A, but have decided to alter ule XIII as follows:—"No transfer of a holding or portion thereof hall be valid unless and until it is ratified by the Superintendent of he Cardamom Hills." Government have also authorised the Amindars of Poopara, Oodumbumshola, and Vandemmettoo to collect st from the Ryots. The question of reducing the rate of assessent to Rs.6¼ instead of Rs.8 is still under consideration and a efinite reply will soon be sent on this point also

The Honorary Secretary was instructed to reply to this letter and equest that kist might be paid to Kombay agent, as originally asked r—and also to press for a reply regarding reduction of assessment Rs.6¼.

The *accounts* audited by Mr. F. Bissett, were duly passed

The *Election of Officers* resulted as follows:—*Committee:* Messrs. . M. Knight (*Chairman*), E. Latter (*Honorary Secretary*), F. Bisett, Angoor Ninar Rowther, and C V. Muthusamy Iyer.

Reduction of Tax.—Proposed by Angoor Ninar Rowther and econded by C. V. Muthusamy Iyer "That H. H. Government be sked to extend the period at Re.1 tax per acre from 4 to 5 years." *arried.*

Resolved that *Subscription* for 1901 to be at the rate of Rs.5 per 00 acres. The five divisions having native representatives to be reated as 500 acres each. This will bring in Rs.210 and with Rs. 50 still due from three of the native divisions will provide sufficient unds for the year and without outstanding liabilities. Members were eminded subscriptions were due at once.

A vote of thanks to the Chairman and Honorary Secretary closed he proceedings.

(Signed) E. LATTER,
Honorary Secretary.

INDIAN TEA ASSOCIATION (LONDON).

The following is an Abstract of the Proceedings of a Meeting of the Committee held on March 5th, 1901, when the following members were present:—Mr. D. Cruickshank (in the Chair), and Messrs. A. Bryans, J. S. Hulbert, Robert Lyell, C. C. McLeod, F. A. Roberts, A. G. Stanton, J. N. Stuart, and C. W. Wallace.

Reduction in Output.—The Secretary reported the number of undertakings received in reply to the circular of the 14th ult. It was decided that reminders should be sent to those companies which had not yet sent in returns.

Green Tea.—The correspondence on this question was read, and after discussion it was agreed that the decision come to on June 21st, 1900, should hold good in respect of the current season, *viz*, "that 1½ annas per lb. up to a maximum of 200,000 lbs. to be manufactured this season, be allowed out of the funds of the levy on the shipments of green tea for the American market, sent there direct from India, such funds to be distributed as a bounty at the discretion of the Calcutta Committee," the definition of the term "green tea" for the receipt of the bounty being taken to be tea made from the ordinary leaf plucked on the Gardens, such as would be ordinarily made into black tea, but which in its altered manufactured state will not compete with the sale of black tea in America or elsewhere. The bounty to be paid on the same quantity as before sanctioned. *viz.*, 200,000 lbs. until it is seen what success is attained in the manufacture of green tea, the Association in Calcutta to be requested to notify the Committee promptly if a larger quantity than 200,000 lbs. is likely to be specially prepared for shipment to America.

Duty on Tea.—The Secretary reported the result of his vist to Sir Seymour King, and it was decided that Mr. J. N. Stuart, should see Sir Seymour, at the earliest opportunity with reference to the letter of March 1 to the Secretary of State for India. It was agreed that a note should be sent to Members of Parliament as soon as the Budget was announced, reminding them of the previous letter to their address and asking them for their support to the proposal for a reduction in the duty.

The Secretary reported having received a call from Mr. G. C. Levey, with reference to a proposed exhibition of products of the British Empire in the winter of 1901 in St. Petersburg. It was noted that Mr. Levey, would write on the subject; and particulars were to be awaited.

THE COST OF WAR.

From the day when Achilles fasted three days and nights over the body of Patroclus, slain in the ten years' siege before the stout walls of Troy, have we learned of war's sorrows.

The Duke of Wellington wept like a child when he surveyed the bloody, hard-won field of Waterloo. Methuen, it is said, broke down at the ghastly sight of Magersfontein, and returned to his tent that the men might not witness his grief.

"Who de d is must be buried," says Homer, and, we might add, "who ill is must die."

So thought Private John Smith, living now at 19, South Uxbridge Street, Burton-on-Trent. The *Aurania* steamed out to the Cape on December 27th, 1899, with this soldier aboard her (that was before she steamed back with the gallant C.I.V.'s) and in telling me of his trials, on August 29th, 1900, Private Smith says that *that* part of his duty was pleasant enough.

"Shortly after Earl Roberts' famous march into Kronstadt, we were stationed between that town and Jacobsdal to guard the line of communication. Towards the end of April I was laid low with that fell disease enteric fever.

"There were hundreds of men down with it It has laid low more men than all the shot and shell that was ever fired by Boer Artillery. For several weeks I was in the fever hospital. My stomach was converted into a manufactory of torturing pains and I grew as weak and helpless as a new-born babe.

"I was for *days unconscious*, but gradually recovered sufficiently to be invalided home"

Yet the suffering of Private Smith was not over. "I went aboard the Hospital Ship *Nineveh* in June," he says, "and

shortly afterwards sailed for home. During my short stay in South Africa, I lost over 20 lbs. in weight. Nothing that I took relieved the constant vomiting, or increased my strength."

"After," he says, "I had been home a few days, my brother, who is an engine-driver on the Midland Railway—not of *an armoured train*—advised me to try Mother Seigel's Syrup. I got a bottle. I found it was doing me good. The vomiting *ceased*, and I was able to enjoy all kinds of food. My appetite is now enormous."

"Altogether I have taken four bottles of Mother Seigel's Syrup, and gladly give you permission to use and publish my statement. This Syrup is a fine tonic and a great medicine for the stomach. I can especially recommend it *to soldiers returning from South Africa* in feeble health."

Wellington knew the bitter cost of war in 1815.

Methuen in 1899 and 1900.

And the hero of this narrative in 1900, too His was a personal cost. "Green vomit." Charles Reade writes, "laid her sickly hand on him."

A broken man.—Until the kindly offices of Seigel's Curative Syrup put him on the steppingstone of "first wealth." which is health.

MARKET REPORT.

[*Per Mail advices of 8th March* 1901.]

COFFEE.

The London Commercial Record says:—The market has been well supplied during the week, and the chief part of the quantity offered found buyers. The batter grades of East India met good competition at full to occasionally dearer rates, but the less desirable qualities are more difficult of sale. Costa Rica has not been in such active demand, and at the close fine qualities are 2s to 3s cheaper, while low middling and middling kinds are dull. Salvador again favored buyers, but otherwise there was no material alteration in other Central American descriptions. "Futures" have shewn many fluctuations; early in the week prices advanced, but lower Foreign markets and Exchange brought about a reduction; the close is, however, firm at a slight advance for the week. Yesterday, May delivery sold at 33s 7½d to 34s 3d. July at 34s to 34s 6d, September at 34s 4½d to 34s 10½d, and December at 34s 9d to 35s 4½d.

Auctions to-day comprised:—17 casks Ceylon Plantation, 826 bags East India, 66 half-bales Mocha, 932 bags Costa Rica, 2,527 bags Guatemala, 220 bags Salvador, 53 bags Caracas, 372 bags Mexican, 26 bags Nicaragua, and 187 bags Santos. A somewhat irregular market. Some Coffee went well and steady, but common Guatemala was 1s per cwt. lower and slow of sale.

London ..	Santos ...	May delivery	... 34s 3d.
New York	... No. 7 Rio...	..	.. 6 30 cents.
Hamburg...	.. Santos ..	..	.. 33¾ pf.
Havre .	... Santos ...	..	. 41 francs.

Imports, Deliveries and Stock of Coffee in London, are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	190
Tons .	13,445	12,416	5,626	5,4
	Home Consumption.		Export.	
	1901.	1900	1901.	190
Tons ...	4,227	3,548	2,931	4,1

The preceding figures exhibit— Ton

In the Imports a decrease this year of	2
Home Consumption a decrease of	6
Export a decrease of	1,2
Stock an increase of	1,0

Auctions this week have passed off as under:—

East India.—4,359 bags mostly sold as follows:—*Mysore*, smal 49s to 51s 6d. middling to good middling 56s to 69s 6d, bold 73 79s, peaberry 62s to 82s. *Coory*, smalls 35s to 47s 6d, low to go middling 43s 6d to 58s, bold 61s to 8[illegible], peaberry 58s 6d to 7 *Neilgherry*, smalls 41s 6d to 47s 6d, low middling to middling 4 6d to 52s 6d, bold 58s to 63s peaberry 49s 6d to 63s. *Nellampath* smalls 42s 6d to 46s 6d, middling 50s to 53s, bold 65s to 6 peaberry 60s to 64s, *Sheraroy*, low middling 47s 6d to 48s, bold 6 peaberry 58s, *Wynaad*, smalls 44s, middling 50s, bold 61s to 6 peaberry 60s. *Naidoobatum*, peaberry 58s.

Java.—*Liberian*—119 bags bought in.

Mocha.—173 half-bales bought in.

Jamaica.—243 barrels 140 bags sold—ordinary to good ordina greenish 32s to 37s 6d, fine ordinary 43s, small brownish 43s 6 low middling 47s to 55s, bold 59s to 65s 6d, peaberry 60s 6d.

Costa Rica.—5,884 bags nearly all sold, smalls 39s to 45s 6d, fi ordinary to low middling 38s to 50s, middling 51s 6d to 58s, go middling 59s 6d to 61s 6d, bold 68s to 83s, fine bold 86s 6d to 9 6d, peaberry 46s 6d, to 79s 6d.

Nicaragua.—135 bags partly sold, smalls 32s, low middli greenish 47s, good bold 67s 6d, peaberry 50s to 60s.

Guatemala.—2,507 bags sold, smalls 36s to 45s 6d, low middli 45s 6d to 49s, middling to good middling 50s to 56s 6d, bold 60s to 65s, fine bold 77s to 82s 6d, peaberry 54s to 69s 6d.

Salvador. Of 1,610 bags catalogued 880 bags sold, smalls 3 6d, good ordinary 37s to 39s, low middling 46s to 48s 6d, middli 50s 6d to 51s, bold 53s 6d to 66s 6d, peaberry 59s to 68s 6d.

Colombian.—Of 771 bags catalogued 700 bags sold—smalls 3 to 40s, low middling to middling 43s to 50s 6d, bold 51s to 6 peaberry 45s to 56s 6d.

Mexican.—297 bags offered and 200 bags sold—good ordina brownish 37s, low middling 43s to 43s 6d, peaberry 55s to 56s.

Ecuador.—453 bags partly sold—ordinary to good ordina 33s to 37s.

Brazil.—Of 634 bags unwashed Dumont Santos 160 bags sold medium to extra bold brownish green 35s to 41s, peaberry 39s to 45s, quay terms.

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

CROSSE & BLACKWELL'S, LTD.

By Special Warrant Purveyors to The Queen and Empress of India.

CELEBRATED OILMAN'S STORES.

[w. 1-10-98 -t.f o.]

Receipts in Rio and Santos.

nce July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	2,114,000	2,743,000	2,434,000	3,409,000
Santos ...	6,543,000	5,188,000	4,635,000	5,249,000
Total...	8,657,000	7,931,000	7,069,000	8,658,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 11$\frac{13}{32}$d, previous day 11$\frac{1}{2}$d.

HAVRE, *Mar.* 7.—Good average Santos March opened steady at 40$\frac{1}{4}$f. and closed steady at 40$\frac{1}{2}$f., May opened at 40$\frac{3}{4}$f. and closed at 41f., September opened at 41$\frac{1}{2}$f. and closed at 41$\frac{3}{4}$f., December opened at 42f. and closed at 42$\frac{1}{4}$f.

HAMBURG. *Mar.* 7.—Good average Santos March opened steady at 32$\frac{3}{4}$pf., and closed steady at 33pf., May opened at 33$\frac{3}{4}$pf., and closed at 33$\frac{3}{4}$pf., September opened at 34$\frac{1}{2}$pf., and closed at 34$\frac{1}{4}$pf., December opened at 35pf., and closed at 35$\frac{1}{4}$pf.

NEW YORK, *Mar.* 7.—Closing prices of No. 7 Rio were as follow:—

	Mar.	April.	May.	June.	July.
March 7...	6·15	6·20	6·30	6·30	6·40
March 6...	6·10	6·20	6·25	6·25	6·35

East India offered in Public Sale since 1st March 1901.

March.	Mark.	District.	Size 1.		Size 2		P. B.	
	Cota Kadoo	Coorg .	39	66/	43	53/	13	67/
	Leighwood	Neilgry..	21	58/	96	48/6	18	60/
	Balmadies	Mdbtm...	12	74/	36	54/	9	not sold
	Scotforth	Neilgry..	16	not sold	35	49/	2	50/
	Lower Droog .	,, ...	7	,,	25	47/	4	49/6
	Pilloor	,, ...	18	,,	63	48/6	13	not sold
	Chengal	,, ...	19	66/	46	50/6	8	58/
	Chisholm's Coorg, Banangalla	Coorg ...	17	75/	20	56/6	13	75/
	,, Fairlands..	,, ...	27	65/6	39	51/6	14	not sold
	Dunkeld	,, ...	6	79/	15	58/	3	,,
	Hutton Kodigi Kogarrully ...	Mysore..	12	53/	24	48/	6	60/
	Looganhally	,, ..	72	79/	17	59/	8	75/6
	A & Co.	,, ...	25	77/6	20	56/	8	73/6
	Kana Kadu	Coorg .	6	50/	24	47/6	6	50/
	Ali Cadoo	,, ...	23	67/	26	52/	11	62/
	Bajee Collie	,, ...	22	66/	32	51/6	10	60/
	Arbuthnots	,, ...	40	70/6	34	55/	17	65/
	Yemmagoondi ...	,, ...	91	64/	113	51/6-52	32	64/
	Mavinkere	Mysore ..	11	75/	18	56/	5	65/
	Wallie Warrum ..	Nelpthy.	25	58/	34	48/-47/6	4	55/
	Matheson's Coorg, Kanam-[baddy.	Coorg ...	90	not sold	79	not sold	52	59/
	,, Cotta Betta.	,, ...	124	64/	144	49/6	51	67/
	Santicoopa	,, ...	42	77/	107	55/	20	71/6
	Balakadoo	,, ...	18	80/	45	57/	8	70/
	Netley	,, ..	7	80/	16	56/6	3	65/
	Hunchi Betta	,, ...	17	77/	17	57/6	4	73/
	,, ...	,,	17	79/	17	58/	4	not sold
	Kowri Cadoo Praters ...	,, ...	21	72/	19	56/	5	,,
	Devarah Cadoo	,, ...	28	72/	22	52/	15	73/
	Kurdior	Neilgry..	10	63/	35	49/	9	58/
5	Colacumbie	Neilgry..	11	62/	36	not sold	9	51/
	Arcood	,, ...	34	64/	56	49/	11	60/
	Nilgiris	,, ...	13	59/6	25	46/6	4	51/
	Woodroffe, Kotergherry ...	,, ...	15	63/6	16	48/	3	55/
	Grove	,, ...	26	71/	35	53/	12	69/
	Boothecaray	,, ...	2	52/	13	46 6	3	50/
	Chisholm's Coorg, Eldorado..	Coorg ...	76	73/	71	55/	43	73/
	Oland	Neilgry..	1	51/	12	49/6	4	51/6
	Woodlands	,, ...	7	63/6	14	52/6	4	53/
	Patycumbay	,, ...	1	53/	11	47/	4	51/
	Chetenhulli	Mysore ..	34	58/6-58/	20	51/6	12	79/6
	Harley Mountain ..	,, ...	23	56/	27	49/	8	68/
	Moodcoosie E. E. B. Murkall.	,, ...	14	82/6	10	69/6	4	82/6
	Binny's Coorg	,, .	87	78/6-79/	67	56/-57/6	28	72/
	Cannon Cadoo	Coorg ...	22	56/6	4	44/	6	70/
	St. Edmunds Chisholm's-Coorg	,, ...	33	69/	4	45/	12	69/6
	Hays Corringebetta ...	,, ...	94	72/	89	54/6	47	70/
	Devarah Betta	,, ...	25	64/6	32	51/6-52/	10	65/
	Muskel Bora	,, ...	50	76/	71	53/	18	71/
	Karradie Mulla Nelliam-pathies		14	65/	34	50 6-51/	8	61/
	Rookery	Neilgry..	43	58/	90	47/6	22	56/
	Culloor	,, ...	7	52/	12	45/	4	49/6
7	Yesier	Mysore ..	2	not sold	17	56/	4	69/
	Jeccan V.	,, ...	4	,,	8	56/	2	63/
	Glendower	Neilgry..	9	60/	38	not sold	7	56/
	Poothoondoo Peak ...	Nelpthy.	18	62/	31	,,	11	60/
	Adderley	Neilgry..	23	not sold	32	48/	8	63/
	Palagapandy	Nelpthy	20	,,	25	not sold	8	65/
	Pollyampara	,, ...	6	,,	13	,,	4	not sold

TEA.

INDIAN.—An increased quantity was submitted at auction, *viz.*, 5,200 packages, compared with 31,500 packages previously. At his period last year public sales were suspended for a week, uyers being so occupied with Custom House work before the troduction of the Budget as to be unable to attend them.

Chiefly because of the relief afforded to the trade by the ssation of excessive duty payments, there was a good all round emand, common being about steady, while fair to medium, when ossessing cold-weather flavour and strength, were well competed r and in the majority of instances dearer. Fine and finest were request and as a rule marked an advance, among the best results he following are noticeable:—Assam: Budla Beta Estate. BBTCo, 0 packages, 1s 5$\frac{3}{4}$d; Itakhoobe Estate, 113 packages, 1s 4$\frac{1}{2}$d; ealkotee Estate, 261 packages, 1s 3$\frac{1}{2}$d; Suddia Road Co., 121 ackages, 1s 1$\frac{1}{2}$d; Koomtai Estate, 199 packages, 1s 1$\frac{1}{4}$d; Hilika state, AFTCo, 171 packages, 1s 0$\frac{3}{4}$d; and Lattakoojan Estate, TECo, 208 packages, 1s 0$\frac{1}{2}$d per lb. Darjeeling: Margaret's ope Estate, 177 packages, 1s 6$\frac{3}{4}$d; Dooteriah Estate, ATECo, 200 ackages, 1s 5$\frac{1}{4}$d; Badamtam Estate, LeTCo, 186 packages, and alej Estate, ATECo, 103 packages, 1s 3$\frac{1}{2}$d; and Seeyok Estate, 70 ackages, 1s 3$\frac{1}{4}$d per lb.

For 40,000 packages on Estate account 7$\frac{1}{4}$d per lb. was obtained. The London bonded stock on the 28th ultimo was reduced to 3,368,000 lbs., but owing to the rush to clear, which came earlier an in 1900, the statistical position is misleading.

CEYLON.—A larger amount was brought forward totalling 34,500 ackages contrasted with 30,100 packages on the Tuesday before.

Inferior sorts remained depressed, but there was more enquiry for Pekoe Souchongs and Pekoes with brisk infusions, which in some cases fetched considerably enhanced rates while the latter over 8d per lb., and Orange Pekoes were well supported both for home and export requirements. Broken Pekoes under 6d per lb., although shewing unusual value were at times neglected, above that however, there was keen bidding for the most desirable parcels, and a further rise was recorded.

The average is 6$\frac{5}{8}$d lb. On the 28th ultimo it stood at 6$\frac{1}{2}$d per lb.

JAVA.—Nearly 1,200 packages passed the hammer. The lots with useful cup and fine quality went firmly, but less attractive ones were rather difficult to dispose of unless at a slight concession.

For next week 2,500 packages are declared.

Deliveries.—The clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 5th March,	1901	... ...	3,205,292 lbs.
Do. do.	1900	... ...	23,975,042 ,,

During the week the following have been printed for sale by public auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offered. Pkgs.
India	41,686	3,553	45,239
Ceylon	31,799	2,657	34,456
Java ...	762	395	1,157
Total	74,247	6,605	80,852

Also 865 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated March 8th, 1901, says :—

Quantity brought to Auction in London from 1st June to date.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1900-1901	1,368,242	1,012,396	47,031
1899-1900 ...	1,384,861	929,567	43,983

46,420 *pkgs.* Indian
34,903 ,, Ceylon
1,157 ,, Java
} Total 82,480 packages were offered in public auction this week.

The gravity of the present position of the Tea producing industry can perhaps be best realised by the appreciation of the fact that the average prices of both Indian and Ceylon Teas are at the present time about 15 per cent. below those at the same date last year, and *that*, in spite of the slight revival in the market rates during the past fortnight

Prices of commonest Teas even now are 40 to 5 per cent. below rates current a year ago.

Indian.—Competition for all descriptions has improved, common kinds selling at steady rates, while all attractive Teas sold at better prices. The official wire gives exports to the U.K. for the second half of February as 1,520,000 lbs. against 400,000 lbs. same month 1900, making a total from 1st April to end of February of 160,830,000 lbs. against 148,492,000 lbs.

Total Tea sold on Garden Account 1st June 1900 to date, 1,137,310 pkgs. av. 7·29d. 1900, 1,084,941 pkgs., av. 8·34d.

Ceylon.—The Ceylon auction was heavy, comprising 34,903 packages. The supply, however, was readily absorbed at firm prices for common Teas, anything with quality again realising slightly higher quotations. Many of the Teas now selling show improvement in quality—this being especially the case with gardens situated in the Dimbula district. The official telegram give exports to U. K. for February as 8,500,000 lbs. against 8,500,000 lbs., making total from 1st January to end of February as 21,000,000 lbs. against 19,000,000 lbs. to the same date last year ; it also estimates the quantity for March as 9 to 9½ millions.

Average for week 6·51d.

Ceylon Tea sold on Garden Account 1st Jan. to date, 257,477 pkgs., av. 6·46d. 1900, 231,990 pkgs.. av. 7·59d.

Java.—In sympathy with other growths, medium and better liquoring Teas sold well, although some of the commoner Teas were withdrawn for higher prices.

Bank Rate 4 per cent. Exchange on London, three months' sight :— Calcutta 1 4 7/32. Colombo 1 4¼.

COCOA.

The comparatively small supply of 4,161 bags offered at auction on Tuesday met a very slow inquiry, only about a fourth part selling under the hammer ; prices were without material cha Of 503 bags Trinidad catalogued, 220 bags sold at steady value good to fine red 67s 6d to 69s. 33 bags Geranada sold with change at 64s for fine red, and 62s 6d for common The gre part of 239 bags Dominica found buyers at 62s to 63s for fai good, being about valuation ; whilst 232 bags Samana were quitted at steady rates, at 61s to 61s 7d. Of 2,381 bags Guayaq 250 bags, mostly sea-damaged, sold at 62s to 68s. 47 bags J partly sold at 25s for low garblings. Of 41 chests 639 bags Cey 170 bags sold—fine bold red 100s 6d, fair medium and small 76s common to ordinary 61s 6d to 67s, and blacks 51s to 56s 6d per c 13 bags Carubano ; 8 bags Colombian, and 25 bags Cuba w withdrawn.

PEPPER.

Black.—The market is very quiet and business is small. On spot sales of fair Singapore have been made at 6 1/16d to 6 1/16d. arrival 100 tons Singapore have been sold, *viz.*, March-May sh ment at 9¼d to 6 29/32d, and May-July at 6 5/16d.

Auctions on Wednesday only offered 8 bags Penang, which s at 5¼d per lb.

White.—Is slow of sale, with business on the spot at 9d for Singapore and at 8½d for Penang. For arrival a little lot Singapore February-April shipment is reported sold at 9d ; Mar May (s.) offers at this price. To-day quiet for Black and Wh with business unimportant.

To arrive 10 tons Tellicherry sold at 6 3/32d per lb. landed Lond per April-May (s.).

160 bags Singapore brought to the hammer on the 6th inst retired at 10¼d per lb.

GINGER.

Nothing offered at auction, and privately sales are restricted small lots of washed Cochin at recent rates.

QUININE.

At the end of last week the market closed easier, with a g business in second hands, mostly for spot delivery. at 1s 2 7/8d oz.; May, 1s 3d to 1s 3⅛d ; June, 1s 3¼d ; and August, 1s 3⅜d. T week opened with sellers at these prices, but on Tuesday the mar was firmer again, 1s 3d being paid for spot, 1s 3⅜d for May, 1s 3 for June, and 1s 3¾d for August ; and on Wednesday 1s 3⅛d w paid for spot, 1s 3⅜d for June, and 1s 3⅝d to 1s 3¾d for Augu Howards advanced their quotation 1d, to 1s 4½d for 1,000-oz. l and 1s 6d in vials. Whiffen's was also advanced 1d. To-day t second hand market has advanced ⅜d, business being done at 1s 3 for spot and 1s 4d for August. B & S are not sellers, and th agents report that 1s 3½d has been refused for this brand ; a that the Amsterdam brand was raised 1s 3½d to-day. P & G quoted 1s 3d.

(Average for all India 7·22d., March 8th).

Garden.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Du and Various	
	Quantity	Price	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Pric
Travancore ...	**1829**	**4·68**												
Arnakal ..	150 p	5	59	5.	24	4½	35	6⅛	14	3⅝	5	3¼	13½c	3 4
Atchencoil ...	41½c	4½	...	...	14½c	4¼	16½c	5½	6½c	3½	3½c	2¼	2¼c	2⅜
Balamore ...	125	4	...	...	91½c	3½3¾	29¼c	4¾	..	...	4½c	2½	1½c	2 4
Corrimony ...	160½c	5	...	...	68½c	4	67½c	6½	20½c	3¼	1½c	2½	4½c	3
Ellangy ...	84 p	4	...	...	45	4	15	5¼	15	3½	...	...	9½c	2¾3
Glenmore ...	175½c	4¼	...	...	109½c	3½ 4	64½c	5	...	...	...	...	2½c	2¾
Isfield T Co Isfield...	66	3⅓	16	4¼	...	...	...	...	37	3¼3½	...	...	13½c	2¾3
Kan Dev A Co M ..	116 p	5	..	...	33½c	4¼	31½c	6¾	19	3½	...	...	33½c	5¼
,, Munaar ...	147 p	5½	23	6¼	39	4½	52½c	7¼	...	...	...	...	33½c	4½
Mount ...	73	5	...	...	16	4¼	26	6	14	4	...	..	17	5¼
Munja Malai ...	99 p	5½	26	6¼	40	4½	16	8¼	17 p	3½	...	...		
Seafield ...	100½c	5			67½c	3¾4¼	32½c	6½	...	...	1½c	2¾	..	
Trav TEstCo BA	141	4¾	44	5⅓	57	4	40	4¾	...	...	...	...	...	
,, Pambanar ...	174 p	4½	49	5	49	4	45	4¾	26	3½	...	...	5½c	3
W	15½c	5¾	...	...	15½c	5¾	...	...	..	...	...	...		
Wallardi ...	103	4¾	32	6¼	51	4¼	...	...	13	3½	..	...	7	4¾
White Hills ...	60	4½	...	...	30	4	30	5	...	....	...	...	...	...
Wynaad ...														
Perindotty ...	127 p	5	...	...	33	4⅝ 6	30½c	9¼	64	3⅝	...	...	..	...

PLANTING OPINION.

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WRITTEN BY PLANTERS FOR PLANTERS.

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TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 12th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

EXPORTS AND IMPORTS OF TEA BY LAND.

From Accounts relating to the Trade by Land of British India with foreign countries, for the nine months, April to December, 1900, compared with the corresponding period of the years 1898 and 1899 we gather certain statistics that are not uninstructive. For instance, the following list of Exports in the first nine months of the last three years :—

Tea—	1898.	1899.	1900.
Indian—	Rs.	Rs.	Rs.
To Khelat	1,720	2,460	1,210
,, Seistan	...	...	200
,, Kandahar	8,118	11,570	16,067
,, Herat	..	6,680	4,400
,, Kabul	28,212	31,382	64,836
,, Bajaur and Buner ...	53,592	15,876	16,828
,, Kashmir	152,756	221,969	2,45,024
,, Ladakh	21,926	14,786	30,078
,, Thibet	1,570	2,440	3,240
,, Sikkim	5,096	4,324	4,739
,, Nágá and Mishmi Hills ...	...	20	20
,, Manipur	169	151	106
,, N. Shan States ...	...		120
Total ...	2,73,159	3,11,658	3,86,868
Foreign—	Rs.	Rs.	Rs.
To Khelat	4,250	360	...
,, Kandahar	30,234	30,111	8,051
,, Kabul	1,79,225	1,64,649	2,12,580
,, Bajaur and Buner ...	1,81,650	73,905	58,650
,, Kashmir	3,600	780	3,175
,, Ladakh	3,360	700	2,100
,, Thibet	...	...	1,300
,, Sikkim	43	...	...
,, Siam	8	...	68
,, N. Shan States ...	...	...	60
,, S. Shan States ...	4,764	1,854	2,620
,, Karennee	60	...	10
,, Zimme	..	143	
Total ...	4,07,194	2 72,502	2,88,614
Total of Tea ...	6,80,353	5,84,160	6,75,482

Here we have foreign teas not very far behind Indian in a trade that should be peculiarly India's own.

Against the above let us set the following statistics of Imports :—

Tea—	1898.	1899.	1900.
Indian—	Rs.	Rs.	Rs.
From Kandahar ...	1,049	...	...
„ Kashmir	...	40	30
„ Thibet	540	650	285
„ Nepal	29,138	29,299	37,392
Total ...	30,727	29.989	37,707
Foreign—	Rs.	Rs.	Rs.
From Kandahar	...	...	127
„ Thibet ...	...	188	300
„ Nepal	...	...	8,721
„ Sikkim ...	174	...	...
„ Bhutan ...	...	218	202
„ Western China ...	7,257	6,070	46,252
„ N. Shan States ...	4,18,339	4,06,391	4,69.440
„ S. Shan States ...	600	5,168	20,523
„ Karennee	...	130	160
„ Zimmé	2,465	1,185	3,953
Total ...	4,28,835	4,19,350	5,49.678

It appears to us that these figures call for explanation. On the face of them they show an export by land in 1890 of Indian Tea to the value of Rs.386,868, of Foreign Tea to the value of Rs.2,88,614, making a total of Rs.6,75,482, and Imports of Foreign Tea alone to the extent Rs. 5,49,678. Still more curious are the results when we analyse the figures so as to show Imports from and Exports to particular places. Thus :—

	Imports from	Exports to
	Rs.	Rs.
N. Shan States ..	4,69,440 ..	166
S. ..	20,523 ..	2,600
Western China ..	46,252 ..	..

These figures would appear to show that a fair amount of foreign tea finds its way into India—probably mostly in Burma—and that India has no monopoly of the tea trade over the territories just beyond her frontiers.

A little investigation of these figures by the Indian Tea Association would probably be found profitable. It is manifestly to the interest of India that Indian demand for Tea should be fostered and shall be met *solely* by Indian teas. It is equally clear that India will be a gainer if she fosters a trans-frontier trade in India and does her best to get this also confined to the Indian leaf. There are certain peculiarities, it may be, about the tea imported into India from the Shan States and Western China. These should be thoroughly inquired into, and should it be necessary, in order to secure this trade, to make changes in the manufacture or preparation of the Indian leaf, such changes should be made. If Indian tea planters aim at overcoming the competition of foreign teas in European and American markets, much more should they strive to drive out all competitors from Indian markets and from markets that can only be reached *viâ* India. The figures given above are not very large, it is true, but "every little helps," and if trade near at hand is neglected we can scarcely hope that the tea industry in India will recover from the present crisis as quickly as it might do were every effort made to stimulate consumption, and to meet it, in all possible quarters.

BOARD OF TRADE RETURNS.

February, 1901.

Officials tables of Imports, Consumption, and Exports various articles for the two months Feb. 28 in the prese and two previous years, compiled from the Board of Tra Returns, with stock in U. K. on Feb. 28 give the usu information concerning the chief products in which o readers are interested.

Coffee.—A large increase in imports is almost exact balanced by an increase in Home Consumption, but expo have shrunk and stocks swelled.

—		1899	1900.	1901.
Import ...	cwts.	125,834	135,021	159,743
Home Consumption	„	45,644	63,832	79,093
Export	„	78,149	93,875	65,602
Stock	„	304,000	294,000	335,000

Cocoa (Raw).—Here the expansion of Consumption h been much greater than that of Imports, and shows in tv years an increase of nearly 100 per cent. Stocks a moderate :—

—		1899.	1900.	1901.
Imported ...	lbs.	7,133,609	10,413,620	10,363,44
Home Consumption	„	6,730,705	7,687,112	12,353,87
Export	„	2,471,090	1,791,133	1,706,06
Stock	„	15,197,000	13,637,000	13,254,00

Cocoa (Prepared).—Similar healthy development is notic able here, and stocks are decidedly small, amounting to litt more than the average consumption in two months.

—		1899.	1900.	1901.
Imported ...	lbs.	897,407	1,074,977	1,387,573
Home Consumption	„	979,785	1,051,297	1,342,060
Export	„	208,038	146,808	137,130
Stock	„	976,000	181,000	230,000

Tea.—Imports have increased since 1899 by nearly per cent., consumption has nearly doubled, and Exports ha increased. Yet stocks, also, are larger, and represent som thing like 15 months' requirements.

—		1899.	1900.	1901.
Import ...	lbs.	41,924,065	56,676,270	60,956,827
Home Consumption	„	38,900,097	59,953,108	77,669,188
Export... ...	„	5,385,115	5,253,441	7,436,855
Stock	„	95,093,000	102,308,000	97,479,000

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nich son's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf peop unable to procure the Ear Drums, may have them free.

Address—No. 989 D, The Nicholson Institute,
Longcott, Gunnersbury
[w. 26-5-00—26-5-1901.] *Lond*

EXPERIMENTAL TOBACCO CULTIVATION IN QUEENSLAND.

Mr. R. S. Nevill, Tobacco Expert in Queensland, states his report upon work done during the year ending 0th June, 1900, that the crop mentioned in his last report being in the farmers' hands has been marketed, and brought the growers some £20,000. The crop now in the hands of e growers is not so large, by reason of continued drought uring the transplanting season, and the prevalence of blue ould throughout the tobacco-growing districts of Texas and nglewood, causing great destruction of plants. So far, his xperiments with fungicides as a cure for blue mould have ot been satisfactory. He has not yet tried them as preven-ves. Other experiments have given better results, but have ot yet been sufficiently tried to be regarded as beyond the xperimental stage. Conditions under which blue mould revails are well known, and the most satisfactory experi-ents have been to neutralise these conditions as much as ossible by the day, and ceasing to water as much as possible, llowing the beds to be as dry as is consistent with plant fe ; when water is used, to have it as near the temperature f the plants as possible, to prevent chilling. In future, says Ir. Nevill, we shall probably supplement this treatment with our of sulphur, sprinkled over the beds, when the plants rst appear. The experimental crop of 4 acres, grown in exas, has given satisfactory results, producing about 2½ tons f good, well-cured leaf, of good quality, and much of it very esirable for wrappers.

The growers are continuing to manifest an interest in the nprovement of their product, and the plough is fast being ubstituted for the hoe in cultivation. The proposed experi-ental farm is looked forward to try them with much inter-st. This farm will be centrally located, and convenient to ll the growers. The consumption of locally-grown leaf is aking satisfactory progress, showing an increase in the past welve months of 77,571 lbs. over the preceding year ; while he increase of imported manufactured tobacco shows only 7,000 lbs. The import of raw leaf is merely nominal. Mr. Brunnich made a comparative analysis of American and Queensland grown leaf of similar varieties. The Queens-and-grown leaf compares favourably with the other, and Mr. Nevill believes that the slight defects may be largely vercome by proper curing and manipulation. Local manu-actures are, he says, using every effort to popularise the ome-grown tobacco, and are taking great pains to get the est results from the leaf. In the Cairns District a few small xperimental crops have been grown and enquiry has been ade by manufacturers for samples. Two samples of cigar obacco were received from the district between Mackay and t. Lawrence, and which were very good indeed.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

At the monthly meeting of the Committee of the Blantyre Chamber of Agriculture and Commerce, B.C.A., held in Chamber Offices on the 6th February, 1901, Mr. Beaton, President, in the Chair ; the Secretary submitted a commu-nication from the United Planters' Association of Southern India, Madras, sending a copy of a resolution on the advisi-bility of a movement in favour of an Imperial Fiscal Federation for the protection of British trade interests as against those of the rest of the world. The resolution was the result of the recent revision of the French Tariff in regard to imports of produce from *inter alia*, India, and the British Colonies and dependencies with the exception of Canada. This tariff may not be enforced, as it was really directed against Brazil, who has made up its quarrel with France, yet the circumstance served as a warning of the risk to which British trade is exposed. The Committee agreed to support the Association in any measures which they adopt in the matter.

Mr Stark moved "That, in view of the recent Custom Convention of South Africa, treating British Central Africa as without the Customs Union, the Chamber of Agriculture and Commerce take the matter up strenuously and write at once to the Governor of Natal, with a Copy to the Chief of Customs craving that produce such as coffee and tobacco from B. C. A. should be admitted into South Africa on the same basis as similar imports from countries included under the Convention." In supporting the motion Mr. Stark said that under the Convention tobacco, for instance, was liable to an import duty of 2/- per lb. on unstemmed leaf, and 2/6 per lb. on stemmed leaf. British Central Africa was, in this respect, taxed to the same extent as Brazil and America, and it was pretty severe on B. C. A. to be on the same footing as these countries. A suitable market could be obtained for coffee and tobacco in South Africa. Its proximity to B. C. A. would be most beneficial to the Planting Community of the Protectorate in every way. The attention of Planters had recently been drawn to the growing of tobacco here, and he believed a profitable industry would be assured if the markets of South Africa were accessible to produce fron B. C. A. and closer reciprocal business relations between the Merchants of South Africa and Planters, would probably follow as a matter of course. Mr. Hamilton seconded the motion.

The Chairman suggested that a Sub-Committee be appointed to deal with the matter and Mr. Cox moved the appointment of Mr. Stark and Mr. Hamilton, which Mr. Metcalfe seconded. The meeting decided to send to copy of the resolution to H. M. Acting Commissioner.

COFFEE IN DISTANT LANDS.

XXV.

Queensland.—The *Queensland Agricultural Journal* gives the following paper, headed "Coffee Culture in Queensland, No. 5—Disbudding," from the pen of Mr. H. O. Newport :—On my arrival in this State, and after seeing the coffee estates and conversing with the growers, I was frequently asked to explain what was the matter with some patches of coffee which the owners considered sick. In some places the unusual and obviously unnatural shape and condition of the trees were put down to some new form of coffee disease The theories were numerous regarding these alarming symptoms, and more than one tree was dug out to see if anything unusual could be found in its root growth.

The trees were long and thin, some 8 to 10 feet high ; they had a good lower part, consisting of from six to eight pairs of primaries well covered with wood, and an apparently healthy tuft of green branches at the top. but the middle of the stem was, for 2 or 3 feet, either woefully naked or sparsely covered with a bristling assortment of dead primaries. The middle

branches had died out, I was informed, and nothing could be found wrong with the roots by anyone. This unfortunate state of the trees was due to no disease, but purely to natural causes. It was not experienced in other countries because coffee is, firstly, not allowed to get into such a state, and, secondly, would not generally do so except under very favourable conditions of growth. The reason of this dying back of the apparently middle primaries began in or about the third year of the plant's growth, when the first crop was borne. Coffee not bearing for the first three years or so, the lower six or eight primaries were enabled to make secondary growth as well as to mature and establish themselves, while the upper primaries had not generally done either by the time of the first blossom making its appearance. The tree blossoming heavily all over—too heavily, in fact owing to the rich soil and forcing climate—the lower primaries blossomed all through, with their secondaries to a certain extent also. The upper primaries blossomed to their very tips as far as they were old enough to bear, and at the extreme top of the tree a pair or two of young primaries, only an inch or two long, were not old enough to do anything. In the course of producing and ripening the fruits from this blossom, the lower branches, owing to their maturity, age, and support from secondaries, were able to do so satisfactorily. The very little primaries at the extreme top, having no crop, drew their share of sap and continued to grow ; but the upper primaries of the young tree had not only to support themselves, but bear and ripen their crop as well, and, bearing over every inch of their length, they were unable to meet this demand upon them.

Their share of sap was absorbed in filling the berries. In some instances they managed to ripen their crop and then died ; in some they only ripened the crop on the matured portion of their length ; in others the tips of the primaries died back. In some instances the effect was greater, in some less ; but the result was in all cases that they bore their progeny at the expense of their own constitutions, and often at the cost of their very lives. When they lived it was as whippy, long, thin sticks that were bark-bound and entirely without secondary growth upon them ; and the young primaries just above, that were too young to blossom, together with a few more that grew in the course of the year, soon outgrew the bearing ones in length and girth. In this way a gap was at once established of from 1 to 2 feet. The next year much the same thing happened again, the result being a widening of the gap, and resulted a growth of tree not only unsightly and useless, but at the mercy of wind and weather.

Trees that were topped in time did not suffer to the same extent. In demonstrating this point in the field, I seldom had any difficulty in finding examples to hand of trees in various stages of this form of over-bearing, and I would suggest to coffee-growing readers to look carefully round their estates and notice any such tendency.

This is a matter easily remedied if taken in time, but if in a well-protected locality is very apt to be unnoticed until the damage is done. The remedy for this state of the tree is to cut the stem right back to the top of the healthy primaries—a place generally seen at a glance—for the upper part is of no use, and a new sucker can be raised from the stem, which, if topped in due time at the right height, will, in a few years, bring the tree into shape again. Topping back a young tree boldly, even down to 3 feet or so, when any tendency to become bark-bound in the upper primaries is observed, will also often save it, but prevention is better than cure.

To prevent the above-mentioned state of affairs it is nece sary to disbud. The disbudding should be done by pulling rubbing off the very young beans a week to three weeks (n more than a month) after the blossoming. It is of no u rubbing off the flower-buds, as at that time the tree is in state of conception, and the effect is merely to force out succession of buds in the same eyes ; nor is it any advanta to wait until the berries are half or partly grown, nor, as son suggest, to wait until the tree shows, by turning sickly yellow, that it cannot carry the crop, for by that time th harm is mosly done.

Disbudding is only necessary from primaries, and the gree or immature part of those, which is usually about half the length. The mature wood is able to carry its crop witho detriment. As a matter of fact, the green tip of the youn primary should not be allowed to put out secondaries eithe Disbudding, again is, a rule, only necessary once in the li of a coffee-plant, and is not an annual work, for, once th primaries have secondaries to support them and to draw sa over-bearing on the green end of the primaries seldom occur

Generally it is in the third year of the plant's life that th is required, but occasionally a little attention may be nece sary in the second year, and sometimes in the fourth, but seldo more than on the one occasion.

Disbudding is required from the primaries whenever, an only when, they attempt to bear on immature or green woo It is not necessary if the primary has secondaries upon it, an it is not necessary to disbud secondaries or any other for of branch.

A secondary or tertiary can be replaced from the same ey if by any chance it should die from over-bearing (which ver seldom happens), but a primary never.

This disbudding may perhaps be considered an expensiv work because of the time it takes to do, but as I have alread said, it has only to be done once (as a rule) in the life of plant, and the labour is very soon repaid by the subsequen cropping of the tree. One are two growers objected to the ap parent loss of crop occasioned by the pulling off of the berrie on the green tips as advocated by me, but I regret to sa that their estates suffered considerably in consequence, an no advantage was gained, as the primaries were not onl unable to ripen any crop on the tips and died back but di not even fill out the crop properly on the matured portion their primaries.

The disadvantages of not disbudding have been ampl shown, I think. The necessity and advantages of disbuddin lie in an increase instead of in a decrease of crop in takin the first two crops together, because of the secondaries tha the disbudding encourages and which come into bearing i the second year, and the production of sturdy and health trees that bear an even crop annually indeed, the value the crop removed as well as the cost of removing it is ofte paid for in the first year by the size, weight, and density the crop left on, which otherwise often does not ripen at al

Reference to this matter is seldom found in any books writers on coffee culture, because in most countries it is no necessary, or so seldom happens as not to be considere generally necessary ; but here, in Queensland the ver favourable conditions for the culture of the staple migh prove the very cause of its undoing.

It has been the cause in so many instances of failures, rather, perhaps, the want of success of coffee-growers in thi colony, that I am of opinion that it is worthy of special not

NOTES.

e Colombo Tea Market.

The sale on 27th March passed off with active competition at firm rates, rticularly for good liquoring sorts.

rnando Po.

A report on the Trade of Spain for the year 1899 says :—"The imports m Fernando Po included 1,000 tons of cocoa valued at arly 1,000,000 pesetas (£40,000) and considerable quan- s of coffee and fire woods.

ulteration.

The Arbuckle Brothers' Coffee Company has filed a suit in the nited States Court to enjoin State Food and Dairy mmissioner Blackburn, of Ohio, from prosecuting it or its ents for violation of the Ohio food laws.

a Coming into Bearing n India.

A "Lowcountry Proprietor" in Ceylon writes with reference to new tea land coming into bearing in India: would "prevent this land coming in" by continuing the avy cropping generally which has caused trouble during the st year. But all have already begun to pluck fine.

calyptus-distilling.

According to the report of the Chief Inspector of Distilleries in uth Australia, there are fourteen eucalyptus-oil distilling ences in force in that colony. Thirteen licences are on angaroo Island, the other at Punyelroo. The value of oil ported increased from 1,131*l.* in 1892 to 2,224*l.* in 1899.

Lucia.

A Colonial Office report on the trade of St. Lucia for 1899 states at the cultivation of kola, turmeric, annatto, ginger, vanilla, dia-rubber, and musk-seed is still carried on, but to what tent is not stated. The price of kola, however, is not fficiently remunerative to warrant new plantations of this oduct being put in.

ain.

During 1899 Spanish imports of coffee and cocoa were as follows :—

	£
Coffee	509,000
Cocoa	907,000

a is included with 'groceries' in official statistics, so no formation is available as to Spanish imports of this com- odity.

ylon Tea in Germany, Austria and France.

Mr. Renton's reports show that Ceylon tea is being gradually pushed in these countries. In France, more rticularly, he thinks he has a hard fight before him, not much against China tea, but against coffee. This has own cheaper quite as rapidly as tea, and to have to persuade ople to drink more tea and less coffee is to attempt to ange the taste of nations.

vernment and the Planter.

With reference to the suggested appointment of a Scientific Expert to study agricultural matters in British ntral Africa, the Secretary of State has expressed the inion that the expenses of an enquiry of this nature, which designed immediately to benefit planters in the country, ight very well be undertaken by some co-operative effort on e part of the planters and firms directly concerned.

Shipments of Teas from Canada.

Some Japan teas have been picked up at points in Canada during the last few weeks and shipped to the United States, says the *Canadian Grocer*. Stocks of Japan tea held here were not generally large, although one shipping house had quite a quantity in store, which has for some time tended to keep values down on this market. A few young Hysons have also been shipped from here to Great Britain. We also hear of shipments being made from New York.

Coffee in London.

Cable advices quote prices as follows, the market being flat :—

Coorg Plantation (B. size)	...	...	42s. to 70s.
Nilgiri do.	do.	...	44s. to 50s.
Wynaad do.	do.	...	43s. to 55s.
Mysore do.	do.	...	39s. to 70s.

Good average Santos is quoted at 31s. 6d. a shilling more for futures (September delivery).

Madagascar Vanilla.

The *Politique Coloniale* states that although Madagascar produces as yet only a comparatively small quantitity of vanilla, a noteworthy increase is shown by the Customs returns for the last three years. The exports, which in 1890 were only 30 kilos. (66 lbs.), rose in 1896 to 1,050 kilos. (2,310 lbs.), and to 3,724 kilos. (8,192 lbs.) in 1898. As regards the preparation of the product, the Creole colony of the east coast of Madagascar has for many years contained skilled workers, natives of Bourbon and Mauritius, who willingly take charge of the drying of the pods.

Entomology.

After many years of hard work and industrious research, Miss Eleanor A. Ormerod, the well-known Entomologist, has decided to discontinue the annual reports on injurious insects and common farm pests which she has prepared for a period now extending to close upon a quarter of a century. When in the year 1877 she issued the first of these annual records, very little systematic work had been done in the direction of saving crops and live stock from the ravages of insect and other pests. Now, this class of work has been reduced to a system, much to the advantage of agriculturists.

A Seed-testing Station.

The Board of Agriculture Departmental Committee presided over by the Earl of Onslow, to inquire into the conditions under which agricultural seeds are at present sold, has come to the conclusion that the seed trade in England is on the whole, well conducted and has of late years improved with the advance of science. Nevertheless the majority of the Committee recommend that one central station should be provided in the United Kingdom for the purpose of testing the purity and germinating power of seeds sent to it for official examination. Two members of the Departmental Committee dissented from this decision.

The Pistachio.

The pistachio tree, *Pistachio vera*, the species which yields the eatable pistachio nuts of commerce, is deciduous, growing about 20 ft. high, and a native of Western Asia. It is largely cultivated throughout Southern Europe. Its fruits are oval-shaped, nearly an inch long, and contain a seed with bright-green cotyledons. The nuts are largely eaten by the Turks and Greeks, and also by the people of Southern Europe, either simply dried like almonds, or made into articles of con-

fectionery. Baron Von Mueller, in his list of plants for industrial culture, refers to an ingenious method of inserting the pistachio seeds into dry figs, to secure their power of germination during transmission to remote places.

Another Blow for the Tea Industry.

The *Ceylon Observer*, of the 27th ultimo, remarks :—News comes from Australia to-day that the nominal duty of 1d. per pound on tea entering New South Wales will, by the Federal tariff, very probably be raised to 3d. ! We trust in view of the still possible raising of the tea duty at home that this fresh blow to Ceylon teas—which recent reports have steadily stated to be in fine demand and clearing well with each importation—may be averted. The effect would be different from that of a raising of the home duty in that it would probably stamp out China teas from Australia altogether ; but as the imports of China there have of late been so immensely reduced, Ceylon would receive no comparative advantage to compensate for the extra cost of production imposed on the growers.

Java Cinchona Bark.

The *Straits Times* observes :—Cinchona planters in Java have thrown off the yoke of a German ring of dealers, who had combined to keep the price of bark down for the enrichment of quinine manufacturers. They have started a quinine factory of their own at Bandong in Java, and arranged to sell their quinine at Batavia by auction. The German monopolists have threatened to start a rival quinine factory in Java. A German quinine manufacturing firm intends to carry the war into the enemy's country in a different way. It proposes to sell quinine pills in Java,—that is, quinine prepared for direct consumption,—at a price corresponding with that of Bandong quinine at the Batavia auctions. The firm will certainly suffer loss by this, but the Bandong factory will have also to stop the making of quinine pills, and will thus lose a main source of profit.

Tea in Cannon Shells.

C. E. Colson & Son are, says the *Canadian Grocer*, just placing on the Canadian market, through the wholesale houses, a novel 1-lb. package of high-class Indian and Ceylon tea that the few retailers who have already seen it pronounce to be a good seller. The package is made of tin formed into the shape of a shell, being a facsimile representation of cannon shells used by the British artillery in the Transvaal War. It appeals to the military spirit now so dominant in the Empire. In England, it has sold phenomenally well. The packing is done by the British and Bennington's Tea Trading Association, Limited, packers of the "Blue Cross" tea. The tea itself is a high-grade article, retailing probably at about 50 or 55c. The tin, apart from its novel appearance, is commendable for use in such a package, as it preserves the tea in a fresh condition.

Drying of Plants.

M. Mansier has been giving in the *Centre Médical et Pharmaceutique* some advice on the drying of plants, not for medicinal purposes, but from a botanist's point of view. He points out that many plants contain in their leaves or their flowers a chromogen, and it is necessary to avoid a too rapid evaporation of the juices, which causes a destruction of the cells ; otherwise, under the influence of oxygen a coloured substance will be produced, which will rob the plant of its natural tint. After making various experiments, he decided that the dryi should not be done by heat, but solely by current of dry at a temperature of 12° to 15°. The freshly gathered pla should be spread in shallow layers on hurdles or suspended little bunches. By this means the natural beauties of plant are said to be preserved. The drying should be carr on until moisture is no longer lost.

The London Tea Market.

Cabling to Colombo on the 2 ultimo, Messrs. Gow, Wilson Stanton reported that the market generally showed a fr tional advance, and that good liquoring Pekoes were improving demand ; while the market for common Pek and broken Pekoes was steady. The price of fair liquori Ceylon Pekoe Souchong was 5¼d (¼d up) and the avera price of Ceylon tea sold on garden account during the w was 7⅛d (½d up)—as against 6¼d and 7⅜d respectively in corresponding week last year. Reuter reports that the t of Ceylon tea is generally firm Pekoe Souchongs are quo at 4d (a farthing up) and the average for the week at (also a farthing up) as against 7⅛d quoted for Indian 25,000 packages of Ceylon tea were offered for sale, of wh 24,000 were disposed of ; while of the 44,000 packages Indian tea offered, 41,000 found purchasers.

Green Tea.

Mr. H. Drummond Deane wr of the Peermaad District :—"Pla herein bearing average well over 450 lbs. per acre and so up to 600 lbs. per acre and I take it the average cost *f.* does not exceed 20 cents in this district and they are g high-grown teas. If you turn up Peermaad teas sold Colombo some ten years ago you will find very fair averag comparing with Ceylon, for Kuduwa Karuam ; Bon Ar Penshurst ; Mount ; Glenmary. I wonder when we sh begin to hear result of sales of green teas in America ; w do not we see the prices quoted for teas like Brunswi Moray, Darrawella, etc.? If they are fairly good it wo stimulate the manufacture and they cannot be very bad those estates would not continue making. I think the 'Thi Committee' should when paying the bounty on green insist on having *copies of all sales* sent them."

Coffee in New York.

There has been a firm and ris market since our last report, wholly to speculative influences, says the *American Gro* of 27th February, 1901. Trading in options has been act with transactions greatly increased. The deliveries of co are running much lighter than last year at this time. ceipts at ports in Brazil continue large. On the spot, for No. 7 Rio, and 8⅜ @ 8½c for No. 3. Mild sorts are m firmly held, with demand moderate. Padang Interior h from 17½ @ 20c, with Fancy mats at 27 @ 29c, and possi higher for extra fine lots ; Mocha 16 @ 19c, and better fancy ; good Cucuta, 9c ; best washed Merida and ot Maracaibo sorts, 12 @ 12½c ; Bogota, washed, 10 @ 1 Bucaramanga, washed, 10 @ 16c ; Central American, be grades, 9½ @ 15c ; Mexican, washed, 12 @ 14c for b Total stock of mild coffee in New York, February 25,239, bags ; in United States, 262,359 bags.

New Coffee.

In the annual report of the Tr dad Department of Agriculture 1899 it was mentioned that several plants raised from see *Coffea stenophylla*, appeared to differ from the type to suc

egree, as to indicate them as either natural hybrids, or eminal varieties, having characters distinct from their mater-al parent. Several of these trees are now fruiting, and the rst to mature has given a small crop of berries of a dark urple colour, with beans about the size of the average rabian. These beans have a slightly rough parchment skin hich recalls a character in the Liberian. The parchment omes away easily and reveals an inner skin corresponding the "silver skin" of Arabian, of a greenish yellow colour, hich is thin and easily removed. The beans are fully 100 er cent. larger than those produced by the type plants of *offea stenophylla*. Other plants are also ripening fruit which ary considerably in size, some being nearly as large as iberian, while others are not larger than the typical beans f *Coffea stenophylla*. The possibilities before this new strain f coffee are very obvious, but at this early stage it is, of ourse, impossible to say what the cropping capacity of the ew plants will be, or to estimate the quality and value of eir produce.

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eylon Tea in Russia.

Russia gains ground in Ceylon as Ceylon tea gains ground in Russia. Mr. W. P. Ampenoffe, who represents one of the largest firms, not the largest, in Russia, known as "The Trading Company, uccessors to Alexis Goobkin, A. Koosnetzoff & Co." has arrived Colombo to open a new firm there. Interviewed by a repre-entative of the *Times of Ceylon*, Mr. Ampenoffe was not dispos-d to say very much. The firm which he represents has been ealing largely in Ceylon teas, and he has been sent out to eylon owing to the increasing business of the firm. Hither-o, there were three Russian and one English house buying ea for them locally. Speaking of the progress of Ceylon ea in Russia, Mr. Ampenoffe testified to the growing taste or it. A good deal of it was sold pure, he said, but the eople still preferred a mixture with China tea. The medium lass of Ceylon tea was liked best. Mr. Ampenoffe, from ome figures in his possession, pointed out that the Ceylon xports to Russia could hardly be compared to the 55,000,000 bs. of Congou tea alone that was now imported, but he elieved that the amount of Ceylon tea going annually to Russia was bound to increase. What chances Ceylon green ea would have in Russia he was unable to say. A good eal of China green tea was now used.

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oasted Coffee.

The *Spicy Monthly* (C. F. Blanke Tea and Coffee Company) claims that ry roast coffee has no advantages over any other sort of oasted coffee. It says: "The reason the water is added to offee just before it is finished roasting is to prevent it from ver-roasting while the coffee is being taken off the fire and ut to the cooling fan. If this were not done, the coffee vould continue to roast, and could not be roasted uniform. The probabilities would be that the coffee would be over-roast-d. Besides this, adding the water proves very beneficial in he way of taking off impurities in the steam which generates, vhen the water is put in. The water that is added does not ecessarily increase the weight, as it is all evaporated by the eat of the coffee before the coffee is entirely cooled off. A ry roast can be made, but when a coffee is roasted that way he chances are nine out of ten that it will not be satisfactory. The average merchant objects to the ordinary roast, or, to esignate it more clearly, a wet roast, because he imagines he water is added to increase the weight, which is not the case. If enough water should be added to increase the weight, it would hurt the quality of the coffee. And no roaster would be foolish enough to jeopardize his interests by affecting the quality of the coffee and roasts before it leaves his hands."

Planting in Hawaii.

An old planter, writing from Honolulu to a friend in Ceylon, two months back, says:—"The soil is simply magnificent. I never saw the like in any part of the world in which I have been. The climate is splendid and the suburbs are charming. A huge botanical garden of palms, ferns, etc. The town of Honolulu is much like those in England, good shops, etc. The Americans are a go-a-head lot. They knock the English into a "cocked-hat." Money seems to be no object to them. Everything is done in the most up-to-date fashion Hotel, electric cars, music (bands), etc., tip-top. Wages are high. Carpenters, plumbers, etc., get as much as $5 (£1) a day. I wish I was a carpenter!! Fancy; the Sugar estates give a profit of from £80 to £90 per acre. No wonder everybody swears by sugar. It is difficult to get the people here to talk of anything else. I have only seen one cultivated Vanilla vine, and that one has a blossom on it equal in value to £2 in hand. This beats sugar! and so far as I can make out the vines blossom twelve months after planting. May I venture to ask you to send me a little Cinchona, Succirubra, and Croton seed. Just a little to give them a trial. I shall feel deeply indebted to you if you will. Tea is no good here owing to the price of labour: ditto coffee. By the way I intend sending you some of the latter, when I can get some ripe berries. The trees are free from *Hemileia Vastatrix*, and the coffee is the finest in the world for flavour. Eh! Mon! (as Geordie Morres used to say) this is a grand country for a man with money to settle in. I am going to see what a man without money can do."

Botanical Research in Ceylon and Malaya.

The *Times of Ceylon*, of 29th ultimo, says:—Mr. A. G. Tansley, an enthusiast in Botany, who arrived here at the end of September last, to carry out investigations in tropical vegetation, and especially to study the lower forms of plant life, left yesterday afternoon by the P. & O. *Oceana*, having completed an interesting tour in Ceylon and the Malay Peninsula. Mr. Tansley joined his friend, Dr. Lang, who arrived in the island two months before him, and they worked together both in Ceylon and Malaya. Mr. Tansley spent, in all, three months in the island, first of all visiting the Royal Botanic Gardens at Peradeniya . . . After his visit up-country, Mr. Tansley went on a tour in the Southern Province, exploring the jungle in the vicinity of Tangalle. He is thoroughly satisfied with the result of his work, and is taking away with him five large cases containing various interesting specimens secured in the island, besides a smaller collection from Malaya. He disembarks at Aden and starts on a short collecting tour in Egypt, and will finally leave for England by the P. & O. boat following a fortnight later. His notes will be consulted on his return home, and the result of his work will, undoubtedly, be useful. Mr. Tansley informed a representative of this paper that Dr. Lang had made some very interesting plant discoveries during his investigations here and in Malaya. There are five different kinds of plants, allied to ferns, which have a new stage in plant life called *prethallus*, and Dr. Lang dis-

covered no less than three of these plants, two being secured at Hanwella, and one at Taiping, in Malaya.

Fibre in Yucatan. The British Consul at Yucatan reports that the production of hemp during 1900 shows an increase of 20,000 bales, or about 3,000 tons in excess of that of 1899, probably about the limit under present conditions. It is estimated that there are about 350 square miles of land under fibre cultivation in Yucatan. The variety principally produced is that called *sisalana agave*, and the number of plants which has been found to give the most satisfactory result is 84 to the mecate of 576 square varas, Spanish, or 4,457 square feet. The sucker are planted 2 varas (about 5½ feet) apart, or in rows of 12 by seven plants. The annual yield per mecate (4,457 square feet) is roughly estimated at 100 lbs. The cost of production is 4c., say 1d. per lb., and the selling price in October last was about 9c., say 2¼d. per lb. The price is subject to occasional violent fluctuations, arising from speculation, and the fibre has been sold as high as 22c., or 5½d. per lb. For industrial purposes fibre less than 3 feet long is unsuitable and generally unsaleable. The machinery employed is driven by steam-power. The wheels originally in use are called scutchers, manufactured in Leicester, England. These wheels are now being superseded, and can be purchased in Merida, second-hand, for about 10/ a-piece. The new automatic machines are by Prieto, a Spanish manufacturer, and are also made in New York and Merida by Villamor, Pornella, and by Lopez. All these machines can be purchased in Merida at from 3,000 to 8,000 dol. Mexican currency, say from 300/ to 800/. These new machines are only employed on the larger estates. There are no English firms engaged in the henequen business in Merida. The principal purchasers and exporters of the fibre in Merida are Messrs. Henry W. Peabody & Co., of Boston.

LETTERS TO THE EDITOR.

COFFEE PRUNING.

Sir,—A sufficient time having elapsed since the coffee pruning season to show the results of the different systems in vogue, I have addressed a few words to you on the subject, hoping that they may draw the attention of others interested in coffee to the important operation, and perhaps bring out the results of their experience in your valuable paper, which I think has a greater circulation among planters than any other.

Planters are much divided in their opinions on pruning, and between the two extremes of not pruning at all, or very lightly, and of chopping the trees to pieces, lies the happy mean of those who prune, not according to any fixed system, but according to the varying requirements of the different trees, soils, climates, previous crops, etc. It must appear to anyone on consideration, that no one system can be laid down as applicable to trees of all ages and conditions, but that what may be a very proper mode of treatment when applied to young trees, may be most injurious to old ones. One great mistake into which many planters fall is the idea that pruning a tree immediately causes it to throw out a large amount of young wood, and that the more heavily the knife is put in the more vigorous the sprouting of the shoots. Now there is not the slightest doubt but that the first effect of pruning, especially of heavy pruning, is to check the flow of sap.

In a young and healthy tree with a sufficiency of folia to carry on the circulation the tree very soon overcom the check, the sap resumes its ordinary flow, and new bu burst out in all directions. In an old tree which has bor heavily, the effect is very different. After taking off the cr the tree is almost exhausted, and so far from checking t sap, every means should be used for its circulation. All t old wood that has borne that year should be cut off, provid there is young wood on the tree ; if there is none, enough o wood must be left to furnish foliage to keep up the flow sap until the rains set in.

Coffee trees from 18 to 20 years of age throw little or new wood on their primaries, but the old secondaries on the usually quite make up for this by their numbers of te tiaries, and the pruning of old coffee should be almost entire confined to the latter. Suppose in the case of an old tr which has borne heavily on its tertiaries that the old secon aries are taken off, leaving merely the bare primaries ; remarked, above the first effect would be to check the sa The tree is completely exhausted, and what little circulati there is receives a check ; the tree has no leaves to help it tide over the dry months, and it never recovers the fi check of the knife. The branches begin to die back gr dually until the rain sets in, then sap begins to be pump up again, and what there is left of the primary throws b sickly little shoots, which develops into gormandizers, drai ing the tree of its sap, and preventing the formation of go wood. If such a tree had been pruned moderately, the o secondaries allowed to remain, the tertiaries which had bor been taken off, and as much foliage as possible left on, the tr would have most probably recovered, and given a small cr the following year on its remaining tertiaries. By the latt method the sap would have never been entirely checked, but t few leaves on the tree would have kept it going until the rai when the old secondaries would have utilized the excess sap which then springs up, by throwing tertiaries instead as in the former case where the superabundant sap, n leaving sufficient room to develop shoots in a regular manne expends all its strength in forcing out malformed ill-growi gormandizers from its primaries.

Leaves, as has often been remarked, are the lungs of t tree, and when a tree is stripped of them, it is a mere to up, whether it ever recovers or not, in fact it never co pletely recovers. Some of the primaries will always d It is much better to leave bad and useless wood with leav than none at all. Anyone who has had much to do wi the cultivation of coffee cannot have failed to observe t strong healthy shoots which almost invariably spring fr the knots on primaries, or secondaries, when a straggli and in itself useless branch with a leaf or two at the en has been left on. These straggling branches can be cut the following year, for then they will have served th purpose.

Young trees will stand almost any kind of pruning, b because they live through it, that must not be taken as proof that it has done them good, but rather that th vigor has enabled them to suffer such ill-usage and co out of it unscathed. It is too much the custom to take t result of some particular system, applied at some particul time to some particular estate, as a proof that such syst is proper for all times on all estates, in fact generalizi

om particulars or in other words going by rule of thumb. ll pruning rules are arbitrary, but the object striven to be tained is always the same, namely to equalize crops, open e tree out to sun and air and remove useless wood to make om for new wood. To achieve these points some rules must laid down to be applied generally, but to be modified as rticular cases require. In the case of a tree with little ood on, what benefit is obtained by cutting away the few anches it has, merely because they have borne? In this se there is no danger of over-bearing: the tree is not rown up with wood, and there is room for new wood; and et it is common to see such trees treated merely for the sake carrying out a system. In fact, strict adherence to a system often kept in view instead of the results, for the attainent of which such system was instituted. If these few marks on pruning should call forth any ideas on the subject om more experienced men, the writer's object will have been ained.

MYSORE,
6th March, 1901. } HEREBELLOLLOS.

GENERAL ARTICLES.

RUBBER EXTRACTION FROM BARK.

Mr. A. Godefroy-Lebeuf writes from Paris to the *Ceylon bserver*:—

The process of extraction of the rubber from the bark is making ery quick progress. Ten years ago nobody was thinking about it. -day we have a few reports on the opportuneness of such a process. ou know that many plants are exploited by the cutting of the em, what you call, I believe, peeling the tree; such are many ots, and slow growers such as *Muscarenhasia* and others from adagascar. *Landolphia Hendelotii* from Soudan, and a lot of roots imitively neglected because it was quite out of practice to tap em by the common process,

Some were cut in pieces and put to bleed into recipients, as is ne with *Urceolo*; but all the sap remaining in the bark after the eration was lost for ever. Now you can obtain from that eglected bark more rubber than the quantity obtained from the tex; and I know people asking for our process, intending to use for the neglected barks left by the natives on the spot.

If it is true in the countries where the natives are accustomed to p the vines, how much more in the regions where the collector ust make the education of the collector of rubber, what can be e colour of his skin? If *par-dessus le marche*, the Governor of the lony has promulgated laws for the regulation of collecting the bber, avoiding the cutting of the vines, stating that they must be pped in official mode: when these vines are so long, so old, so rge, the collector thinks that the weather is too bad for working d he sleeps till better times. But if you can say to the collector: and cut the vines, but bring me the rubber you have obtained d if it is too meticulous [timid!] for you, bring me the bark, the hite, yellow, black or undetermined,—the coloured man will think at to cut the vines is a very pleasant work for him and the crop the bark a very pleasant one for his wife and he will go to work once.

If it is true for the collecting of the bark, how much more it for the *enrichissement*—another word I cannot manage—of is bark.

The *Landolphia Hendelotii* per oz. contains from 7 per cent. to 1 er cent. of pure rubber. When the bark is dried quickly,—and I ay quickly because when the operation is done slowly the fermenation is a cause of loss of the gum,—this bark is easily broken in mortar, a common one for the decortication of paddy; so after few minutes the operator can seperate a few per cent. of the imurities, and as generally native women are expert in the manipuation of the pestle, their lords and masters have no hesitation in ntrusting them to perfect this work.

I have received bark of better rubber prepared by the female beauties of Senegal, containing no more than 20 per cent. of impurities. Such rubber is a very commercial one and will be accepted on any market.

It is naturally much more difficult to bring this rubber to purity, but we must not be too exacting and such rubber will lead the way in the manufacture of pure rubber. With patience it is possible to obtain nearly pure rubber by these primitive processes; but the buyer is judge of the question; he can pay the rubber on the percentage and the analysis is quite mechanical. If the buyer take one ounce of the product and use an iron mortar and pestle and take the formation of nature; after a few minutes, if he has had the precaution of wetting the bark he will extract a certain proportion of impurities and obtain a parcel of rubber nearly pure and a sufficient sample for judging the quality and the quantity of good rubber in the sample. After a very short time he will be able to avoid any mistake.

The extraction of rubber from the bark gives better product than the bleeding:—I send you a little sample of Borneo rubber obtained two years ago, and you will see that it is much better than the rubber generally offered on the market from this country It has been prepared by a collector using this process for the first time. It is enough for to-day.

TEA IN INDIA.

It is not quite clear whether the remarks with which the Viceroy concluded the debate on the Assam Labour Bill should be taken as indicative of a belief that the question of developing the demand for tea for local consumption is one that has not occupied the attention of the Indian tea industry, or merely of an opinion that more might advantageously be done for the purpose than has yet been attempted. In the former case he is, of course, labouring under a mistake. In the latter he is probably right. When, however, His Excellency describes the market which lies at the planter's door as the most splendid in the world if he would only cultivate it, we are afraid he ignores, or greatly underrates, the difficulties that stand in the way of tea becoming the "staple drink" of the people of India, or even of the Indian artisan, whom he seems specially to have had in view. The difficulties to be overcome are, in fact, of three kinds—the difficulty of taste, the economic difficulty, and the difficult of machinery. Except among the better classes of Mahomedans, the taste for tea-drinking is practically non-existent in the plains of India. The mass of the people, indeed, regard tea as a medicine, and would not use it as an ordinary beverage even if supplied with it for nothing. Admitting, however, that under favourable conditions the taste might be acquired, the economic difficulty, as far as the bulk of the population are concerned, is an insuperable bar to its acquisition, as it would be to its gratification if it existed. Even if there were nothing but the price of the tea to be considered, and if, as with the necessary organisation it probably might be, it were made generally available to the retail purchaser at a pice an ounce, the addition to the cost of living which its habitual use would entail would be out of the question for ninety-nine out of a hundred of the people of India. But it is not only the price of the tea, but also the cost of the fuel that would be necessary for the preparation of the infusion that has to be considered; and to the mass of the people, who are hard put to it to find the means of cooking their daily rice, this in itself would be a serious matter. Then, again, there is the difficulty of distributing machinery. If even the lowest qualities of tea are to be made generally available to retail purchasers at anything like the price just mentioned, it must be by means of some kind of special organisation, and not in the ordinary course of trade, at all events for some years to come. But what organisation that would be at once effective for the purpose and not disproportionately costly, is conceivable? The village bunniah possibly might be induced to sell pice packets of tea for a small commission, if he were required to pay only for what he sold. But the risk and the labour in the way of stock and account taking and collection of proceeds which this would entail, would, if we are not mistaken, be prohibitive. The police are out of the question, because, if for no other reason, people would not go to them for tea, even if they could get it for nothing. The post offices have been suggested, and, if they were allowed to dispense pice packets of tea for the planter, as they at present do pice packets of quinine for the Government, something, though not very much, towards the popularisation of the

beverage might perhaps be effected. But so far, the Government has not seen its way to allowing this. It is in the highest degree improbable, however, that even with the most perfect distributing agency, and with tea sold at a pice an ounce, more than a small fraction of the population of India would, under present economic conditions drink tea otherwise than as a medicine or an occasional luxury. Still, we have little doubt that, with time and effort, the present demand for tea for local consumption might be considerably increased; and the question whether any, and if so what, steps should be taken to develop it, is one deserving of the careful consideration of those interested in the industry. The putting up of a certain quantity of tea in very small packets that would preserve it from deterioration through exposure to the atmosphere on contact with other substances, is probably an essential condition of any considerable advance in this direction. The provision of some form of petroleum lamp that would not cost more than a few annas, and would serve alike for the purpose of illumination and the boiling of a moderate quantity of water, might not impossibly be an important auxiliary step.—*Statesman.*

COFFEE IN LONDON.

The *London Commercial Record*, of 15th ultimo, remarks :—

The week closing to-day has not been without its exciting moments to operators in several of our trades, and although in some instances results have fallen short of expectations, the renewed life in dormant markets formed a pleasant feature. Strange to say America has been the moving spirit again, wholly and solely, and the key-note struck by New York, has been accepted and resounded by our markets. Thus new life and activity were instilled into our Sugar market the moment the American Trust showed some inclination to purchase. Instead of a dull and steadily declining market, which of late had exercised its depressing effect on the spirits of all favouring sugar, we saw, produced as by magic, a strong tone, renewed confidence, and quickly rising values. Sugar enjoyed renewed attention, bulls once more increasing in number. As beneficial as the American demand has been on the position of sugar, so depressing and discouraging has been the sudden withdrawal of the support to coffee, given lately by the American Coffee Ring. Only last week the hope of a lasting boom seemed perfectly justified by the action of the Ring in question, and we can blame no one for having been misled by it and persuaded to join the merry throng of bulls. As we pointed out only a short while ago, it was the feature of the movement in coffee that London bulls in their mistrust of the sincerity of the Coffee Ring held aloof from the market, preferring to await further development ere they decided to change their view of the terminal market and become converted bears; but the extent of the movement, the strength and apparent determination displayed by the Ring last week left them no choice, they could not sit still in the face of a rapidly rising market, they felt they ought to be in the swim and profit by the spurt Bears joined the Ring, therefore, in a body, and their united buying gave exceptional life and vigour to the market; in fact, so much so that actual coffees which, paralysed by the excessive weight of stocks and floating parcels, had failed to join the movement, became animated and recorded prices in the sales which gladdened the heart of many holders. Everyone was inclined to believe that we had at last arrived at the eve of a considerable rise, and the disappointment is easy to imagine when suddenly the American Ring ceased buying, robbing thereby the movement of its principal support. Our bulls pluckily stuck to their holdings and exerted every effort to stave off the decline which was beginning to spread the moment the Ring disappeared. The enormous receipts, about 30,000 bags, instead of an average of 20,000 bags, however, proved too much for the bulls, the weight of supplies was too great and prices steadily declined under their pressure. Actual coffees once more became a drug in the market, and bears again ruled the day. Bulls cling to the hope—and not an unjustifiable one—that the Coffee Ring has withdrawn its support with a view of flattening the market to enable its members to make fresh purchases presently at cheap prices. The phenomenal receipts of Brazils may have had a sobering effect on the spirits of the Ring; whatever the cause, it is a dangerous thing to embark largely in an undertaking which for its basis has the sole support of an outside speculative element.

DISTRICT ASSOCIATIONS.

SHEVAROY.

Extracts from Proceedings of the Committee of the Sheva Planters' Association at their monthly Meeting held on 1st April, 1901, in the Victoria Rooms, at 1 p.m. Present Rev. M. Anderson, Messrs. J. C. Large, W. J. Lechler, R J. M. Kempf, Messrs. C. Rahm, R. Gompertz (*Honor Secretary*).

1. Read notice calling the Meeting.
2. Read letter from Collector asking Association to nominat successor to Mr. Anderson on the District Board as his term office has expired

Resolved that, as Mr. Anderson is willing to serve for anot term, the Association do nominate him for an extension of three ye

3. Read letter from Mr. Amaladas Pillay charging Rs.64, fees and expenses in the Scotforth Coffee-stealing case. Resol that the amount be paid.
4. Read Circular No. 27/01 giving cover and copy of a le from Mr. Sanderson reporting Proceedings and Resolution of Committee for checking the adulteration of coffee.

Resolved that this Association approve the Resolution of the ab Committee and request the Chairman, U. P. A. S. I., to address Government of Madras (and India) and the Indian Chambers Commerce on the subject.

Yercaud, 2*nd April*, 1901. } (Signed) Robt. Gompertz, *Honorary Secretary, S. P.*

MARKET REPORT.

[*Per Mail advices of* 15*th March* 1901.]

COFFEE.

The London Commercial Record says :—The recent heavy arriva which are being freely placed on the market, have exercised depressing influence upon prices, which, with a few exceptio shew a decided decline for the week, the market to-day closi with a weak tone. Further considerable supplies of East In have been brought to auction and, with the exception of the fin qualities, prices generally shew a reduction of 2s to 3s per c Costa Rica has also been freely offered, and, as importers ha been desirous of making progress, the latest rates are fully 2s to below those current a week ago. With the continuance of la Brazilian receipts and a falling exchange, together with realisi by speculators, the market for "futures" shews the import decline of 2s 6d since our last, business being done yesterday May delivery at 31s to 31s 6d, July at 31s 4½d to 31s 6d. Septem at 31s 10½d to 32s 6d, and December at 32s 4½d to 32s 10½d per c Auction supplies to-day consisted of 2,057 bags East India, 2, bags Costa Rica, 464 bags Guatemala, 100 bags Salvador, and bags Central American. The sales passed off with fair demand a full rates were paid.

London ...	Santos ...	May delivery	...	31s 3d.
New York	... No. 7 Rio...	,,	...	5·80 cen
Hamburg...	... Santos ...	,,	...	31¾ pf.
Havre ...	... Santos ...	,,	...	38¼ fra

Auctions this week have gone off as under :—

Imports, Deliveries and Stock of Coffee in London are as follows :—

	Stock.		Imports.	
	1901.	1900.	1901.	19
Tons ..	14,812	12,905	8,008	6,
	Home Consumption.		Export.	
	1901.	1900	1901.	19
Tons ...	4,654	4,092	3,518	4,

The preceding figures exhibit— To

In the Imports a decrease this year of 1,
Home Consumption a decrease of ... ...
Export a decrease of ... ...
Stock an increase of 1,

Ceylon.—4 casks 1 tierce 2 barrels 1 bag *Plantation* sold—sma 44s, middling 85s, bold 90s, peaberry 58s. 23 bags *Native* brou 35s per cwt.

AST INDIA.—5,528 bags mostly sold as follows:—*Naidoobatum* alls 44s to 44s 6d, low middling 50s to 50s 6d, bold 65s, peaberry . *Mysore* smalls 40s to 48s 6d, low middling to middling 49s 6d 8s 6d, good to fine middling 65s to 76s, bold 63s to 76s, fine bold peaberry 60 to 97s. *Coorg* smalls 40s to 46s, low middling to ddling 48s to 58s, bold 59s 6d to 80s, peaberry 60s to 76s. *lgherry* smalls 42s to 46s 6d, low middling to middling 46s to bold 56s 6d to 66s, peaberry 52s to 63s. *Nelliampathy* smalls to 44s 6d, low middling to middling 45s 6d to 51s, bold 60s to peaberry 53s to 60s. *Wynaad* smalls 41s to 46s 6d, low ddling to middling 45s to 52s, bold 58s to 68s 6d, peaberry 56s . *Shevaroy* smalls 44s, low middling 47s, peaberry 52s to 6d.

MOCHA.—66 packages bought in.

AMAICA.—82 barrels partly sold—smalls 31s 6d, good to fine linary 39s to 42s, low middling 46s 6d.

COSTA RICA.—4,902 bags mostly sold, smalls 37s to 47s 6d, good linary 42s 6d to 43s 6d, low middling greenish 46s to 50s, middl- to good middling 51s to 61s 6d, bold 69s to 77s 6d, fine bold s to 88s 6d, peaberry 52s to 80s.

GUATEALMA.—1,838 bags mostly sold, smalls 35s to 48s 6d, low ddling to middling 46s to 54s, bold 57s 6d to 69s, peaberry 51s 65s.

SALVADOR.—Of 1,038 bags catalogued 660 bags sold, fine ordinary s 6d, low middling to middling 46s to 51s, bold 61s to 68s 6d, aberry 60s to 63s 6d.

NICARAGUA.—113 bags partly sold, smalls 38s, ordinary foxy 35s to 36s, peaberry 68s.

COLOMBIAN.—135 bags sold, good ordinary brownish 39s 6d, low ddling 44s to 46s 6d, middling 47s to 48s, bold 53s, peaberry 50s.

MEXICAN.—Of 667 bags offered 170 bags sold, low middling faded ayish 43s 6d, peaberry 47s 6d to 60s.

ECUADOR.—8 bags ordinary palish 34s.

Receipts in Rio and Santos.

	1900-1.	1899-1900.	1898-99.	1897-98.
ince July 1 ...	Bags.	Bags.	Bags.	Bags.
Rio ...	2,177,000	2,803,000	2,508,000	3,489,000
Santos	6,693,000	5,221,000	4,719,000	5,348,000
Total...	8,870,000	8,024,000	7,227,000	8,837,000
Crop ...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 11 $\frac{9}{16}$d, previous day 11 $\frac{1}{16}$d.

HAVRE, *Mar.* 14.—Good average Santos March opened quiet 38f. and closed barely steady at 37$\frac{3}{4}$f., May opened at 38$\frac{1}{2}$f. and osed at 38$\frac{1}{4}$f., September opened at 39$\frac{1}{4}$f. and closed at 39f., ecember opened at 39$\frac{3}{4}$f. and closed at 39$\frac{1}{2}$f.

HAMBURG, *Mar.* 14.—Good average Santos March opened quiet 31pf. and closed steady at 31pf., May opened at 31$\frac{1}{2}$pf. and osed at 31$\frac{3}{4}$pf., September opened at 32$\frac{1}{2}$pf., and closed at 32$\frac{3}{4}$pf., ecember opened at 33pf. and closed at 33$\frac{1}{4}$pf.

NEW YORK, *Mar.* 15.—Closing prices of No. 7 Rio were as follow:—

		Mar.	April.	May.	June.	July.
March	15...	5·65	5·75	5·80	5·80	5·85
March	14...	5·75	5·75	5·85	5·85	5·85

TEA.

INDIAN.—Public auctions totalled 44,800 packages, against 45,200 packages last week, and 41,500 for the corresponding period of 1900.

The market remains without material alteration, inferior descriptions continuing dull of sale, while those with useful infusions ruled firm. Medium to fine, particularly several of the closing shipments, met with spirited competition, and full prices were recorded for them. Finest and choice parcels also commanded considerable attention as the supply is fast becoming exhausted. The following are among the best quotations:—Assam: Samdang Estate DDT & Co., BP 2s 5d; Dhoedaam Co., BOP 2s 4$\frac{1}{4}$d, BP 2s 2$\frac{3}{4}$d, OP 2s 1d; Hansura Estate, DDT & Co. BOP 2s 0$\frac{1}{4}$d; Beesakopi Estate, DDT & Co., BOP 1s 11d, and Hilika Estate, AFTCo., BOP 1s 9$\frac{1}{4}$d per lb. Darjeeling: Okayti Co., BOP 2s 4$\frac{1}{4}$d, OP 2s 2$\frac{1}{2}$d, P 1s 10$\frac{3}{4}$d, and Goomte Estate, BP 2s 3$\frac{1}{2}$d, OP 2s 1$\frac{3}{4}$d.

Rather over 2,700 packages from South India were offered. Quality for the greater part was not attractive, and results generally were disappointing.

For 38,560 packages on Estate Account 7d per lb. was obtained versus 8$\frac{1}{4}$d per lb. for 31,600 packages, and 9$\frac{1}{4}$d per lb. for 25,900 packages in the two preceding seasons.

For the past two months especially there has been an active demand, the quantity sent abroad during that time being 2,419,000 lbs. compared with 1,426,000 lbs. a year ago.

CEYLON.—Catalogues comprised 28,400 packages contrasted with 34,500 packages previously and 24,500 packages twelve months since.

There was no improvement in the enquiry for the lower grades, which often tended in favour of buyers, particularly for small breaks, the proportion of which was unusually large. In the case of invoices where flavour was better than that of foregoing once the bidding was brisker and in most instances advanced quotations were made. Continental and Candian buyers were operating more freely and some of the Pekoes and Orange Pekoes suitable to their requirements, being also wanted by the home trade, brought enhanced rates. Higher figures were paid to secure the finest lots. A consignment of 60 packages of Green Tea from North Pundaloya realised 7$\frac{3}{4}$d per lb.

The average is 6$\frac{1}{2}$d per lb. On the 8th instant it stood at 6$\frac{5}{8}$d per lb. and 7$\frac{1}{2}$d per lb. in 1900.

JAVA.—About 2,500 packages, mainly of direct import, passed the hammer, common as a rule being depressed, though fine lines were occasionally dearer. For next week 1,800 packages are advertised.

Deliveries.—The clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 12th March,	1901	...	...	6,847,984 lbs.
Do.	do.	1900	...	... 25,961,711 ,,

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

CROSSE & BLACKWELL'S, LTD.

By Special Warrant Purveyors to The Queen AND Empress of India.

CELEBRATED OILMAN'S STORES.

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	40,123	4,719	44,842
Ceylon	25,973	2,416	28,389
Java	1,384	1,144	2,528
Total ...	67,480	8,279	75,759

Also 785 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated March 15th, 1901, says:—

Quantity brought to Auction in London from 1st June to date.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1900-1901	1,413,979	1,041,248	49,559
1899-1900	1,426,772	954,145	45,666

45,737 *pkgs.* Indian
28,852 „ Ceylon
2,528 „ Java
} Total 77,117 packages were offered in public auction this week.

There has been an encouraging development in the use of Indian and Ceylon Tea in markets outside the United Kingdom; this is doubtless due in part to the abnormally low prices ruling, and probably also to the unsettled condition of the Chinese Empire. Fourteen million pounds more of British-grown Tea were taken by these outside markets in 1900 than was the case in 1899.

It is a remarkable fact that in 1890 only about 13 million pounds of Indian and Ceylon Tea were taken in markets other than the United Kingdom, while in 1900 the quantity had risen to just under 83 million pounds.

In spite of the enormous relief thus afforded to the Tea producing industry, production has increased too rapidlyfor consumption to keep pace with it.

Indian.—The market was very steady, bidding for medium and better Teas being strong, with a tendency towards higher prices, common grades remaining without alteration. The following averages are worthly of note:—"Okayti T Co.," 1/10; "Dhoedaam T Co.," 1/5½; "Runglee Rungliot," 1/2½; "Goomtee," 1/2¼.

Week's average of Tea sold on Garden Account 1901, 38,263 pkgs., av. 6·86d. 1900, 32,604 pkgs., av. 8·00d.

Total Tea sold on Garden Account 1st June, 1900, to date, 1,175,573 pkgs., av. 7·26d. 1900, 1,117,545 pkgs., av. 8·33d.

Ceylon.—The auction was distinctly lighter, only 28,852 packages being brought forward against 34,903 last week. Anything with fair quality met with good attention from the Trade and sold well, slight advances being occasionally recorded. Common descriptions, however, showed no change from last week's rates.

Average for week 6·48d. against 7·50d. in 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 284,426 pkgs., av. 6·47d. 1900, 253,738 pkgs., av. 7·58d.

Java.—Medium and better Teas sold well, but commoner kinds passed slowly and many lots were withdrawn.

Bank Rate 4 per cent. Exchange on London, three months' sight:—Calcutta 1/4 7/32. Colombo 1/4¼.

COCOA.

The market is very quiet, but there is hardly any change in prices. At auction on Tuesday 2,860 bags were brought forward, of which 1,080 bags sold. Of 994 bags Trinidad catalogued 600 bags sold at steady rates—very fine red 72s 6d, middling to fine 67s 6d to 70s. 35 bags fair Dominica realised 62s, and 40 bags Jamaica 61s to 62s 6d, these prices being about valuation. 6 bags Tobago brought 64s. Of 539 bags Guayquil about 90 bags were placed, at 61s to 61s 6d for Esmeralda. 551 bags Haiti were withdrawn. 35 bags African about half sold at 62s for ordinary. Ceylon continues very slow, and of the 785 bags brought forward only about 300 bags sold—common medium and small 62s 6d to 67s 6d, small 55s 6d to 62s, and blacks 54s 6d to 55s 6d per cwt. Privately 200 bags Ceylon sold at rather easier prices, and 100 bags good Arriba at 80s per cwt.

PEPPER.

Black.—Is quiet on spot and lower to arrive; in the former position fair Singapore sold at 6 1/32d, whilst in the latter 100 tons done at 6 7/32d to 6 3/16d per lb. March-May (s.).

At auction on Wednesday 287 bags Trang bought in at 6⅛d, also 180 bags Aleppy at 6⅛d and 395 bags Lampong at 5¾d. 12 bags rather light Ceylon sold at 5⅝d per lb.

White.—Is cheaper, especially for Penang. On spot fair Singapore sold at 9d and Penang at 8⅜d, whilst to arrive 25 tons Singapore near at hand sold at 8 15/16d to 8⅞d per lb.

At public sale on the 13th instant 165 bags Singapore retired 8¾d to 9¼d, and 158 bags Penang at 8⅛d to 8¾d per lb.

GINGER.

Cochin.—The small supply of 15 cases 77 bags offered passed hammer unsold—medium and small cut at 47s 6d, dusty cutti at 31s and rough D's at 28s per cwt. Privately the market is v firm and 300 bags ordinary medium and small washed rough h been sold at 35s 6d (now 36s asked), also 60 to 80 cases C cut at and small Native cut at 32s per cwt.

Japan.—90 bags fair limed retired at 33s per cwt.

Jamaica.—In fair request and of 347 barrels offered 230 barr sold—good bright washed 50s to 51s, middling 44s to 47s common to low middling 37s 6d to 43s, and Rhatoon 34s to 36s cwt., these prices showing an advance on the best lots, oth being steady.

CINCHONA.

At auction on Tuesday there was a good demand, and practica everything was sold at an advance of from 15 per cent. to 20 cent. on the last London sales, the average unit being 1¾*d.* agai 1½*d.* at the February auctions.

The quantities of bark offered and sold were as follows:—

	Packages Offered.	Packages Sold.
East Indian cinchona	902	677
Java cinchona	424	374
Calisaya cinchona	362	362
African cinchona	149	149
Ceylon cinchona	26	20
	1,863	1,582

The following table shows the approximate quantity of b purchased by the principal buyers:—

	Lbs.
Mannheim and Amsterdam factories	92,653
American factory	49,623
Imperial factory	48,114
Frankfort-on-Main and Stuttgart factories	43,526
Brunswick factory	21,290
Messrs. Howards & Sons	16,850
Druggists, &c.	27,699
Total quantity sold	299,755
Bought in or withdrawn ...	75,470
Total quantity offered ...	375,225

The prices paid were as follow:—

Java.—Ledgeriana, original stem chips, 7*d.* to 10*d.* per lb.; ro 3¼*d.* to 4¾*d.*

Ceylon.—Succiruba chips and shavings, 3⅝*d* to 5½d.

South American.—Bolivian cultivated Calisaya, quill, fair good, 6¾d to 11⅛d; broken quill, 5½d: flat cultivated sound, 0½; and damaged, 8¾d to 11d.

African.—Broken quill and chips, 4¾d to 7⅝d; and mediu quill, 6⅝d to 7d per lb.

East Indian.—Ledgeriana, original stem chips, 4⅞d to 9 branch, 3⅝d to 6⅛d; and root, 7¼d to 8⅜d. Red, original ste 2¾d to 4⅜d; chips, 3¾d to 4d; renewed, 6½d; and root, 3d to 4½ crown chips, 3d to 6¾d; renewed ditto, 6⅜d to 8⅞d; chips a shavings, 2d to 9½d; shavings, 5⅞d; and branch, 5⅛d per lb.

The auction to be held in Amsterdam on March 28 will consist 4,601 bales Ledgeriana and hybrid, and 207 cases, 1,172 ba succirubra, weighing together 545,468 kilos. Java bark, and co sisting of 375,340 kilos. Ledgeriana, 106,723 kilos. succirubra, a 63,435 koilos. hybrid. The stock in first hands at Amsterdam March 5 consisted of 2,819 packages Government and 8,060 packag private bark, including the quantity to be offered in the abo auction. In the drug-auction 3 serons Loxa quill sold at from 2½d to 1s 7d, and Huanoco ditto at 6d to 6½d per lb.

QUININE.

Quinine has shown renewed activity this week in the secon hand market, and a good business has been done at dearer pric the spot price for good German sulphate having advanced to 3⅞d, and forward positions at proportionately higher rat Howards' have advanced their quotation to 1s 7d 1,000 oz. lots vials, and B. & S. now quote 1s 4½d, and Amsterdam 1s 4d. T improved position is due to the advance in the unit at the Lond bark-auction on Tuesday. The Java shipments during the l fourteen days were 623,000 Dutch lbs.

(AVERAGE FOR ALL INDIA 6·86d., MARCH 15TH.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.
ilgherry ...	222	5·88												
enfruin ...	17	4¾			17	4¾	...	...	...	...	...	...	...	...
enmorgan ...	119 p	5¼	88 p	5 6¾	26	4¾	...	...	...	...	...	...	5	3¼
ospect ..	54	6½	33	7	21	5¾	...	...	...	...		...	...	...
aforth ..	32	7¼	17	7¼ 8¾	12	6¼	..	...	...	...	...	...	3	8½
avancore ...	2151	4·80												
ienkow ...	2	1	...	...	...	...	...	...	...	...	2	1		
nakal ...	120 p	5	47	5¼	18	4	30	6¼	13	3¾	2	3½	10½c	3 4¼
rady Goody ...	90 p	5	30½c	6¾	20	4¼	20	5½	20	3½	...	...		...
erian Mallay ...	166 p	3½	98 p	3½ 4¼	20	3¼	...	...	...	...	...	...	48½c	2¾3½
langy ...	230 p	4¼	...	...	106	4 4¼	42	5	55	3½3¾	...	...	27½c	3 3¾
me ...	80½c	3¾	...	...	46½c	3¾	27½c	4½	...	...	4½c	1¾	3½c	2½
ield T Co Isfield ...	64	5	...	...	31	4¼4½	27	5¾	6	3½	...	...		...
n Dev H Co A ...	187 p	4¾	..	...	57½c	4½	33½c	6½	26	3¾	11½c	3¼	60½c	3 5
, Munaar ...	193 p	6½	51	6¼	...	...	110½c	6¾	...	..	...	...	32½c	6¼
nshurst ...	157 p	4¾	52	5¼ 6¾	63	4 4¼	18 b	5	...	..	24½c	4¼	...	...
onmudi TC BA .	112	4½	...	...	39	4¼	37	5¾	16	3½	15	3¼	5	4¼
,, Poonmudi ...	93 p	4½	32	5½	...	...	...	...	26	4	18	2¾ 3½	17 p	3 5
hnInd T Co K K...	184	5¼	107	4¾	...	...	35	7	17	3¾	...	...	25	5½
agbrook ...	132 p	5	30½c	7¾	40	5¼	...		44	4¼	16	3½ 5	2	3
h Trav Co Ven ...	112 p	5¼	...	..	50	4¾	29	7¼	25	4	...	.	8½c	4
embenard ...	229	4½	53	4¾	68	4 4¼	74	5½	...	..	19	3¾	15	3¼
ynaad ...	224	5·69												
aulika ...	62 p	5½	27½c	7¾	22	5	...	...	13	4¼	...	...	...	
ynaad T Co Per ...	162 p	5¾	21	7	16	4¾	62½c	7½	47	4½	9	3¾	7½c	5¼

FOR PRIVATE SALE.

Mount Graham Coffee Plantation.

Cairns, N. Queensland.

The Plantation is situated on the banks of the Russell River, about hirty-five (35) miles from Cairns, and within Three (3) miles of the roposed Terminus of the Mulgrave Tramway. It comprises

160 Acres Freehold
100 Acres Unconditional Selection.

The Improvements consist of

Comfortable Dwelling House
Numerous Kanaka Outhouses,

Also

25 Acres of Coffee in Full Bearing
Coffee Pulping Machinery, etc.

The crop coming on now looks well, and should produce quite welve tons by April next.

As an Investment this Property is well worth consideration. The rop of Coffee now coming on should be value for quite £800.

The Trees are all being well cared for, and the Property can be aken over as a Going Concern.

In addition to the clearing planted with Coffee, there are about 100 cres of Scrub felled.

The quality of the Soil cannot be surpassed, and the Property will ear inspection.

Splendid Water Supply. Age of Coffee 5 to 10 years.

Terms and full particulars on application to

D. R. LEWIS, Esq.,
Lake St.,
CAIRNS, N. Q.

w. 6-4-01—20-4-01.]

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QUOTATIONS ON APPLICATION.

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[m. 15-7-99—t.f.o.]

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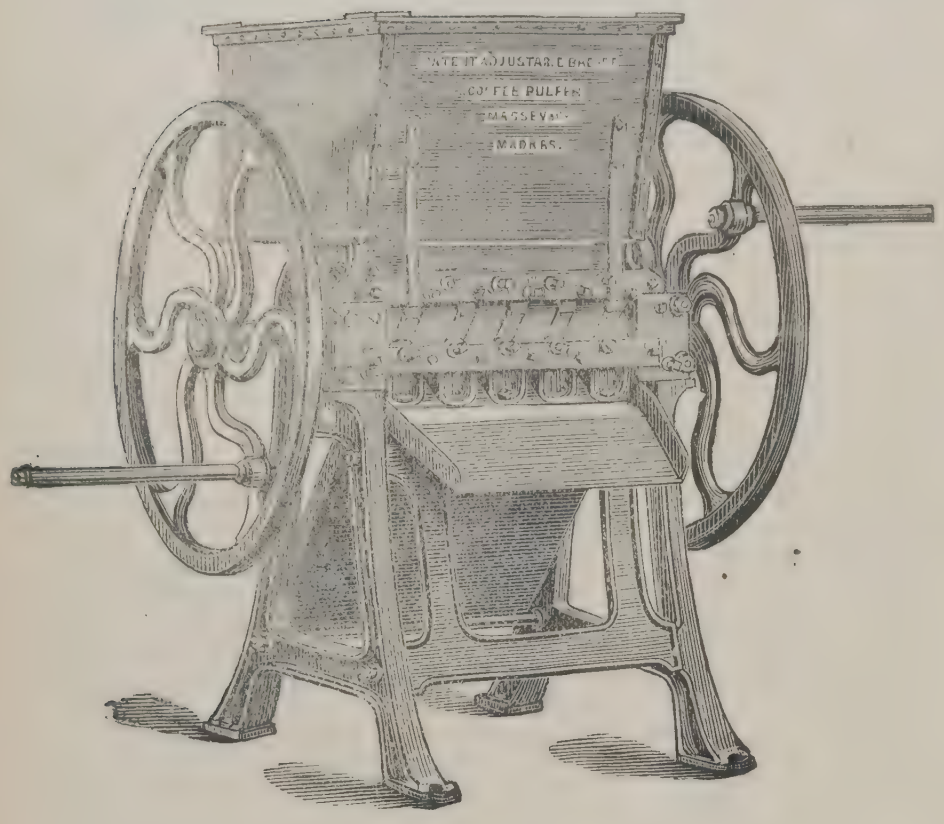
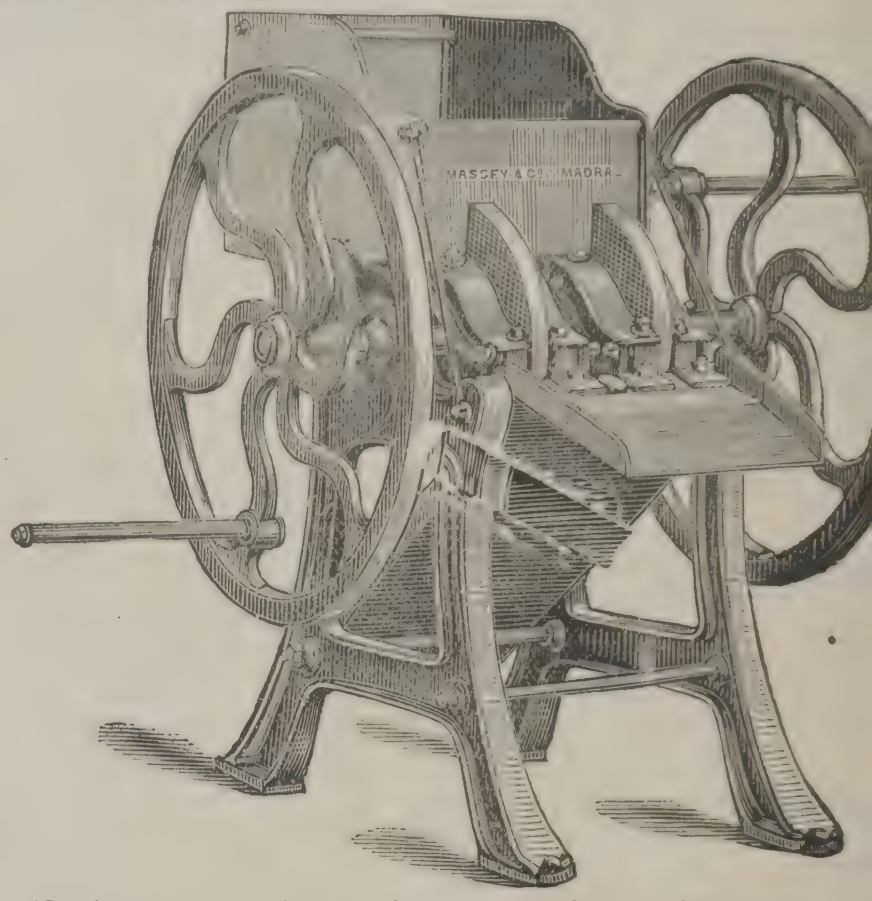
ENGINEERS AND IRON FOUNDERS, MADRAS.





Engines with Pulpers supplied and erected. Estimates, Lists of users of Oil Engines a
Pulpers and current Price Lists on application to

MASSEY & CO.,
MADRA

Notice is hereby given for general information that application having been received for the purchase of the und mentioned land, under the Waste Land Rules, it will be put up to public auction before the Assistant Co missioner of Coorg at Mercara at noon on Friday, the 7th June, 1901, and sold to the highest bidder ab the upset price.

No.	Name of Applicant.	Name of Land.	Taluk, Nad and Village.	Area in Acres.	Value of Timber, Sandalwood and Bamboos.			Upset Price.			1/10th of the value of Timber and Sandalwood recovered.			Survey charges received.			Fees for engrossing Title-deed.			Annual Assess-
					RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	
1	Shivachar Mari Shetty and Rajaput Krishnasingh...	Yedathore Paisari estate. Survey No. $\frac{-}{1}$ ...	Kiggatnad Taluk, Bettiethnad, Siddapura Village.	43·04	*399	2	6	*494	5	0	...	...	...	...	...	...	2	0	0	From 1st June, 1905, at one rupee annually per acre and from 1st June, 1913, at two

For conditions of sale, apply to the Commissioner of Coorg, or to the Officer conducting the sale.

COORG COMMISSIONER'S OFFICE,
Dated Mercara, 22nd Feby. 1901.
[a. 23-3-01—20-4-1901.]

(Signed) G. F. MEIKLEJOHN,
Commissio

* Subject to revision after receipt of Timber Bill checked by the Forest Department.

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

VOL. VI.] MADRAS, SATURDAY, APRIL 13, 1901. [No. 15.

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SUBSCRIPTION.—Payable in Advance: Yearly, Fifteen Rupees; Half-yearly, Eight Rupees; Quarterly, Five Rupees, and Monthly, Two Rupees, including postage. Single Copies, Eight Annas.

ADVERTISEMENTS.—The charge for line advertisements is As. 4 per line for the first; As. 3 for the second, and As. 2 for the third and succeeding insertions. Five-line (or shorter) advertisements from Subscribers will be inserted for three issues for One Rupee; non-Subscribers will be charged Two Rupees.

DOMESTIC OCCURRENCE.—The fee for inserting a domestic occurrence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 19th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Coorg.

Polli Betta, *3rd April.*—*Weather*—No rain since last report. Clouds working up. They have begun early this morning and look promising. Rain now would be seasonable, but it must be copious. *Crops*—all over. Some pruning still to be done. There is manuring in hand also. Most places have paid off and reduced hands. *Health*—Fair.

Coorg.

Polli Betta, *10th April.*—*Weather*—Heavy thunderstorm here on night of 8th. Some places had an inch of rain. There was some hail—much cooler now. *Crop*—Previous blossoms appear to have set. *Labour*—mostly paid off and places reduced. *Health*—Fair. *Interesting item*—Camp of Exercise on at Mercara. Many members from this side have gone up to it.

Munzerabad.

April 2nd.—*Weather*—Hot days and hot nights, an easterly wind by day and west by night. *Crop*—Each of this year's blossoms have had a most satisfactory setting, some of the first blossom is swelling already. *Works*—Pruning, manuring and shade lopping. *Labour*—Abundant. *Health*—Good. *Interesting item*—Our roads, which are now being complained of in the *Madras Mail*, are badly in want of repair; the holes were carefully filled in with earth for the Resident to roll luxuriously over, but for the resident with a small r, the sun and wind are allowed unchecked to re-excavate, and the holes are as before.

THE RESTRICTION OF OUTPUT OF TEA.

The 15th March, 1901, was the last day fixed for the receipt at the Ceylon Association Rooms in London of signatures to the Tea Restriction proposal. A good many signatures appear to have waited until the last moment, and more may still be 'lying low;' waiting to see how the proposal has 'caught on.' At any rate, the London correspondent of the *Times of Ceylon* writes:—"In all about one million lbs. have been struck off by the voluntary promises of Companies and Proprietors according to the list at Gracechurch Street, and there is at least one Company of influence which express themselves as agreeable to carry out the arrangement on their estates, though they are not willing to sign the circular and say so in black and white. One cannot very well see why, in such a case as this, people who are willing to comply with the conditions should not be willing to say so; but after all if the thing is *done*, it is of no great consequence whether the doing of it is made public or not, perhaps." That is a debatable point; for the Company that declares its intention doubtless leads other Companies and some individuals, whereas the Company that keeps its intentions dark is more likely to encourage the doubting Thomases. Calcutta advices show that a restriction of output to the extent of 3½ million pounds has been agreed to, and if, as we suppose, this is in addition to the quantity advised from London, a total of about 4,500,000 lbs. is arrived at. A good deal below the 10 per cent. reduction by 80 per cent. of planters that was required. So much below, that we are by no means satisfied that the scheme will yet be practically tried, though we understand, that the time for receipt of signatures has now been extended.

The London correspondent of the *Ceylon Observer* appears to be very sanguine. He writes to that paper:—"First of all, when Mr. Rosling's proposals appeared, your columns were filled with criticisms of them. They were crude, futile, Utopian, and what not. People here naturally began to think Ceylon would have none of them. Meanwhile the Joint Committee brought out their scheme, and as I have stated from time to time, though it evoked little enthusiasm, it met with a fair amount of support. Your Overland received by last mail informed us that the Committee's suggestions had been carefully considered and ruled out as impracticable, and that the meeting had voted almost unanimously in favour of the much decried proposals of the Chairman. This was sufficiently startling, but there was more to follow. For a cable has been received at the Ceylon Association stating that the Joint Committee's suggestions have now been adopted." At the same time he adds "that it is sufficient to know that the Ceylon and London bodies are now at one and are endeavouring to get the required number of assents. Whether they will be successful in this or not it is impossible for anyone in London to say. The general opinion seems to be that it will be 'a near thing.' Assents have been coming in rather more freely the last few days and more are expected before this evening (the last day). On the other hand, several of the largest Ceylon Agency houses are holding aloof, and I have been at some pains to ascertain the reasons for this. One objection to the scheme arises from a doubt as to the integrity of signatures. It is asserted that anyone can drive a coach-and-four through the agreement, and doubtless there is some truth in this. Again, it is held in some quarters, that with the finer and more careful plucking now in vogue (of whi there is abundant evidence in the teas now arriving) matte will right themselves without any artificial combination. third party simply say that they signed the 1-lb. dra agreement, and with that experience will sign nothing more

We are not believers in the practicability of the ne scheme. To us, it is doubtful if sufficient producers wi join in and adhere loyally to the terms agreed upon. Eve should they do so, they will, in our opinion, merely help benefit those who do not sign. However, the attempt bring about an agreement having been made, there wi certainly be some evil results should failure result. Th Darwinian theory of the survival of the fittest is no generally accepted in regard to industries as well as plan and human beings. Yet this scheme ignores it. In fac the scheme may be said to embrace an appeal to the stron to be philanthropic and aid the weak, lest the latter b stamped out. It may be magnificent, but it is certainly n business; and in these days of intense competition te planting must be worked on business lines if it is to succee However, *nous verrons*. The tea-industry is in a bad wa It must be when trifles are commented upon as follows:- "A small scrap of comfort for tea-sellers comes this wee from Brussels. Since her severe illness recently, the Quee of the Belgians has found formal dinner parties too grea a strain on her strength, and she is now inviting all visito to afternoon teas, which accordingly are becoming the mo fashionable form of entertainment in Belgium in consequence Truly, a feather may sometimes be so handled as to sho which way the wind blows, but it is a bit uncertain in i records unless the wind, be steady, if not also strong. Mo encouraging is the news from the same source—the Londo correspondent of a Colombo paper—that in Paris Ceylon te becomes weekly more popular, and French ladies are a beginning to become customers. "All," though a sma word, has a potent meaning. The misfortune is that it is apt to be slipped in where its use constitutes an unpardon able exaggeration. We trust this is not the case now. At an rate, if it be not, restriction of output must soon give plac to increase of consumption, for all the ladies of France migh soon put a new face on the statistics of consumption.

UNWHOLESOME TEA.

The attention of Parliament has been drawn to allegation as to the import of inferior and unwholesome tea into Gre Britain. Some of this tea was even said to contain "micro bial products, dangerous to health." The Local Governmen Board, it appears, had no definite information on the subjec so we may presume that there has been some exaggeration Under the Sale of Food and Drugs Act, 1899, the Boar may in certain circumstances direct an officer to procu samples of tea for analysis. The result of the analysis is be communicated to the local authority, and thereupon becomes the duty of the authority to cause proceedings to b taken, just as if they had caused the analysis to be mad

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nicho son's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf peop unable to procure the Ear Drums, may have them free.

Address—No. 989 D, The Nicholson Institute, Longcott, Gunnersbury, *Londo*

[w. 26-5-00—26-5-1901.]

e Public Health Acts contain provisions under which icles of food, which appear to be unwholesome or unfit the food of man, can be dealt with by officers of local thorities. It is significant that the President of the Local overnment Board should have remarked :—"I am not at esent aware of sufficient reason for any such inquiry as at suggested." It is equally significant that Mr. E. H. rine should have taken the opportunity to write in dispraise much of the Ceylon Tea imported into England. As a ylon planter and a seller of Ceylon tea—Ah, well, perhaps e less said the better.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

Selangor Planters' Association.

Indian planters will probably be interested in reading e following extracts (regarding Coffee, Rubber and Ramie) om the eighth Annual Report of the Selangor Planters' ssociation (for 1900) :—

There are now 69 Subscribing Members and Estates, all of whom e entitled to one vote, but some are entitled to more than one te by paying extra subscription if they have got the necessary reage opened.

At the end of the year under review, the cultivated area according all the returns that could be obtained, and estimating the area estates from which no returns could be obtained, is less by 473 res than that of the previous year, and on the back of this report a statement showing how these figures are arrived at.

Coffee.—Prices ruling during the year have shown a distinct improvement over those of last year and are as follows : January $20 per kul, February $22, March $22·50, April $21, May $20·25, June 2, July $22·50, August $22, September $21·25, October $19, ovember $19 and December $19 : an average of $20·89 per pikul, $3·69 per pikul higher than the average for last year. Prices re firmer at the commencement of the year ; but, towards the d, prices were dull and the market still remains so. The low ices, although better than those obtained last year, have necessited the strictest economy on all estates. Under these circumances your Committee consider that it is a matter for congratulan that estates are looking so remarkably well, and that the nters are showing such determination to do everything in their wer to tide over the present crisis.

The attempt to improve the quality of our coffee, commenced in 99, has been continued during 1900, and it can safely be said that e sample generally is better than it ever before was. During the ar five samples of sun-dried and machine-dried coffee were sent a London Broker by the Committee of the United Planters' sociation for report and valuation, with the result that such mples were favourably reported on, and showed a considerable provement in value on the Singapore prices for similar samples, d your Committee have followed up the action of the United nters' Association in obtaining promises of contributions from ates in Selangor to form regular monthly shipments to London : d we trust that this may lead to something substantial being ne towards shipping our produce direct to European Markets. show that it is realised how important it is that the quality of r coffee be raised to the highest standard possible. the fact may mentioned that three patent dryers have been added to those eady in use in the State.

As to the future of coffee in Brazil, a thing which closely affects oducers of it in every country, may be mentioned the following :— From the last report from Messrs. Rucker and Bencraft (Brokers), ted 29th November, 1900, it appears that exchange in Brazil at at time was $9\frac{15}{16}$d. as against $7\frac{3}{30}$d. at the same time the year fore, or practically a rise of 3d. in the Milreis, and from an exustive paper on the present condition of coffee culture in Brazil, itten by the Director of the Agricultural Institute of San Paulo, d sent to your Association by the Selangor Government, it pears that that official's opinion is that it is absolutely necessary to go in for manuring on a large scale if the former output of coffee is to be maintained, and in his summing up as to the future of coffee in that country, he says, that judging from the cost of production in Brazil it is evident that the situation of the present proprietors of estates is an extremely precarious one, and that the greater number of them will be obliged to sell their estates or give them up to the mortgagees. He points out, however, that the new proprietors would purchase cheaply and reduce the cost of production, so that the only thing that would prevent new proprietors from making a profit, and continuing to work the estates, even under present circumstances, would be a rise in the rate of wages or a decrease in the price of coffee. No doubt the substantial increase in exchange referred to above will have a serious effect. It must also be borne in mind that it is the general experience that, when estates are pushed to such extremes, the value of the same at the time of sale is reduced through neglect by at least 60 or 70 per cent of their former value.

Crops.—The crop for last year was estimated at 25,636 pikuls, which has been realised Crop for the coming year is estimated at 22,578 pikuls. See statement on last page.

Reports from London Brokers show that the largest crop Brazil ever gave amounted to 10,365,000 bags from 1st July, 1897, to 30th June, 1898.

BRAZILIAN RECEIPTS FROM 1ST JULY TO 1ST JANUARY.

	1900-1901.	1899-1900.	1898-1899.	1897-1898.
Rio bags ...	1,652,000 ...	2,110,000 ...	1,821,000 ...	2,759,000
Santos bags ...	5,409,000 ...	4,620,000 ...	3,802,000 ...	4,476,000
Together bags...	7,061,000 ...	6,730,000 ...	5,623,000 ...	7,235,000
Crop ...	... ...	8,971,000 ...	8,772,000 ...	10,461,000

From 1st July, 1900, to 1st January, 1901, the receipts were 7,061,000 bags, being only 174,000 less than on the record season 1897-1898. This would not look well, if it were not for the following statistics taken from—

"Return to an Order of the Honourable the House of Commons, dated 3rd August, 1900, for Statements showing the Imports of Tea, Coffee, etc."

PART II.—COFFEE.

TABLE I.

Comparative Statement showing the Consumption of Coffee in the Principal European Countries and in the United States in each year from 1884 to 1899 inclusive.

Years.	United Kingdom.	Russian Empire.	German Empire.	France.	Italy.	Austria-Hungary.	United States.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
1884	32,256,000	18,288,000	244,438,000	149,411,000	35,825,000	78,100,000	508,633,000
1885	32,704,000	16,992,000	259,895,000	150,412,000	51,911,000	30,740,000	539,264,000
1886	31,584,000	16,488,000	271,988,000	150,308,000	23,872,000	82,720,000	537,212,000
1887	29,344,000	11,448,000	224,033,000	140,455,000	31,383,000	70,180,000	500,819,000
1888	30,576,000	14,004,000	252,248,000	149,600,000	30,859,000	75,900,000	108,563,000
1889	28,336,000	12,924,000	249,104,000	143,548,000	29,762,000	76,340,000	561,132,000
1890	28,000,000	14,076,000	259,877,000	149,406,000	30,760,000	77,220,000	490,162,000
1891	28,672,000	12,600,000	276,344,000	154,323,000	30,397,000	78,320,000	511,041,000
1892	28,224,000	14,256,000	268,470,000	158,072,000	30,437,000	80,740,000	629,672,000
1893	26,544,000	15,040,000	268,820,000	151,886,000	27,757,000	79,200,000	551,395,000
1894	26,544,000	14,688,000	269,188,000	153,556,000	26,891,000	82,060,000	547,069,000
1895	27,440,000	14,436,000	269,258,000	159,093,000	26,393,000	83,600,000	643,235,000
1896	27,328,000	13,860,000	285,773,000	165,405,000	27,740,000	86,900,000	572,672,000
1897	27,328,000	16,740,000	300,069,000	170,443,000	28,571,000	90,420,000	724,560,000
1898	27,664,000	17,892,000	337,194,000	174,691,000	29,462,000	95,920,000	851,691,000
1899	29,120,000	18,396,000	343,501,000	179,120,000	31,222,000	92,180,000	801,757,000

These figures show that the consumption of coffee in the principal European countries and the United States during the year 1888, was 961,750,000 lbs., and during the year 1899, 1,495,296,000 lbs., an increase of 533,546,000 lbs. during 11 years. During the same period, the rate per head of the total population has gone up from 2·66 lbs. per head to 3·77 lbs. per head. This is an enormous increase in consumption during 11 years, and it is a matter for consideration as to whether the acreage under coffee cultivation in the world can for long continue to supply this amount. Year by year estates become worn out and unremunerative—see report written by the Director of the Agricultural Institute of San Paulo, in which he states that about two-thirds of the acreage under coffee culti-

vation in Brazil requires manure and without manure it cannot go on producing large crops. This manure will have to be transported on an average more than 600 miles by railway, to say nothing of the cart transport.

Ceylon was once a great coffee-producing country, and for 20 or 30 years went on giving large crops without manure: but the time came when manure became absolutely necessary, and with manure came disease, and eventually total abandonment of coffee in the island.

Your Committee consider the above sufficient to stimulate you in continuing to keep your young and vigorous coffee in as good order as your finances will allow of, for we are in hopes that the days are coming, and perhaps not far off, when large crops will mean large profits.

Pará Rubber.—During the year the cultivation of this product has increased considerably, 1,146,870 seeds having been imported or obtained from local sources, all of which have been planted out in the field or in nurseries. It is to be regretted that seed imported from Ceylon germinated exceedingly badly; but, as hitherto, we are indebted to Ceylon for a large percentage of the rubber now flourishing in Selangor, we hope this will not occur again. Local seed gave an outturn of at least 75 per cent.

Termites still continue to be the worst pest which cultivators of Pará rubber have to deal with, but these have been, more or less, kept in check by various remedies.

Rambong.—The planting of Ficus elastica has occupied the attention of planters much more this past year than hitherto, 52,147 trees having been planted out. A sample sent by the Superintendent of Forests, Perak, to London was valued at 3s. 6d. per pound, and sold at 3s. 10d. per pound.

For further information your Committee refer you to the minutes of a General Meeting, held on 5th January, which have been placed before you. The year shows that Gutta rambong is likely to occupy the attention of planters more in the future than it has done hitherto, for although the largest operations are being carried on with Pará, there seems to be a tendency to extend the cultivation of Ficus elastica.

Ramie.—One estate is carrying on the cultivation of ramie in a praiseworthy way and we wish this estate all success.

Experimental Gardens.—The Government of the F. M. S. have appointed a Superintendent of Experimental Gardens, and your Committee are in hopes that he will as soon as possible make experiments in tapping rubber trees of different ages, and different kinds, and be able to give us some trustworthy information as to what yield we may expect from the different kinds of rubber, also that the Government will supply him with a Biffen separator which may prove of some use to him. We are also in hopes that Mr. Stanley Arden will devote a good deal of his attention to hybrid coffee, and that he will be able to instruct us on the best methods of destroying and keeping pests in check. As the planting of rubber has to some extent taken the foremost place in the attention of planters, a good deal of his time should be devoted to gathering and giving information on every branch of that cultivation, and his services in that direction will be most useful.

Statistics of acreage under Cultivation, estimated Crop and Labour employed on the European and other chief Estates in Selangor.

District.	Names of Estates.	Acreage under Cultivation at end of 1900.	Estimated Crop in Pikuls for 1901.	Labour. Tamil.	Chinese.	Malays and Javanese.	Total.
Klang ..	Blackwater	160	300	..	..	40	40
,, ..	Golden Hope	365	1,200	112	..	..	112
,, ..	Lowlands ..	565					
,, ..	Highlands ..	235	2,500	190	35	50	275
,, ..	Bukit Rajah	588½	40	160	2	30	192
,, ..	New Eskdale	162	42	25	..	..	25
,, ..	Klang Lands	183½	367	52	..	..	52
,, ..	Harrow	70	..	..	10	..	10
,, ..	Pendamaran	300	..	70	..	178	248
,, ..	Vallambrosa ..	305	350				
,, ..	Marshalsea ..	400	..	132	..	20	152
,, ..	Harveston ..	225					
,, ..	St. George ..	50	50				
Klang ..	Damansara ..	383	1,000	243	..	..	
,, ..	Merton ..	50					
,, ..	Telok Batu ..	250	160	197	15	..	
,, ..	Labuan Padang	200	75				
,, ..	Sungei Binjai	270½	100	70	..	13	
,, ..	Sungei Rengam ..	663½	612	125	..	6	
,, ..	Golconda	53	..	..	7	..	
,, ..	Beaumont	170	225	53	..	..	
,, ..	Glen Marie ..						
,, ..	Enterprise ..	270	500	30	75	20	
,, ..	Esperance	5	..	..	..	2	
,, ..	Batu Unjor*	..	..	..	..	..	
,, ..	Koong Yaik	450	325	82	17	105	
,, ..	Klang	185	300	25	..	28	
,, ..	Triangle*	..	..	..	..	..	
,, ..	Beverlac*	..	..	..	..	..	
,, ..	Bukit Duku	135	..	..	..	5	
,, ..	Shelford	160	..	90	..	..	
,, ..	Sungei Puloh	125	345	100	..	..	
,, ..	Kapar*	..	..	..	..	..	
,, ..	Merrow	44	..	60	..	..	
,, ..	Batu Tiga*	..	..	..	..	..	
,, ..	Kapar Rubber Estate ..	130	..	..	..	16	
,, ..	Tan Kee*	..	..	..	..	..	
K.Langat ..	Klanang	427	30	125	..	..	
,, ..	Denmark	50	350	9	..	3	
,, ..	Jugra*	..	..	..	..	..	
K. Selangor	Kempsey	153	60	30	..	2	
,, ..	Sungei Rambai ..	300	450	15	..	30	
,, ..	Langford	250	..	7	..	19	
,, ..	Telok Piai	112	..	..	..	16	
K. Lumpur	Klang Gates	150	500	50	..	..	
,, ..	The Mount	140	550	74	..	..	
,, ..	Batu Caves	284	700	150	..	..	
,, ..	Seronor	50	75				
,, ..	Petaling	400	1,000	150	..	..	
,, ..	Devon	100	300	23	..	..	
,, ..	Delabole	70	..	25	..	..	
,, ..	Ledbury	250	450	58	..	..	
,, ..	Weld's Hill	110	220	15	..	..	
,, ..	Eveleen*	..	..	..	..	..	
,, ..	Selangor	75	85	27	..	6	
,, ..	Batu	185	350	145	..	8	
,, ..	Kent*	..	..	..	..	..	
,, ..	Uganda*	..	..	..	..	..	
,, ..	Wardieburn	205	1,086	100	..	4	
,, ..	Setapakdale	330	2,079	150	..	..	
,, ..	Hawthornden	200	400	50	..	..	
,, ..	Lincoln	85	160	14	..	..	
,, ..	Edinburgh*	..					
,, ..	Azledale*	..	..	..	..	..	
,, ..	Eberswalde* ..						
,, ..	Kepong*	..	..	..	..	..	
U. Selangor	Batang Kali	200	850	72	..	1	
,, ..	Ulu Yam	120	300	20	..	..	
,, ..	Serendah*	..	..	..	..	..	
U. Langat	Inch Kenneth ..	120	480	..	..	30	
,, ..	Hell's Glen	212	500	..	..	32	
,, ..	Balgownie	250	550	105	..	..	
,, ..	Belmont	303	1,212	60	..	..	
,, ..	West Country ..	510	1,350	160	..	..	
K. Lumpur	New Amherst* ..	..	..	..	..	..	
	Total estimate from returns received for 1900 ..	12,794	22,578	3,450	161	664	4,
	Estimate of estates marked no returns	2,270	3,000	150	50	..	
	Total ..	15,064	25,578	3,600	211	664	4,
	Return for 1899 ..	15,537	..	2,877	401	1,016	4,
	Increase & decrease in 1900	—473	..	+ 723	—190	—352	+

* No return.

* * *

Tea Trade with Persia.

Referring to a paragraph in the proceedings of the meeti of the General Committee of the Indian Tea Associat (Calcutta) held on the 12th March, the Secretary

rculated for information, a copy of a letter, dated 14th ebruary, from the Kangra Valley Planters' Association on this subject. He remarks :—You will observe that the angra planters propose to send a caravan of 100 camels arrying 32,000 lbs. of tea from Quetta to Meshed. The ravan will start in June or July. And the Committee nderstand that should any other proprietors outside Kangra e willing to supplement the quantity specified the necessary rangements can be made. They accordingly direct me to k whether, in the event of your wishing to send any tea, ou will kindly give them particulars as early as possible f both the quantity and the quality.

The letter is as folllows :—

PALAMPUR, *4th February*, 1901.

rom

GERALD C. DUDGEON, Esq.,
Honorary Secretary,
Kangra Valley, Planters' Association,

o

THE SECRETARY,
Indian Tea Association.

At a meeting of this Association held in Palampur on the 13th stant, the Manager of the Bundla Tea Company handed in a letter, copy of which I beg to enclose, received by him from His ajesty's Consul at Seistan in reply to his enquiry concerning the troduction of tea into Persia. I am directed by my Committee place the same before you with certain suggestions which have manated from the consideration of it by them.

It will be seen that His Majesty's Consul at Seistan recom-ends the despatch of an agent with a consignment of 100 camel-ads to Persia in order to effect the introduction of tea from India á the new route. This project is considered feasible, and ar-ngements are in progress between this Association's Committee nd a local planter, well acquainted with Persian and Pushtu, to nvey and sell such a consignment in Persia, and to appoint agents, necessary, to ensure the permanency of the trade. It is under-ood that the Indian Tea Association may have in contemplation similar scheme, and it was therefore considered that it might be pedient for this gentleman to act for them also. Indeed the ommittee of my Association are desirous of offering his services, it is obvious that the elimination of competition in this trade an important factor for its favourable establishment.

The proposals which together with your Association's reply it is ggested should be put before a General Meeting of planters, are iefly that every garden in the valley should be invited to tender supply a quantity of suitable tea with samples to be submitted r approval to this Association's Committee. The tea will have be railed to Quetta. The expenses incurred for camel transport Persia, and the agent's remuneration and expenses will be pro-rtionally paid for by those whose tenders are accepted. The ofits upon the sales of the teas less a commission to the agent ll be made out separately for each contributing garden and paid on the termination of the expedition. It is estimated that 100 mel-loads would mean 32.000 lbs. of tea, but should the Indian a Association be desirous of supplementing this quantity, it uld be arranged for. It is probable that the whole 32,000lbs. uld be subscribed in this valley itself. In order to start a ravan of this description a certain amount of capital would be quired. This could be met by each contributor advancing a ed rate per lb. calculated to cover expenses, the alternative ing to borrow money from some bank or private individual interest.

SEISTAN-QUETTA, *17th November*, 1900.

rom

Major E. CHENEVIX TRENCH,
H. B. M Consul,

MANAGER, Bundla Tea Company,
Palampur.

In reply to your letter of 27th August only now reached me m being addressed Perisa and not Quetta. Seistan itself is a small place with no very large demand for tea or any other produce. The importance of Seistan is that it is the only province of Persia which is co-terminus with British India, and therefore commands the only land entrance into Persia which is opened to Indian traders. I need hardly remind you that every Persian drinks black tea, and that the tea comes from India either by Bunder Abbas, Mahomerah, Bushire, or round by Batoum. Green tea is drunk by the Afghans, and by the Bokhariots Russian subjects. It would be useless my sending you a sample of tea from here. Every kind of tea (Black) is drunk in Persia, the richer the Persian the higher is the price he will pay. I have not penetrated far into Persia yet, but shall shortly be going to Meshed as Consul-General, but I can say in a country like Persia it would be quite impossible for me to recommend any respectable Persian firm who would merely issue orders on you for tea. If you want to press Palampur tea on Persia your best plan is to send an agent; with a caravan of tea, say 100 camel-load, and let him sell in the different towns he goes to. I do not think there would be any chance of his not selling it well for the Persian greedily buys tea. This agent would either himself settle in the locality best suited to sell tea, or could appoint his own agents; in any case he could by advertising, encourage the Persian traders who are beginning to go to Quetta to buy your tea.

I never hold out any hopes to any person who is merely desirous of remaining stationary and accepting orders for tea obtained through the medium of a Consul. That course is impossible. No trade enterprise has been carried out in that way in any land. Take the history of China or India. Had English merchants at first waited until the Indians and Chinese went to them they might be waiting still.

Should you be unable to afford to risk a caravan of tea and learn the trade by practical experience. I shall be glad to receive samples of your tea done up in small packets, and labelled in English and Persian according to the attached form. This sample will be put in my show room at Meshed, and any Persian can see and order if he likes. I cannot be in any way responsible for Persian firms. One enterprizing firm at Baras is here now, and doing a very large and profitable business in ghee, wool, and tea, selling as far as Meshed, Bujand, and Herat. I am hoping Messrs. Lipton will come and thoroughly exploit the country besides many others. As regards the journey Seistan is 500 miles from Quetta by an easy safe road. Camel hire is Rs. 4-8 to 5-0 a maund from there to here and cheaper in Persia for the same distance.

Camels and transport are plentiful everywhere, five per cent. *ad valorem* is the duty chargeable on all imports into Persia, and may be paid in Seistan or Meshed. My advice to you is to come and see for yourself what Persian trade is like. Your agent must speak Persian; I am always ready to give you any advice on information.

* * *

Sale of Tea in India.

The Indian Tea Association (Calcutta) has issued the following circular, dated 4th April, 1901, to all Agents and Proprietors of Tea Estates :—

You will no doubt have observed from the recently published proceedings of the General Committee of the Indian Tea Association that this question has been engaging their attentive consideration.

2. At their meeting of the 12th March the General Committee appointed a Sub-Committee to examine the question ; to submit a definite scheme for developing the Indian market ; and to suggest an organisation to put the scheme into practical operation. The Sub-Committee have now submitted a preliminary report, a copy of which is annexed to this letter for your information. This report has been accepted by the General Committee ; and from it you will readily understand the nature of the scheme it is proposed to endeavour to put into practice

3. Briefly, the scheme may be described as one resting on a tea, rather than on a cash, basis. In other words it is proposed to ask all tea concerns to make over, without charge, a certain quantity of tea yearly, to an Agency which is to be

established. And the object of the present letter is to enquire as to the quantity of tea which Companies and Proprietors will be willing so to contribute.

4. The Sub-Committee anticipate that three, or four, or perhaps five, years will elapse before it will be possible to develop a large market. It will, therefore, be necessary for the Agency to be founded on such a basis as will enable it to carry on operations uninterruptedly for a term of years. And this can only be done by the industry undertaking to supply a certain quantity of tea annually.

5. During the first year of its existence it is believed that the Agency may be able to dispose of about two million lbs. of tea, or say, rather more than one per cent. of the Indian crop. If the business proceeds satisfactorily, this quantity, or perhaps something more, will probably be required annually.

6. I am accordingly now to ask if you will be good enough to inform the General Committee *at the earliest possible date* of the maximum quantity of tea which you will be prepared to contribute annually for say three years. It is of special importance that this information should be supplied promptly, because if a sufficiently large quantity be promised to warrant a start being made, steps will have to be taken immediately to engage a competent Superintendent or General Manager of the Agency. And this brings the Committee to an additional reason why it is essential that the contributions of tea should be guaranteed for a term of years. For it will be clearly impossible to obtain the services of a thoroughly competent man unless he can be given an agreement for probably five years. It must be evident to all that the success of the Agency will depend almost entirely upon the General Manager. And it is therefore of the highest importance that the terms and conditions of the appointment should be such as will secure a really able man.

7. It should be understood that the tea contributed will be required to be delivered free in Calcutta. The Committee are approaching the Inland Steamer Companies and Eastern Bengal State Railway with a request that it should be carried to Calcutta without charge. And they hope to inform you of the result in due course.

8. I annex a form of undertaking which should be filled in and returned to this office without avoidable delay.

Yours faithfully,

W. Parsons,

Secretary.

Annexures:—

(1) Form of undertaking.

(2) Report of Sub-Committee.

.....*April*, 1901.

To

The Secretary,

Indian Tea Association.

Sale of Tea in India.

Dear Sir,

I / We undertake in behalf of the..... .....

Company, Ld. / Estate, to make over without charge to the proposed Tea Distributing Agency.....lbs. of tea annually for the years 1901, 1902, and 1903 for distribution in India with the object of developing the Native market.

The tea to be delivered free in Calcutta.

Yours faithfully,

Indian Tea Association,
Royal Exchange Building.
Calcutta, 26th March, 190

Sale of Tea in India.

Preliminary Report of Sub-Committee.

To

The Chairman, Vice-Chairman, and
General Committee of the Indian Tea Association.

Gentlemen,

We, the undersigned, having been appointed a Sub-Commi to consider the question of increasing the sale of tea in India, beg to submit a preliminary Report.

2. In accordance with the terms of the resolution under wh we were appointed, we have confined our attention to the prepa tion of proposals whereby a definite scheme for increasing the of tea may be put into practical operation.

3. The scheme which we now put forward may be briefly cribed as one for the formation of a tea-distributing Agency. do not propose that tea producers should be asked to contrib money towards the cost of establishing and maintaining such Agency. But we suggest that they be asked to contribute tea.

4. As a preliminary measure therefore the Association sho we think, ask every tea producer in India if he would be willin make over, without charge, to the proposed Agency a cert quantity—to be determined by himself—of his production. offer might be for one season only, or it might extend over a num of seasons.

5. If, as we believe will be the case, a fairly large quantit forthcoming, the next step will be to make arrangements for e consignment to be valued by an expert on its arrival in Calcu The value would be credited to the subscribing Proprietor Company in the books of the Agency; in order that if at so future time it should be decided to distribute any assets or pro the distribution might be proportionate to the subscriptions of different Proprietors or Companies.

6. As soon as it becomes evident that a sufficiently la quantity will be given to enable a start to be made, we propose t a Superintendent, or General Manager, should be engaged. should be an energetic and capable tradesman, who has experience—in India for preference—of the work of advertis and pushing the sale of tea. The whole of the work of the Age would be carried on under his direction and supervision. head-quarters would be in Calcutta. And he might be made ponsible to a Board of Management, or Committee of Produce representing the subscribing Companies and Proprietors.

7. Under the Superintendent, at least two smart Europe travellers would be required. Their business would be to tra throughout the country on behalf of the Agency; to visit bazaars in the towns and villages; to induce the local dealers to t tea for sale; and generally to push the trade in every possible w

8. The staff in Calcutta would need to consist of a few Nat Clerks, and other Native Assistants. The latter would be mai required to pack the tea; and to see to the work connected w the receiving and despatching of it.

9. Office accommodation and godowns for storing tea would a be necessary.

10. The tea would be distributed by the staff in Calcutta to local dealers. Wherever possible cash would be obtained from latter; but if not, credit would be given. Possibly a number the dealers would not account for the tea sent to them. But nev theless, we think, that when the scheme is in good working or the receipts will more than cover working expenses.

11. The expenses connected with the initiation of the sche would be met from the Rs.50,000 to be contributed from American and Foreign Market Fund.

12. The foregoing is, in outline, the scheme which we sugg should be put into operation. There are many points of de connected with its working which will require considerati The following seem to us to be a few of the principal:—

(*a*) In addition to the chief towns and villages, the Age should work vigorously at railway stations, at mills, factories, c mines, and, indeed, at every centre where numbers of Nati congregate, or are employed. Railway stations we regard a special importance. During last year there were 162 millions passengers carried by the different Indian railways. La quantities of tea could, therefore, we think, be disposed of at

ading junction and terminal stations if arrangements were made sell tea in the cup, *i.e.*, brewed tea. To enable this to be done e Railways might be asked to permit stalls to be erected, and the cessary apparatus to be fitted. The stalls might be leased out contractors by the Agency.

(*b*) We understand that the Director-General of the Post Office clined a year or two back to allow tea to be sold at Post Offices the manner in which quinine is sold. But we note that there e no fewer than 7,672 so-called extra-departmental offices through-t the country. At all of these tea could be sold without the nsent of Government, precisely in the same manner as groceries, fancy goods, are sold at shop Post Offices in England.

(*c*) As it will be advisable to keep expenses as low as possible, e Railways and the Steamer Companies might be asked to make ncessions in the matter of freight. They might also be asked to ant free or at least assisted passes to the travellers of the Agency.

(*d*) As the consumption of tea in the countries beyond the orth-West Frontier is believed to be very large, we propose that e operations of the Agency should extend to Kashmir, luchistan, and, if possible, to Persia, and Central Asia.

We are, etc.,
D. KING (*Chairman*).
H. C. BEGG.
W. BROWN.
J. BUCKINGHAM.
W. T. CARTER.
H. R. McINNES.
SHIRLEY TREMEARNE.

THE PLANTERS' ALMANACK.

In quoting the following extract from the *Brazilian Review*, venture to express the hope that at least one planter in ch of the Tea and Coffee districts of Southern India will lige us by compiling a similar almanack in regard to one of ese products.

January.—Plantations are weeded and the ground prepared for wing beans. Very hot days occur (veranico) generally injurious the berry. Calculation may be made of the crop this month.

February.—Weeding continues and cereals are sown.

March.—Weeding on the lowlands (terras quentes) should be mpleted to allow picking in April. Second weeding takes place "terras quentes." Washed coffees commence to appear.

April.—Coffee picking commences on "terras quentes." Heavy ns this month make the coffee ripen too quickly.

May.—Picking continues on "terras quentes" and harvesting of rn and beans commences. Rainy weather in this month is urious because it develops too early flowering with berry on es and weakens them.

June.—Cold and damp is occupied exclusively in picking coffee. thing should be sown this month. All kinds of cereals are rvested and undergrowth cleared. A good time to cut timber. ffee and Rubber seasons end on 30th June.

July.—Picking should be finished this month before the trees gin to bud. Frosts commence. New Coffee and Rubber seasons nmence on the 1st July.

August.—Trees commence to bud for September flowering in "ter-quentes" and in October for "terras frias." Ground is prepared sowing cereals; weeding coffee proceeds and coffee, now well ed, commences to be sent to market. This is the worst month for st and the most injurious. Sugar season ends at Pernambuco.

September.—Second picking of coffee on "terras frias" is com-nced, called "café das aguas." Third weeding continues in rras quentes" and milho and other cereals are planted. Rainy son commences. On well treated plantations first flowering. in during the month previous to the second flower is desirable, it develops the flowering. Sugar season commences at Pernam-co and Northern States on the 1st of this month.

October.—Weeding continues on coffee and cereal plantations "terras quentes." Picking finishes in "terras frias" and drying nmences. First flowering on "terras frias" and second on rras quentes," this determines the ultimate crop.

November.—Third weeding.

December.—Second heavy flowering in "terras frias" and third "terras quentes."

NOTES.

Green Tea in the U. S. Mr. Wm. Mackenzie cabled on 27th ultimo from New York :—"Green prospects are more favourable."

Cinchona in Amsterdam. A supplementary catalogue for the Amsterdam bark auctions, to be held on Thursday, March 28th, showed that 6,899 packages would be offered, containing 624,980 kilogrammes (about 1,374,956 lbs.).

Indian Tea for Indians. The *I. P. G.* holds to the opinion that the creation of a taste for tea among the masses must be first attempted by the sale of the infusion rather than by that of the leaf. It would certainly be a great thing if "tea-stalls" could be established side by side with "opper" depôts !

Tea in Sylhet. Calcutta news, dated April 4, says : —In South Sylhet last night there seems to have begun a break in the long drought : half an inch of rain was registered. This is not of much use in the present parched state of the ground, but the cloudy gloomy atmosphere presages more.

Their own Wallets. "It is all very fine," says the *I. P. G.*, "for our local papers to grid at the Ceylon and South Indian planters for sending out refuse tea for local sale and even export ; but what about our own damaged and re-packed ? Hardly a sale passes during the monsoon without several chests being put up under the above denomination."

The London Tea Market. Cabling to Colombo on the 2nd instant, Messrs. Gow, Wilson & Stanton reported that the market generally was steady. The price of fair liquoring Ceylon Pekoe Souchong was 5½d (¼d up) and the average price of Ceylon tea sold on garden account this week was 7⅜d (also ¼d up)—as against 6½d and 7½d respectively in the corresponding week last year.

Indian Tea for Tibet. It is reported that traders are declining to take sample trees of Indian tea into Tibet, fearing punishment from the Lamas. This has reference to an important experiment recently made by the Korb of Kalimpany with a view to the introduction of Indian tea into Tibet. The Lamas have a monopoly of Chinese weak tea and are quick to resent competition. However, Indian tea-planters should do as Bruce and the historic spider did : Try, try, and try again.

The Value of Tea. The *Pall Mall Gazette* states that the capital of fifty Companies has fallen in value from 10 to 7½ millions sterling since the middle of last year, and holders of shares, who have already had much cause for anxiety, view with dismay the statutory increase of wages for an immigrant population, which lives and saves upon the present rate and has settled upon land of its own in Assam upon the expiry of its contract period in large and increasing numbers.

Colombo Tea Sales. The last tea sale before the Easter holidays was held at Colombo on the 2nd instant. The sales will not be resumed till Wednesday,

the 17th instant. About 16,832 packages = 1,297,052 lbs. were offered, of which about 10,494 packages = 826,634 lbs. were sold. Owing to the large quantity offered and the short time available for tasting, there was a great disinclination on the part of buyers to operate. Consequently prices were very irregular, and in many instances showed a marked falling off.

Indian Tea for Indians.

The Indian Tea Association has received undertakings in India representing a reduction of 3½ million lbs. A scheme for pushing the sale of tea amongst the population in India, by means of a special distributing agency under the direction of a superintendent, has been recommended; also that brewed tea be sold at all railway stations. The operations of the agency to extend beyond the frontier and in Baluchistan and Persia. The Committee has cabled to London to allot Rs.50,000 from the Foreign Market Fund for the purpose.

Sir Thos. Lipton.

The great tea boomer has passed from knighthood to knighthood, having now been gazetted a Knight Commander of the Royal Victorian Order. *A propos* of this, the *World* writes under the head of a provisional "Order":—

[A knighthood of the Royal Victorian Order has been conferred upon Sir Thomas Lipton.]

This honour new to Lipton paid
Seems of the wrong degree;
If he "Lord Bacon" can't be made,
Why not at least "K. T." (ea)?

New Plants??

The *Ceylon Observer* publishes the following letter concerning "The Ruby, Sapphire, etc."

London, W., *March* 12.

Dear Sir,—By this post we are forwarding you two copies of the "Mining Journal" containing articles on Corundum Gems—Ruby, Sapphire, etc.—by our Mr. Leopold Claremont. As many of your Ceylon readers are interested in precious gems we shall be happy to place them at your disposal for reprinting.

pp. CLAREMONT & WARD,
J. W. Purkis.

Our contemporary remarks:—"These interesting articles will be duly reproduced in our *Tropical Agriculturist*." We may fairly ask:—*Que vont ils faire dans cette galère?*

Indian Tea for Indians.

The sub-Committee of the I. P. A. (Calcutta) suggests in its preliminary report that producers should contribute a certain quantity of tea yearly for distribution throughout India by a special agency controlled by a superintendent or general manager; that travellers should be employed to push trade, mainly by the native dealers in bazaars who brewed teas, and should be sold at railway stations, also at so-called extra departmental Post Offices. The operations of the agency should extend to the north-west frontier, including Baluchistan, Turkistan, and Persia. Sanction to spend Rs.50,000 from the American and Foreign Markets' fund was asked for by wire from the London Committee.

Rubbish or not?

An "Old Merchant" sends the following pithy remarks to the *Ceylon Observer*:—"As long as an article is not injurious to health, it is legitimate to trade in it, as we see in the thousands of instances that occur every day. I remember very well when in 1898 some common tea was called 'muck'—yet when that tea, the following year, advanced 2d per pound, it was called capital tea. Tea that sold in large quantities t weeks ago at 2½d per pound, was sold six months ago at 2 —of course, it is now called rubbishy tea—and high coun planters want its export to be prohibited!—because it injurious to health and not fit for human food as the Aust lians say, and as the Americans said of broken Pekoe, beca it contained so much small and broken leaf."

Planting Prospects in Ceylon.

The following is a comparat statement of the Chamber of Co merce figures of shipments to U. K. for the first four months of the last three years. T discloses a favourable condition of things when it is rememb ed that last January's shipments were abnormally swol by December teas:—

SHIPMENTS OF CEYLON TEA TO THE UNITED KINGDOM.

	1899. lbs.	1900. lbs.	1901. lbs
January	6,860,166	10,477,132	12,617,510
February	7,816,499	8,490,967	8,333.266
March	8,589,706	10,578,085	7,683,801
April	8,284,687	8,924,218	9,000,000
Total for 4 months ...	31,551,058	38,470,402	37,634,577

Coffee in the U. S.

Thus the *American Grocer* of 6th ultimo:—A very strong mark wholly due to speculative influence. There has been act trading in futures. The deliveries indicate a light consum tion, and are behind last year at this time. The outlook for the greatest crops ever harvested, but, in spite of hea supplies, strong outside interests have taken hold of coff No. 7 Rio has sold on the spot at 7⅝c, No. 3 at 8⅝c, a No. 5 Santos at 7¾c, c. and f., and 8c spot asked. A s of 10,000 bags, delivery in March, 1902, was made on Exchange at 6·70c. On Tuesday a weaker tone develo and prices reacted ⅛c on spot. The price of package co was advanced to 12½c list, or 11c net, for "Lion" a "Ariosa" brands. A slow trade in mild sorts, with quotati well supported. Padang Interior held from 17½ @ 20c, w fancy mats at 27 @ 29c, and possibly higher for extra f lots; Mocha, 16 @ 19c, and better for fancy; good cucu 9c; best washed Merida and other Maracaibo sorts, 12 12½c; Bogota, washed, 10 @ 16c; Bucaramanga, wash 10 @ 16c; Central American, better grades, 9½ @ 1 Mexican, washed, 12 @ 14c for best.

Cinchona.

The London correspondent, of *Times of Ceylon*, offers a word the wises. He says:—"At the bark sales this week pri showed an advance, and the unit is now quoted at 1 Since the sales the tone has not been so buoyant, owing the large shipments for the half month cabled from Ja As quinine is being again "talked up" in some quarters may be well to recall what took place two years ago, and utter a word of warning. At that date quinine, which h rapidly risen from the neighbourhood of 9d an ounce, v being boomed. There was no solid foundation for the ri but the mere fact of so many silly people (of whom I v one,) rushing in to buy in itself put up the price, which r to about 1s 10d. Most of us, I need hardly say, got in n the top. When the supply of buyers stopped, down went price, which sank to 10d again. Some cut their loss getting out at 1s 6d or 1s 3d. Others, greatly dari bought more at low prices to "average" and still hold stuff. The quotation is now about 1s 3½d, and if it suits

rposes of the ring who control the price to a great extent, may go higher for a time. I could tell many painful ories of the losses sustained by Ceylon men, not in quinine ly but in all sorts of speculative schemes here in London, r can I recall more than one or two instances, and those ry doubtful ones, of men who have done any good for emselves by hasting to be rich. Believe me, the planter is match for the plausible professional who takes care that comes out on top, whatever happens. I learnt this lesson ry early in my residence here, and to anyone who is mpted to speculate by the promise of a high return I ould say 'Don't'."

dian Duty on Ceylon Teas.

Mr. H. Drummond Deane, of Peermaad, writes to the *Ceylon Observer*, that it seems to him that the "extraordinary remedy" suggested—the imposition of a reciprocal x by the Indian Government on Ceylon teas imported into dia—is one that Indian planters may sincerely pray for. e adds:—"Unfortunately I fear that the Ceylon Government ould not be disposed to play into Indian planters' hands, thus increasing the cost of your production, which such tax would necessarily mean. The abolition of the rice tax Ceylon, the main food of the people, is what most people ould like to see brought about from humanitarian grounds, d I am one of the many of that way of thinking; but, Sir, the case of a tax being imposed on Ceylon tea into this untry we merely get the same protection from Ceylon mpetition, as you have got (and still advocate as being just d expedient) from Southern India teas. With a similar x to the Ceylon one of four annas, the million and odd ounds of what are probably mostly very common teas that w find their way chiefly to Bombay from Colombo would ve to find other markets, and Southern Indian planters and en Northern Indian planters would at once benefit by the hole of that amount. In the expressed opinion of Mr. krine, Mr. Campbell, Mr. Thomas, and others, one of the ief *raison d'etres* of the Ceylon tax is to keep us Southern dian planters out of competition with Ceylon. Why then e we not in our rights in demanding protection for ourlves? I believe myself that we shall in time not only ask r but obtain a reciprocal duty on Ceylon tea, until such time Colombo is made a free port for our produce." Our Colombo ntemporary replies with a question:—Are Southern Indian anters prepared to contribute to the Ceylon tea cess on all as shipped from Colombo?

GENERAL ARTICLES.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

São Paulo.—The *Municipio* of São Manoel do Paraiso states that e plantations in that district suffered no damage from the late avy hail and rain storms.

Heavy rains have fallen in Jundiahy, Figueira and Itatiba.

In Espirito Santo dos Turcos the coffee is said to be abundant. he crop will be early, as the berries are already ripening.

The Secretary of Agriculture has declared, with reference to the le recently made by the Sorocabana & Ituana Co., limiting the eight of bags of cereals presented for despatch in its stations, at shippers may forward packages of any weight or capacity hich suits their convenience.

In São João da Boa Vista a *fazenda* worth 32:000$ has been sold auction for 6:000$000.

A number of Campinas *fazendeiros* intend asking the Government to assist them in introducing Japanese immigrants for work on the plantations in that district.

Exchange.—*Saturday, February 17th*, 1901.—Ninety days rate on London opened on Monday the 11th at 10 1/4d. and closed this evening at 10 19/32 d.

Throughout the week rates have inclined to boom and selling for the next three months has been heavy. There can be no doubt of the feeling of the market but though the rise, and a considerable one, is bound to come sometime, it seems rather early yet to begin anticipating coffee entries.

26th February.—Extremes during the week ending February 22 were 10 1/2—11 3/16 d. for 90 d/s Bank paper and 10 19/32 — 11 5/16 d. for private. The average Bank 90 d/s counter drawing rate for the week comes out at 10 3/4 d. the corresponding sight rate being 10 11/16d, against 10 25/32d. the average sight rate of the *Camara Syndical.*

Santos, February 23rd, 1901.—90 days' Bank rate opened at Rio on Monday 18th at $10\frac{9}{16}$ d., rose to $11\frac{3}{1}$ d., on Thursday and closed this evening firm at 11d.

A rise of almost a penny in twelve days, and that at the tail end of February, without outward or visible rhyme or reason, is enough to stagger even the lamented Mr. Thomson and make the hair stand on end of the very deer he is popularly supposed to be chasing over his native heath. But as it went up so shall it come down, because there is no sense in it, anyhow, and great shall be the fall thereof.

It is interesting to get away for awhile from the hub of the Universe in the Rua da Alfandega and hear what others think and say of affairs, and, if laid to heart, instructive. Here at least they do not think much of our little Rio ways and protest energetically against the iniquity of allowing wicked outsiders to interfere in so virtuous and proper a market.

When exchange is going up it always seems quite right and proper and that it would never stop; but although we are only present in the spirit, we have no doubt that the sanguine *Fluminense* is already totting up the value of stocks and discounting the coming crop, Sorocabana Railways, Melhoramento loans and other waifs and strays, in his endeavour to prove that the rise is legitimate and that two and two make five, just as he did under the Thomson dispensation and will do whenever it suits to "bull" the market.

There is, however, no possible sense in such a rise as has been engineered this week, with the value of coffee shipments on the wane and remittances on the increase. The best that could be looked for was a steady rate during February and March, with an improvement, perhaps, in April in anticipation of the new season. But the attempt to boom things now is altogether premature and bound to end in reaction and disaster, unless backed up by some outside factor of which the public is unaware, and on which there is no ground to count positively. The Santos market, anyhow, has not accompanied the movement nor believed in it, selling only from day to day for its own requirements; nor is it likely that with coffee prices so low as they now are, that there will be any disposition to sell coffee in advance. Where jobbers are to find cover for the heavy selling for delivery during the next three months unless assisted by Santos shippers is hard to say, as both prudence obliges merchants here to be careful and interest to be "bears." Immediately rates weaken bills disappear from the market as by enchantment and a "bear" reaction sets in.

The contest which is fought out year by year between Bills and Money is being rapidly converted into a struggle for supremacy between Santos, the great producing centre, and Rio the consuming and speculating market whose interests are necessarily antagonistic, or at least appear so.

Which will get the best of it, Rio, the "bull," or Santos, the inveterate "bear"?

Last year, no doubt, the "bull" had the best of it because the factors were favourable for a rise throughout. Not only did coffee realize a higher average value than there was any reason to anticipate and largely augmented the supply of bills, but unprecedented monetary stringency so restricted demand that money kicked the beam and up went exchange.

At present prospects are very different. A much larger crop is likely to be sold at much lower prices than last year, whilst foreign obligations will receive a considerable addition. It is true that the stringency of money is increasing, if anything, but is that alone

sufficient to counteract the possible deficit in the supply of bills? Will coffee give nearly £20,000,000 this year as it did last? That is the question that must be answered before conclusions can be reached.

Supposing that the most sanguine estimates of 12,000,000 bags for the whole crop (Rio, Minas, S. Paulo, Espirito Santo and Bahia included) be realized and that it fetches on an average 30 shillings per bag f.o.b., in that case the supply of bills from this source cannot exceed £18,000,000 and compared with last year, will give a deficit of £2,000,000.

There is a great deal of talk of American and French Syndicates operating for a rise and, though it is possible their buying may maintain rates for a time, in the long run the effect of commencing a record crop with such enormous stocks cannot fail to make itself felt. A good deal of trust is also placed in the apparent tendency of foreign prices to follow exchange; but that, in our opinion, can be but momentary so long as the minimum price is not attained by which supplies would be affected.

Returning to the immediate market offers of tobacco bills from Bahia have been a decided feature. Money, it appears, is still so scarce at Bahia that bills were offering eagerly at 11d. when Bank paper was quoted here at 10 7/8d. The Bahia season is usually sharp but short, tobacco bills being exhausted in less than a month. Take it as we may, a rise so violent seems at this season wholly unjustified and bound to bring its own punishment, but, at the same time, it is requisite to bear in mind the fact that the Bank of England rate is down again to 4 per cent, that "Brazilians" are being actively boomed and, finally, that advantage is certain to be taken of such circumstances to endeavour to work off some of the undertakings that have been waiting for months for a chance. In case of success it is likely that, under present circumstances, the effect would be very pronounced. Anyhow, the facility with which the rise was worked shows how extremely nervous the state of tension is and counsels the greatest prudence.

THE TEA TRADE.

FEBRUARY STATISTICS—PROSPECTS OF RESTRICTED PRODUCTION.

[By an Expert Correspond ent.]

The Board of Trade statistics of the imports and exports of tea and the quantity on which duty payments have been made for the first two months of this year are quite as interesting as any previously dealt with. I compare the import payments with those of 1899 to show the quantity taken out of bond in excess of the normal quantity in anticipation of a further increase of duty:—

IMPORTS.

	1901. lbs.	1900. lbs.
From China	2,469,341	3,674,728
India	34,137,154	29,935,902
Ceylon	21,954,006	21,379,491
Other countries	2,396,266	1,686,149
Total ...	60,956,827	56,676,270

QUANTITY PAID ON.

	1901. lbs.	1899. lbs.
On China	2,610,417	2,441,586
India	50,833,954	23,418,556
Ceylon	22,744,397	12,288,155
Other countries	1,480,420	751,801
Total ...	77,669,188	38,900,097

EXPORTS.

	1901. lbs.	1900. lbs.
Of China	2,144,478	1,942,153
India	2,419,432	1,425,838
Ceylon	2,583,392	1,767,600
Other countries	289,553	117,850
Total ...	7,436,855	5,253,441

Stocks in bond, 28th February, 1901, 97,479,000 lbs.; 28th February, 1900, 102,308,000 lbs.

The returns do not give the quantities in bond from the different countries, and it is desirable that they should do so, as the statistics of the Tea Brokers' Association are not always reliable. T exports, especially to the United States and Canada, continue o very satisfactory scale, indeed, induced, no doubt, by the very l prices of the common but useful descriptions. The increase in imports is again nearly all from India It is now evident that l year's crop will be about 11,500,000 pounds in excess of the previ one and about 4,000,000 pounds more than the estimate of Indian Tea Planters' Association. The duty payments, it will noticed, are on about 40,000,000 pounds over the usual quanti we shall therefore witness another year of disorganisation in trade, unless it is counteracted by the steps being taken to cur production.

ALTERNATIVES TO LARGER TEA DUTY.

In my article last month I suggested that by imposing moderate duty on sugar the Chancellor of the Exchequer co exercise the power of turning the tables on Budget anticipators, a of relieving the tea industry of a portion of its intolerable burth I venture now to make another proposition. Why should not import duty be put on petroleum? The commodity is not produ in this country; there can therefore be no question of that bugb Protection. We annually import 1,000,000 tons from America a Russia, and a duty of only 10s per ton wouldy ield £500,000, eq to ½d per gallon. Such a duty would not only be far-reaching, would fall, imperceptibly, chiefly on those who contribute compa tively little to the present extraordinary expenditure of the count The object of suggesting new and equitable sources of revenu to enable the Government to adjust and equalise oppressive dut on other articles, such as tea.

PLANS FOR CURTAILING YIELD.

The amended plan of the Committees of the Indian and Cey Planters' Associations for reducing the output of British gro tea being of a more elastic nature than the original one will. I h good reason to believe, be acted upon by nearly all growe Planters have now the option of either restricting the pluck area or of reducing the yield by finer plucking. Ceylon growe as I have already pointed out, are losing money in all cases wh the price of their tea does not average more than 5d per pound, a they have no option but to adopt finer plucking. I learn, too, t a very large number of those whose tea averages even 6d per pou have also decided to adopt the same course. An illustration of advantages of finer plucking, as compared with a restriction area, which has just come within my own experience, will obvi any surprise there may exist for the preference for the quicker a more effectual method of curtailing the output.

ADVANTAGES OF FINER PLUCKING.

During the last few weeks a considerable quantity of tea fr the estates I am interested in has been sold at an average of per pound, entailing an absolute loss of 1½d per pound. My presentative in Ceylon, for seeing this result when the sudd slump in quotations began, commenced at once to pluck finer. T first shipment of this tea has just arrived. The brokers repor to be of good quality, and value it at 55 per cent. more than wi was previously imported. A loss of 43 per cent. is thus conver into a small profit, even at the present unprecedentedly low rat The cost of cropping the smaller quantity is naturally largely creased, but this is nearly all compensated for by saving in ma facture, packing, transport, freightage, and warehousing charg The original plan of contracting the cropping area by 10 per ce is being quietly forestalled by abandonment of cultivation of portions of estates where the yield does not remunerate at pres prices. This abandonment of cultivation does not mean extincti Weeds do not kill the shrubs as in the case of coffee, and when c cumstances warrant they can be brought again into production a cost of £2 or £3 per acre.

WHEN THE EFFECT WILL BE FELT.

The effect of the adoption on a large scale of the plan for c tailing production cannot be very apparent for some time to co and it may probably be June or July before it has any pronoun effect on quotations. It must not be forgotten that the Indian c does not begin to arrive before July, and therefore any restricti of yield from that country will not be felt until then. Still, the i proved tone of the market during the past two or three weeks, face of the unsettled state of the trade, owing to the accumulat of duty-paid stocks, proves that dealers are not shutting their e as to what is being done in Ceylon, and will from the same cau be done in India when the time comes.—*Financial Times.*

FACTS ABOUT CACAO.

The following extracts from the Administration Report, nd sub-reports, recently issued by the Director of the Ceylon otanical Gardens, for 1900, will prove of interest to planters. he Director quotes as follows in his main report :—

CACAO.

The Assistant Director, who now takes charge of all matters nnected with this product, reports as follows :—

"The exports for 1900 show a considerable decrease, from 42,745 vt. to 33,476. This, however, may be explained in a variety of ays. The year from January 1st to December 31st is not the est period for a record of cacao yield, and it is probable that the ckings of the last few weeks of the year and of the first weeks 1901 will, to some extent, make up the deficiency, the crop in 1900 aving been later than usual. That the canker of stem and pod nd the attacks of Helopeltis, etc., are a factor in lessening the ield, is no doubt true, but a large diminution in fruit crop has ccurred in trees which have no disease. In fact an unusual umber of dull and rainy days in some cacao districts has told gainst the production of fruit and in favour of the blackening of ods and the growth of canker. The prices which have been btained for Ceylon cacaos show that the quality of our cacaos is ill up to a high level, and encourage cultivators to devote atten- on to further improvements of their methods of curing The anker and blackening of pods still causes a serious diminution of rop on many estates where little or no care is taken to combat ese evils, but where preventive and curative treatment is oroughly carried out a marked decrease has resulted, and in me cases estates which two or three years ago were seriously andicapped have been almost entirely freed from the disease. ocal attacks of Helopeltis on the pods have been more virulent an usual. The cacao industry will, however, be benefited by ese evils to some extent, as they have undoubtedly led to more anitary methods of cultivation, and such advances, as well as forts to improve our varieties by selection and other means, tend to an increase of profit from this fruit tree, which grows vigorously in different climates in Ceylon."

EXTRACTS FROM THE ASSISTANT DIRECTOR'S SEPARATE REPORT.

From Mr. J. B. Carruthers' own report we take the following :—

Several inquiries relating to cacao canker, *Nectria* sp., both on em and pods, have been received and advised on. In more than ne case it has been sent as an entirely new disease which has not een noticed or heard of by the cultivator before. The life-history f the canker having been worked out and the methods of counter- cting its evil effects having been laid down, and during the last wo years carried out with a large amount of success, it is most mportant that all growers of cacao, either European or native, hould be on the constant lookout to detect the first appearance of his fungus and take steps to get rid of it before any serious loss as accrued and its removal becomes a more difficult and costly natter. Their neglect is also a serious injury to other cacao lanters.

A good many matters relative to the cultivation of cacao and its nprovement have been investigated and are still being worked ut. Two of the most striking things in the cultivated varieties f cacao are the amount of blossom produced in relation to the uit ripened and the number of small fruits, from half an inch to our inches long, which die off without being attacked by any pecific disease.

In some cases the weight per tree of these withered fruits has een found equal to ten to twelve ripe pods. This waste energy is early a disadvantage to the attainment of greatest profitable ield in a cacao tree.

The fertilization and subsequent ripening of the fruit in cacao therefore a most important question. The method of pollination not thoroughly known, and with this in view the flower is being tudied ; when the method of pollination is discovered some ex- eriments will be initiated to endeavour to produce an increased rtilization.

A cacao tree has been under observation at Keenakelle, Badulla, evation 3,800 ft., of the Caracas variety, but not very typical— robably a hybrid which has for the last five years borne an verage of 434 harvested ripe pods per annum. The tree is about 7 years old, 22½ feet high, with a spread of 30 feet, and an abnor- ally abundant leaf production.

The propagation of cuttings from this tree has been tried, but so far without success, and a series of experiments as to the best method of striking cacao cuttings is in progress. However, any experiments in this direction by planters or others which add to our knowledge will be welcomed, as the ability to perpetuate the characters of any specially fruitful tree would be of great economic importance.

198 seeds from eight pods on this tree were sown in an experimental plot. Each seed was weighed, and those above the average (weight 3·4 grammes) were placed in one-half of the plot, and those below the weight in the other half. The plots were further divided into beds according to the pods from which the seeds came, the shape, size, weight, and thickness of wall of the pods being recorded. By this means data will be gained which will show the best directions in which to work in selecting cacao fruits for seed.

For the same reasons a large number of cacao pods have been examined, measured, and weighed to find out what relation, if any, there exists between the size and shape of the pod and the number and weight of the seeds it contains. So far as the investigation has gone no such relationship has been found to be constant, the size of the pod in many cases being simply due to a thickening of the fruit wall, and in many cases the largest pods contain fewer seeds than are found in smaller fruits, but a definite conclusion connot be formed until a much larger number of different pods have been so examined.

Experiments as to the fermentation of cacao seeds before drying have been made with a view to finding whether the process can be accelerated with good results, and these will be carried on as far as possible.

PARAGRAPHS FROM THE ENTOMOLOGIST'S REPORT.

In September last Mr. E. E. Green paid a vist to Kurunegala, partly to visit a cacao estate suffering from an attack of *Thrips*, and on this subject, and *Helopeltis Antonii* (Signoret)—sometimes called Mosquito Blight—which has troubled cacao as well as tea, he writes thus :—

The *Helopeltis* insect attacks the cacao plant in a different manner. Though there is occasional injury from the puncturing of the young cacao leaves, the principal damage is confined to the pods, which are often so badly punctured when quite young that they are unable to develop properly, or may even be killed outright. I have suggested the spraying of the young pods, at the time when the eggs of the insect are being deposited, with Macdougall's solution or some similar insecticide. This treatment is now being carried out on a few estates with apparently good effects.

Thrips.—A serious attack of Thrips was reported from Kurunegala District in September The species appear to be the same as has been recorded from the tea plant, but in this case it was injuring cacao trees. I made a personal visit to the estate in question, and found the damage had been really severe. The insect is a most minute one, only just visible to the naked eye. But the work of myriads of individuals results in an excessive loss of leaf and endangers the safety of the crop. The symptoms of attack are a yellowish blotchy appearance of the upper surface and a brownish discolouration on the under surface, which is also covered with small black spots due to the deposition of the excreta of the insect. No eggs could be found ; but on crushing the body of the female insect and examining it with the microscope a powerful serrate ovipositor is noticeable, which suggests a probability of the eggs being embedded in the tissues of the plant. It is probable that they are deposited in the younger leaves after these have attained their full size, but before they have become hard. On such leaves the adult insects are found, but few, if any, of the immature individuals. The actual injury to the leaf occurs after it has reached maturity. It was most noticeable that plants growing under dense shade were less affected by the pest than those in more exposed situations. It was also apparent that hardly hybrids, when once they have reached the fruiting stage, are able to withstand the attack very much better than do the old red varieties. The young hybrid plants do not share this immunity, and often succumb to a bad attack. On this account, although it would be quite impracticable to treat a large area, with many trees over 20 feet high, attention may be given to the supplies with great benefit, to enable them to reach the immune stage. Such supplies might be sprayed with any of the soapy insecticides in the market. It may be necessary to repeat the treatment at intervals during the critical period.

COFFEE IN BRAZIL.

The Boletim da Agricultura of São Paulo publishes statistics relating to the Municipal districts of Aracariguama, Atibaia, Bananal, Pilar, Sertãozinho and Villa da Redempção, which summarized give the following results:—

Number of plantations ...		466	
Area of do	Alqueires	62,987 =	Acres 319,444
Area of do under coffee ...	,,	11,127 =	,, 56,414
Area of do not under coffee ...	,,	19,665 =	,, 99,651
Total number of trees ...	...	22,944,188	
Trees 4 years and upwards ...	...	15,116,188	
,, less than 4 years ...	...	7,828,000	
Hands actually employed ...	...	13,919	
,, wanted	...	4,748	
Extra hands employed at harvest	...	10,034	

From this it would appear that one hand can care and work about 1,300 trees of which 1,000 in full bearing and the rest under 4 years, and that 1 extra hand is required per 1,500 trees in full bearing at harvest time. Supposing that all these hands employed were male adults earning, say 2$500 per day or 70$000 per month, including keep, the cost of labour would be 11,69 ,960$ for maintenance, and 2,107,140$ for harvest, in all say 13,800,000$. At an average of 80 *arrobas* per 1,000 full-bearing trees, the aggregate yield would be 1,209,288 *arrobas* of 15 kilos and the cost of labour work out at 11$400 per *arroba*. Evidently there must be a mistake somewhere, as with coffee selling at 9$000, it is quite impossible that labour should cost 11$000 per *arroba* or anything like it. The mistake must be either in the number of hands employed or in the estimated number of trees.

A Coffee Exchange.—A project for the monopolisation of coffee shipments under the guise of a coffee Exchange has been presented to the President fathered by the *Centro Commercial*. This Association has done such excellent service in defence of commercial interests as to make it a matter of regret to find a project of so retrogade and illiberal a character under its protection. We have not time at present to give the scheme *in extenso* but its principal clauses embody a scheme for the complete monopolisation of the coffee export trade that under no possible curcumstances could we recommend. It does not seem likely that a measure so illiberal and anti-republican will ever receive the serious attention of a Government or that Government would ever assent to stretch its prerogative so far as to put it into practice, as is proposed, without the previous consent of Congress. In our next number we propose to give the project in detail.—*Brazilian Review.*

THE POSITION OF PLANTERS IN BRAZIL.

In a sensible letter addressed to the *Estado de S. Paulo* Dr. Adolpho Pinto, general manager of the Paulista Railway, urges planters to look the situation fairly in the face and acknowledge that the depreciation of coffee is the exclusive effect of "overproduction."

"In spite," he says, "of consumption having reached 14,700,000 bags *per annum*, this year's production will probably exceed it by 300,000 bags, and the situation become unfavourably if not absolutely desperate. In face of such figures, it seems likely that prices will continue weak until September, when their course must depend chiefly on the prospects of the crop for 1902-1903, as regards which it is reasonable to conjecture that the trees weakened by heavy crops and insufficiently tended in consequence of the lack of labour, will produce much less coffee in 1902, probably under 10,000,000 bags, in which case the world's production will reach at most 14,000,000 bags and, falling below consumption, provoke a rise of sterling prices.

It is not the status of coffee in the world's market Mr. Pinto thinks to be so serious, but the lack of labour on the plantations in consequence of which he says "there is not a plantation in all the State of S. Paulo where labour is properly organized, or where the proprietor is not tormented with the perpetual nightmare of finding himself suddenly without any labourers whatever. Mr. Pinto goes on to justify the employment of the surplus of State Revenue which, it should be remembered, is drawn exclusively from coffee, in importing labour to take the place of those who, after they have made money, annually leave the country. No doubt it is just enough, but would it not be wiser to try to fix the immigrant on the soil by making him a proprietor?

The crisis that the country is going through seems to us to be quite as much social as economical or financial, the effect of the metamorphosis commenced years ago, when slavery was first attacked, not yet complete. The attempt of planters to maintain semi-feudal conditions under a regime absolutely different to that under which they formerly grew and flourished and to make free labour conform to old practices is at the root of the old trouble. Freemen will only consent to be labourers when no other prospect is open to them, but they will not seek or remain by preference in any country that does not hold out prospects of independence.

The coffee problem will, we are convinced, be ultimately solved as the cotton problem was in the United States, by the sub-division of great estates and peasant proprietorship. When that occur little will be heard of low prices, because even now the margin of profit is ample to compensate labour, though it may not be enough to ensure returns on capital or to maintain the crowd of unnecessary intermediaries who live on the industry.

As regards production no doubt São Paulo is highly privileged. With a population of 2,000,000, exports in 1900 reached the value of £12,000,000 equivalent to £6 per head. The *average* rate of production in Argentina, however, is £9 5s. and in Uruguay £6 12s. per head, and in certain provinces such as B. Aires and Santa Fé more than double. In Australia the average value of exports *per capita* is £10 and in New Zealand nearly £13 all of which considerably in excess of S. Paulo.

If, therefore, comparative production were the only incentive to immigration all these countries would be preferred. But it is not, and other considerations such as guarantees for life and property, stability of values and proprietorship are equally powerful in determining the direction of immigration. As regards the first two, only Australia offers superior advantages to Brazil, against which are to be placed greater distance and, as regards Latin peoples, drawbacks of language, religion, and customs. In regard to proprietorship, however, Argentina offers far greater attraction than Brazil and is, on that account, likely to attract a far better class of immigrants, the class that comes chiefly at its own cost with the intention of settling in the country and becoming citizens and not mere hired hands.—*Brazilian Review.*

S. PAULO.

The *Brazilian Review* writes as follows:—

It is now getting on for three years since we commenced but never finished what our compositors used to call "tripa." Perhaps this time we will be more lucky and be able to get to our journey's end. Anyhow there is nothing like making a start, thanking God that one day comes after another, and that there must be an end to all things, even "tripa."

With years of discretion comes satiety, and after forty the joys of even a Rio Carnival begin to pall. Then we look in amazement on the time when water and lemons took the place of flowers and confetti and the joy of battle coursed fiercely in our veins.

Eleu fugaces, postume, postume, labuntur anni! Lost to me, lost to me!

The rising generation must be a wretched maudlin lot compared to their papas to take to such effeminate ways; or were we greater ruffians? Anyhow Carnival has lost its go here and everywhere, and is now but a reminiscence. About 7 p.m. on Sunday last the remorseless rain came down in buckets, confirming one's conviction that Rio at Carnival time is a place to get out of, and helped our halting resolution to be off and to explore the circumference of the world of which the Rua do Ouvidor is the centre and the hub, as is universally admitted.

Whatever may be the cause, whether the comet that failed to upset our axis and changed the climate, or the clerk of the weather is to blame, we have had altogether too much rain lately to be pleasant. . . .

When we made our last "tripa" the wide-gauge reached only Apparecida, now it has been extended much further and in the course of time will reach S. Paulo, unless balooning or some other kind of locomotion surprise it. It was, however, no great hardship to turn out of comfortless beds, stretch aching limbs, and refresh insides with the resources of Taubaté. The coffee is good as it

rly everywhere except on the S. Paulo Railway, and the chunks andwiches the same as ever. Man wants but little in Brazil wants that little long, so he gets a whole loaf cut in two for a dwich, and must have precious good teeth and a wide mouth lo it. And then the day broke dull and grey ovey the Serra do r and old Sol lighted up the prospect of desolation. Beside the t of the hills the line, like some great snake, wound its slow gth along the edge of the plain through which the Parahyba ds its tempestuous course. Here and there a solitary hut rked petty attempts at cultivation, where toiling thousands ld, in other lands, harrow the teeming soil and make it fruit-

Some day this valley will be the granary of Rio and corn rise shall wave from end to end; but these things shall not be nor of the indolent nigger. Within, conversation was of coffee, king, how depressed and humbled was his majesty and necessity of putting this Humpty Dumpty up on his throne in. The method most favoured seems to be kicking out Murho and unlimited issues of paper money. *Demooratisar o' dinro*, a politician called it, swearing in the same breath that y Barboza was the ruin, the *aza negra*, he called it, of the ntry. The way to *demooratisar o' dinheiro* it appears, is to d it to planters, the backbone and mainstay of the country! t all the king's money and all the king's men will never set that mpty up again. Over-production is of course nonsense, it can- be, because however much you produce consumers will always found at a price, but so long as production exceeds instaneous demand, complete consumption can only be attained by uction of prices.

From coffee the conversation drifted to the infinite, the problems origin and finality, unknowable, absorbing! And so before we ew it the boys were offering S. Paulo papers and the train had ched the outskirts of the city and it was time to look out for gands and your luggage.

COFFEE'S FOES IN B. C. AFRICA.

Writing to the *Ceylon Observer*, an old Ceylon planter says that spotted bug is very like a lady-bird and unlike all the Ceylon fee bugs flies about from tree to tree sucking at the juice of the ver, fruit, and tender shoots or buds as they appear on the coffee es. The damage done to the flower is terrible, completely desying the fructifying power even in the most favourable weather. regard to the fruit the insect sucks the juice, and seems to inject son into the berry when young which turns it black or spotted streaky, so that the fruit withers up and drops off the trees, even en it reaches the size of peas, just the same as the leaf disease ected the Ceylon crops leaving only small clusters or single ries to come forward to maturity and those berries that do reach t stage are mostly damaged.

The buds or terminal branches when sucked at, turn a dark green our and are stunted or bastard having a shrivelled-up appearance h a black pith and black spots showing between the bark and wood.

The damage alluded to is worst during the dry season when their very little sap in our coffee trees, and does not show much during growing or rainy season. I lost a fine crop about 6 cwts. per e this year with this bug. They came before the bush fires in arms and found a safe harbour amongst my coffee. In addition the new arrivals, those that had come in, and bred amongst the fee for some two years unheeded (I was not aware they did any mage) added to the damage done. To show you what a number bags I have gathered, I have had an average of 20 children at rk collecting daily for the past 6 months and they have each ought in from 30 to 60 per diem. Thank goodness, they can only a few, 3 to 5 each, now. So that I may get a bumper crop next ar. It was always next year in Ceylon, I remember during the f disease days. It is now quite certain in B. C. A. that we can- rear bug, and get coffee to yield crop. It is very fortunate wever that we have a remedy, although a tedious one, in catching spotted bug I was always looth to believe that our spotted bug l damage to coffee before I proved it by experiments.

have further proof this year by the fact that my crop is saved the pieces of coffee where there is a colony of soldier ants ablished; this tiger ant eternally racing about on the coffee eps the bug lively, not allowing them to rest and do damage, en if they don't succeed in catching them which they sometimes do, and of course the ants pull the little wretch to pieces and devour it at once. I am going to set a boy on with a piece of meat on the end of a stick to trap a party of ants and distribute them about the plantation to help to fight the bug and other insect pests. I remember, I think, doing the same with red ants in Ceylon, to try and get rid of helopeltis or some other pests on my cacao in Matale.

Our red ant seems to be identical with the Ceylon one, that used to torment the coolies so when handling, where they established themselves and made nests amongst the coffee leaves. Only they don't seem to bite so hard, or it may be the African negro has a thicker hide.

I am growing tobacco for which I can get 1s 3d per lb. for clean in South Africa. Tea I may turn to good account by-and-bye also in South Africa. Chillies pay very well here, I have been getting up to 55s 6d lately for them.

A YEAR OF TEA.

Messrs. Geo. White & Co. remark in their annual India, Ceylon and Java Tea Report, dated 22nd March, 1901.

The year which has elpsed since the issue of our last Annual has not been propitious for the majority of those interested in the production of British grown tea, chiefly on account of the output from all quarters having outstripped consumption. No doubt the high rates ruling for common grades in the Spring of 1899, gave an impetus to coarse plucking which has continued more or less ever since, and this coupled with the addition from extensions made in recent years gradually coming into bearing, together with weather conducive to heavy flushes both in India and Ceylon contributed to swell receipts, and temporarily glutted the markets of the world. Under these circumstances the 2d. per lb. extra Duty imposed on the 5th March, 1900, unfortunately pressed more heavily on the trade than it might have done otherwise, and in the opinion of many tended to depress prices especially for inferior sorts.

India.—The entire 1900 crop as given by the Indian Tea Association of Calcutta in their circular of 20th ultimo, was 187½ million lbs., of which 161¾ million lbs. have been shipped to this country against 149¼ million lbs. actually sent in the previous season, when the total yield was 170¼ million lbs.

Quality on the whole has been below the usual standard, partly owing to the reasons given above, with a proportionate decrease in fine and finest, and the averages as set forth on page 4 are for each district less favourable than in the two foregoing years. Arrivals from Darjeeling in August and September included some choice invoices, though later ones were, as a rule, not so good until the turn of the year, when a few consignments with cold-weather flavour came to hand and were taken up freely. Assams for the most part kept their position, and although some Managers appear to have gone in for quantity others were able to despatch shipments little, if any, below those hitherto manufactured. Dooars were generally disappointing, as they often lacked the full rich liquors for which they were formerly noted. Cachars and Sylhets proved in some instances of useful style, yet in others so common that buyers found it difficult to dispose of them even at the low level established. Kangras and Kumaons were in comparatively short supply and of mediocre character, but the few with distinctive flavour sold well. An increased amount was received from Travancore, the bulk of which was not up to the mark, the small portion where exception to this was noticeable, together with a few from the Neilgherries and Wynaad with delicate infusions were however in request.

One of the chief features has been the gradual decline in the quotations for common descriptions both Leafy and Broken. Pekoe Souchongs, which at this time, in 1899 were worth 8d. per lb., and at the same date in 1900 were selling at 6d. per lb., are now bringing scarcely 4d. per lb. The prolific growth which on many concerns could with difficulty be coped with also led to the leaf opening more than is deemed expedient, so that what should in ordinary cases have been Medium and Fine grades were really of a lower type, and consequently adversely affected results where this occurred. A brisk demand however existed throughout for the upper lines with sterling cup from gardens where quality had been maintained.

Statistics regarding deliveries during the period under review do not afford an accurate index as to actual consumption on account of the Duty scares which took place both this and last year, but so far as can be gathered, after allowing for heavier exports from here, it seems evident that a considerable part of the excess available has been used by the population of the United Kingdom.

From 1st July, 1900, to the close of February, the average for 1,085,000 packages sold in London at public auction was 7½d. per lb., contrasted with 8½d. per lb. for 1,057,000 packages and 8¾d. per lb. for 948,000 packages in the corresponding intervals of 1899-1900, and 1898-1899.

Ceylon.—The causes which led to augmented manufacture in other quarters seem to have prevailed, if anything to a greater extent in this Island and a lower type than usual has been produced from some districts, at times barely recouping shipping and other charges on realisation, besides endangering the prestige of these growths. Careful handling of the Green Leaf has in the main proved that with judicious working and the avoidance of extremes, the industry can still be rendered profitable, many places having made desirable quality for which there always is a ready sale. As will be seen from the table given on page 4 from the group classified as No. 1. 242,900 packages brought 9d. per lb., whereas none of the low-lying ones stood at less than 6d. per lb. for the whole year, though of course the depression during the past three months is not recorded there.

The total forwarded to this country from Colombo in 1900 was 114¼ million lbs. against 103½ million lbs. in 1899, while shipments from there to all ports were 148½ million lbs. *versus* 129¾ million lbs. respectively.

For the twelve months the following on Estate Account passed the hammer in London:—

1900.	1899.	1898.
1,125,100 packages.	1,138,100 packages.	1,108,800 packages.
(Average, 7⅞d. per lb.)	(Average, 8d. per lb.)	(Average, 7⅞d. per lb.)

Java.—Business has been on a somewhat extended scale, 42,600 packages of Java having been catalogued bringing 6⅛d. per lb. in contradistinction to 7d. per lb. for 38,300 packages and also for 30,200 packages in the two seasons before. These teas have kept steadily in favour with the Home Trade owing to their similarity to those from India, while the quantity sent to outside markets was also larger.

Prospects.—Although the present season closes without any near prospect of relief so far at least as the value of common and inferior grades of all kinds are concerned, the position can hardly be considered as devoid of brightness in the future, as in the nature of things it will work out a cure for itself though in doing so individual interests may suffer. Production has overtaken immediate requirements, but the trade is a sound one and if given a respite from the burden it has lately had to bear in the way of excessive supplies it should right itself ere long, partly through the expansion of business fostered by low prices. It is to be hoped also that the action to restrict output taken by the Committee appointed by the Indian and Ceylon Tea Associations may bring home to Directors of Companies, Owners, and Managers of Estates generally, the absolute need of serious attention to this matter, and although it may be difficult to formulate any scheme which can be universally adopted, that all will strive towards the desired end. In many cases it may be feasible to gather the leaf more quickly, *i.e.*, without letting it run so long. In others finer plucking may be resorted to, or portions of properties which do not give an adequate or satisfactory yield may be allowed to lie fallow. Planters in India especially may elect to finish their season rather earlier and thus curtail the crop, while on some gardens in Ceylon more rest may be given to bushes where stimulating manure has been used. In different ways therefore the same object may be kept in view, the result being that the industry will assume a healthier condition and that the cloud which now hangs over it will gradually disperse, leaving behind a lesson which should not however be forgotten for many years to come.

While there is much to be done by producers, distributors are not backward in taking their part and progress is being made in this respect, though slowly in some quarters. The Continent of Europe, and especially Russia, is consuming more British-grown tea every year, consequent on the persistent efforts of exporters both in this country and at the ports of origin. In Canada and the United States of America many are engaged in pushing the trade, and so in spite of a number of drawbacks the produc India and Ceylon is gradually being more used in other count than our own. If the manufacture of Green teas suitable for requirements of our Trans-Atlantic cousins should prove a succ as is confidently hoped by those who have taken it up so earne a further important step will have been gained and one which afford great relief to all concerned.

Another matter which should engage notice is that of encourag retail sales locally and it does not seem beyond the bounds of sibility that herein may be found an outlet for coarse leaf wh might be sold at such a figure as to induce the natives to be la consumers and yet be remunerative to growers. In this connec it may be noticed that a considerable business is at present tr acted by South Indian Estates chiefly from the Nilgiris, whence people all along the West Coast up to Bombay are principally suppl A certain amount from Ceylon too also finds its way there. Th done entirely through native shopkeepers and there is no do that the existing demand in the bazaars might be much increa by the offer of cheap tea in small packets. It is estimated already 4¼ million lbs. are disposed of in India alone.

Manufacture.—With reference to the treatment of the leaf, w we wrote last year seems still applicable, *viz*:—"Taking into sideration the larger area coming into bearing in some district would seem policy to avoid very coarse plucking and the manu ture of undesirable sorts which foster a low quotation here and t to glut the market. Where briskness, pungency, or full-bod liquor are attainable, every effort should be put forth to secure th characteristics. Plain featureless teas are more or less neglec especially in the very busy months, and good appearance with sterling cup no longer satisfies even the Continental buyers used to take that style of China Congou."

There have been occasional intances this season of breaks tain apparently by eucalyptus leaves (where these trees are cultiva having been allowed to find their way into the picker's basket, becoming mixed up with the tea during manufacture, which quently leads to less competition among buyers, and should guarded against.

The number of "cheesy" lots has again considerably decrea due possibly to more thorough final firing, and also to the exten use of patent packages (especially of those lined with thick le of which such a large portion now arrive. Partly due to w wood, but more often to carelessness in loading on board steamers, ullaged packages have given much trouble recently, volving loss in weight and necessitating an allowance to buy Some economy has been effected by slight reductions in Wareho charges, and also by the adoption of an improved system of wei ing by the Customs.

Size of Breaks.—The limits for large breaks remain as und *viz.*:—

India—20 Chests, 30 Half-chests, 50 Boxes. Ceylon—18 Che 24 Half-Chests, 40 Boxes.

Smaller lots than the above are sold after the regular aucti and though sometimes receiving attention are apt to be neglec particularly when sales are heavy. The proportion of these f Ceylon of late has been excessive, and it would be advantageou this could be altered. It is not well however to allow tea to a mulate at the factory, as if kept for any length of time it is li to lose its flavour, and to guard against this fewer grades migh sent. Indeed, under present conditions when so small a differe often exists between the value of ordinary Orange Pekoes, Pek and Pekoe Souchongs, it becomes a question as to the advisabi of shipping them home in one line. This might at all event tried on small estates where the crop is limited. The follow continues to be a saleable assortment; say:—A Broken Peko 30 to 50 chests; a good Pekoe of 50 to 80 chests; a Pekoe Souch of 70 to 100 chests, with an occasional break of Broken Tea Pekoe Fannings. Parcels containing dust are not readily mar able and this therefore should be sifted out and packed by its for which purpose some of the patent packages now in vo might be utilized so as to avoid leakage on the voyage res ing in loss of weight which often occurs with country-made che The exception to the foregoing is when a tippy Broken Ora Pekoe or Orange Pekoe can be made, as these when really generally command high figures, whether from India or Cey Should the quantity of leaf available for this not suffice for a f sized break of 20 Chests it might be packed in 30 Half-Chests.

MONTHLY SUMMARY.

INDIA TEA.—*Season*, 1900–1901.

When our last Annual was issued, *viz.*:—23rd March, 1900, there was on the whole a brisk demand, notwithstanding heavy clearances made in anticipation of the Budget. Useful Pekoe Souchongs were bringing 6d. per lb. compared with 8d. per lb. in the previous year. Nearly all kinds continued firm throughout April and May but without material change.

The first of the New Crop was printed on the 11th June, after Whitsuntide, when 626 packages, principally from Darjeeling and the Dooars, were disposed of with lively competition. Afterwards more was coming to hand, and stand-out lots showed a hardening tendency, but those lacking point and strength were neglected and easier.

At the opening of July Old Season's were rather less wanted, but desirable invoices of the New Teas were in request, and rates generally advanced. After the middle of the month buying became more important, and late arrivals proving attractive the market moved upwards.

After the Bank Holiday, business was resumed on the 13th August with larger sales. Cachars, Sylhets, and Dooars were in many instances poor, and for them comparatively low quotations were registered, but for the best shipments from Darjeeling and Assam full rates were paid, though the latter evinced a falling off in quality towards the end of the month.

During September there was not so much disposition manifested to purchase common and inferior liquoring consignments, which were coming more plentifully, and prices for these gave way ¼d. to ½d. per lb., low Pekoe Souchongs touching 4¾d. per lb., while many lots were withdrawn. On the other hand superior lines, and breaks with good cup maintained their position and went in favour of Importers, Broken Pekoes particularly being in request.

In October full supplies were brought forward (256,900 packages against 230,300 packages in the year before). These consisted to a great extent of ordinary descriptions and Trade being rather dull the sales passed flatly at a decline of ¼d. per lb. on Pekoe Souchongs and Broken Teas, while Pekoes and Broken Pekoes were as a rule ¼d. per lb. cheaper. A few of the Dooars indicated improvement while Cachars and Sylhets were on the whole of saleable style. Exports from the United Kingdom to outside quarters were 300,000 lbs. above those of the preceding year.

November opened weak with decreasing prices for common sorts and those with thin infusions, of which there was a preponderance in the catalogues. Attractive and tippy parcels however, invited attention and went firmly. Continental buyers were taking a fair quantity of Pekoes and Orange Pekoes.

A cheerful feeling was observable at the beginning of December with more enquiry, resulting from the idea that the lowest point had been touched though quotations under 6d. per lb. were often ¼d. per lb. down. A few choice Darjeelings came to hand but receipts from Assam and several other districts were not up to former ones. The better grades were in the main well supported, bidding being strong for fine and finest.

Auctions were recommenced after the Christmas and New Year Holidays on the 2nd January, when useful descriptions were in fair request on the basis of the closing sale of the year, but common tended to decline. Quality was ordinary in character with fewer Autumn-flavoured teas than usual. Inferior sorts remained depressed during the month, but for others some enhancement was noticeable. Heavy payments to forestall a possible rise in the Duty occupied the attention of the trade, and prejudicially affected the market.

In the first fortnight of February a dull tone prevailed, the large daily deliveries absorbing both the time and capital of dealers. The lower kinds went ¼d. to ½d. per lb. adversely to importers, Pekoe Souchongs selling down to 3½d. per lb. and Pekoes 4d. per lb., and there was much irregularity in the offers for others. After the middle of the month, however, partly due to smaller auctions and a slackening in the clearances, buying was more universal, with increased spirit in the Room. Common did not alter but medium and fine received more notice with a recovery in values. Choice Darjeelings realised high figures, and all lots with cold-weather flavour sold well.

March.—Relief being afforded by less tea being taken out of Bond day by day, desirable kinds suitable for Home and Export purposes ruled firmer, while finest, the supply of which was becoming exhausted, met a well-sustained enquiry. All descriptions under 5d. per lb. continued dull of sale.

Ceylon Tea from 24th March, 1900, to 22nd March, 1901.

March last year ended with a steadier tone in the bidding than was apparent at the commencement, when sales were stopped for one week on account of the Budget scare. Pekoe Souchongs and Pekoes of ordinary character were worth 5¾d. and 6d. per lb. respectively, or 1½d. to 2d. per lb. under the quotations of a year ago.

The market did not show much change in April until the first sale after Easter, which was held on the 24th, when there was a firmer tendency for leafy kinds under 6¾d. per lb., though Broken Pekoes went irregularly. Arrivals lacked strength with only a small proportion of finest.

In May with increased receipts of undesirable quality to be handled and quieter trade in the country there was less enquiry. Common Pekoe Souchongs did not alter in value, but fair to medium Pekoes and Orange Pekoes were weaker and Broken Pekoes under 8d. per lb. fell ½d. per lb. Attractive parcels however brought full rates. For the month a fall of ⅜d. per lb. took place in the general average, the lowest weekly result yet recorded being 6¾d. per lb. on the 29th.

Owing to Whitsuntide the opening auction of June did not take place until the 12th. There was an easier feeling for thin liquoring sorts of which the catalogues contained a large assortment and the 92,900 packages put forward in the month only realised 6⅝d. per lb., but good medium and fine with full flavour were well supported. In view of the over-production of British-grown tea the question of making "Green Teas" both in India and Ceylon for shipment to America and Canada was placed prominently before Garden owners.

Throughout July Home and Export buyers were purchasing freely. Low Pekoe Souchongs and Pekoes hardened and the latter as well as Orange Pekoes with good flavour rose ½d. to 1d. per lb. Broken Pekoes with poor cup under 9d. per lb. were cheaper towards the close, but fine and finest with quality were well competed for throughout and as a rule secured enhanced quotations.

(*Sales.*)

For the first sale after the Bank Holiday on 14th August, the largest quantitiy at present advertised for one day, *viz.*, 44,700 packages, was declared which went off unevenly and mostly against sellers, unless for the best invoices which held their own.

Notwithstanding smaller auctions demand throughout September was quiet, except for stand-out lines, which were firmer. Common Pekoe Souchongs declined to 4¾d. per lb., and all grades under 7d. per lb met less enquiry. For Broken Pekoes from 8d. per lb. up however, there was more competition, the desirable lines fetching higher prices. Quality which had been for some time below par manifested improvement.

Landings in October possessed more flavour which induced brisk buying in the case of those parcels where this was observable, but all grades with poor and pointless infusions received diminished attention. Medium Broken Pekoes of useful character were well taken up and Choice Orange Pekoes and Broken Orange Pekoes made full figures.

Although a moderate amount was brought to public sale in November, inferior liquoring lines of all descriptions remained easy, principally owing to heavy arrivals of a similar class from India, though the low range current seemed to be favorably affecting deliveries. Medium and fine were in better request and taken at a rise towards the close of ½d. and 1d. per lb. in many instances. In a memorandum issued by the Board of Trade the annual consumption of tea in the United Kingdom was estimated at nearly 6 lbs. per head of the population, this being approximately composed of 3 lbs. Indian, 2 lbs. Ceylon, and 1 lb. China, Japan, etc. The most taken by any European country was 1·39 lbs. per head in Holland.

In December, medium and fine were wanted both for the home and Export Trades, but all sorts under 6d. per lb. were neglected, and the market closed prior to the Holidays with a flat tone, Pekoe Souchongs selling down to 4¼d. per lb., or 2d. per lb. under what they stood at 12 months before.

Business re-opened after the turn of the year on the 3rd January, when stocks having accumulated full supplies were available, reaching 146,000 packages for the month. Quality was indifferent, and dealers being occupied with clearances in anticipation of the Budget, prices were depressed, particularly towards the end, for all except the most attractive consignments. The Continental demand also was quiet owing to the Holidays, especially in Russia. A Committee was chosen to examine into the question of cur-

tailment of output and to advise as to the means which should be taken to bring this about.

During the first half of February duty payments were engrossing the time and capital of most buyers, so that the auctions passed without much spirit and at a decline of ¼d. to ½d. per lb. for common to fair leafy kinds while others were irregular and easy. The bidding was stronger later on however, and although no rise in the lower descriptions was registered all breaks with fine flavour were generally dearer. Many of the teas showed signs of finer pluck-ing.

March.—Inferior sorts remained depressed but there was more enquiry for Pekoe Souchongs with flavour both for this and Foreign Markets. Broken Pekoes above 6d. per lb. were also in better request. Several invoices with superior quality to that of previous arrivals of the same marks were now coming to hand.

GLAZED COFFEE IN OHIO.

The Dairy and Food Commissioner of Ohio, Hon. J. E. Blackburn, on February 19, notified Arbuckle Brothers that "'Ariosa' coffee, as now prepared, is, in his opinion, an adulteration under the laws of Ohio." This opinion of Mr. Blackburn is based on that provision of the food laws of Ohio defining adulteration, which says:

"Sixth.—If it is colored, coated, polished, or powdered, whereby damage or inferiority is concealed, or if, by any means, it is made to appear better or of greater value than it really is."

The Commissioner also holds "that it is not a compliance with the foregoing to simply label the article 'Compound,' when coffees are filled, coated, and glazed to make them appear better or of greater value than they really are, and to retain water that has been added to increase weight."

Technically, under the laws of Ohio, Commissioner Blackburn may be correct; but it is strange, at least, that he has discovered that "Ariosa" coffee is adulterated under the laws of Ohio, seventeen years after they became effective, and fifteen years after the creation of the office of Dairy and Food Commissioner.

The opinion of Commissioner Blackburn, respecting "Ariosa" coffee, while perhaps technically defensible, is against the spirit and object of food laws, primarily enacted to protect the people against the sale of unwholesome and fraudulent foods. To class "Ariosa" coffee as such seems an extreme and, to us, indefensible action.

The coating, or glazing, on "Ariosa" coffee, is a preparation of egg, which tends to retain the aroma of the coffee, and to act as a clarifier in its brewing. It is not put on to conceal damage or inferior quality, and its low price, as compared with the coffee generally sold in Ohio, quality considered, is proof that the glazing is not to make it appear of greater value than it really is.

"Ariosa" coffee has been sold without restraint all over the United States for a quarter of a century or more. Its present cost is phenomenally low, by reason of the savings effected through the purchase of cargoes at a time, and the adaptation of machinery to all the processes involved in its preparation for market, even to putting it into packages.

After a food law has been operative since 1885, without consumers complaining that they had been injured in health or defrauded in pocket, it seems strange, at least, that Commissioner Blackburn should, at this late day, suddenly discover that "Ariosa" coffee is adulterated.

We recognize that the Supreme Court of Ohio has held that the duties of the Dairy and Food Commissioner are mandatory. If so, then the present and former Dairy and Food Commissioners of Ohio have been very neglectful of the interests of the people for the past sixteen years.

Such an extreme interpretation of a food law as that in the case of "Ariosa" coffee tends to bring all food laws into disrepute. Unfortunately, the Ohio law, which is largely copied from the New York State law, omits a very important proviso, which makes elastic a law which otherwise would be onerous and unjust, and work irreparable injury because of its ironclad provisions. A study of the definition of what constitutes adulteration under the Ohio law, as in all other State laws, will show that it covers every imaginable form of food adulteration, sophistication, or contamination, even covering harmless forms of food manipulation perfectly defensible on all grounds, but scientifically classed as an adulteration.

To avoid injustice or unfair attacks on wholesome food product technically adulterated for good and sufficient reasons, the Ne York law provides as follows:

"Seventh.—*Provided*, that the State Board of Health may, wi the approval of the Governor, from time to time declare certa articles or preparations to be exempt from the provisions of th act; and

"*Provided further*, that the provisions of this act shall not appl to mixtures or compounds recognized as ordinary articles of foo provided that the same are not injurious to health, and that th articles are distinctly labeled as a mixture, stating the componen of the mixture."

The New Jersey law has a similar provision, but the Ohio law an the laws of other States omit part or whole of this very wise an necessary provision.

If the Ohio law is defective, the action of Commissioner Blac burn, in enforcing it, is a step in the direction of its amendmen and therefore defensible. We cannot escape the conviction, hov ever, that he has stretched a point in waging a war against suc a wholesome and meritorious article as "Ariosa" coffee. We a aware that the Ohio law requires that mixtures or compounds so within the State must bear on the label the name and per cent. each ingredient therein. This compels manufacturers to mak their formulas public property, and thus rob them of all benefit their invention or special method of production. Glazed coffee ca scarcely be called a mixture or a compound, but could properly l classed as a food accessory.

If the action of Commissioner Blackburn eventually leads modifications in existing State laws, and their being made uniforn it will turn out a blessing; but, if it tends to make food laws vehicle of oppression, and a means of interfering with legitima trade and commerce, then it would be better if they were replaced.—*American Grocer.*

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION (CALCUTTA).

Extract from an Abstract of Proceedings of a Meeting of th General Committee held on 26th March, 1901. Present:—Mr. H. S. Ashton (*Chairman*), Mr. A. Tocher (*Vice-Chai man*), and Messrs. H. C. Begg, H. W. Boyd, W. Brow W. Holder, R. Magor, and R. R. Toynbee.

Letters, dated 1st and 8th March, from the Secretary, Indian Te Association, London, were brought up for final consideration an disposal after previous circulation. The chief matters dealt wit in these letters were:—

(*a*) **Bounty on Green Teas.**—With his letter, dated 8th Marc Mr. Tye forwarded copies of the following resolution respectin this matter, which had been adopted by the London Co mittee, *viz.*:—

"That 1½ annas per lb., up to a maximum of 200,000 lbs. to manufactured this season, be allowed out of the funds of th levy shipments of green tea for the American market se there direct from India, such funds to be distributed as bounty at the discretion of the Calcutta Committee, th definition of the term 'green tea' for the receipt of the bount being taken to be tea made from the ordinary leaf plucke on the gardens, such as would be ordinarily made into blac tea, but which in its altered manufactured state will n compete with the sale of black tea in America or elsewher The bounty to be paid on the same quantity as befo sanctioned, *viz.*, 200,000 lbs. until it is seen what success attained in the manufacture of green tea. The Associatio in Calcutta to be requested to notify the Committee prompt if a larger quantity than 200,000 lbs. is likely to be specia prepared for shipment to America."

The General Committee, after discussion, decided to refer th resolution to the Sub-Committee (the Vice-Chairman and Mr. H. C. Begg) appointed at the last meeting. They were to be asked re-model the instructions contained in the circular issued to mem bers of the Association on the 7th August, 1900, in such manner to bring them into accord with the terms of the resolution.

But, in accordance with the decision come to at the last meetin

o definite action in the way of offering the bounty was to be taken, ending the result of the movement for restricting production.

(*b*) **Restriction of production.**—The Committee noted from Mr. Tye's letters that the scheme for reducing production, which was set forth in the circular of 14th February, was being supported in London. From a telegram, dated 19th March they had also learned that the period for receiving replies had been extended to the 31st March. The undertakings signed in India to date represented a reduction of slightly more than $3\frac{1}{2}$ million lbs.

A letter, dated 19th March, from Mr. H. H. Mann, B.Sc. F.I.C., ealing with certain scientific aspects of the proposal to restrict oduction was to be printed and circulated to all the members of ie Association.

Considered a preliminary draft report of the Sub-Committee apointed at the last meeting to consider the question of the sale of a in India. Briefly stated, the proposals of the Sub-Committee ere for the establishment of a tea distributing Agency. To start ie Agency they suggested that tea producers should be asked to ontribute a certain quantity of tea yearly Tea so contributed ould be sent to Calcutta, whence it would be distributed through ndia by the Agency. The work of the Agency would be under the irection and control of a Superintendent or General Manager. ravellers would be employed to push the trade, which would be irried on mainly by Native dealers in the Bazars. Further, the ub-Committee suggested that brewed tea should be sold at ailway stations. They also thought that an attempt might be ade to have tea sold at the so-called extra departmental post fices throughout the country. It would not be necessary to otain the sanction of Government to the sale at Post Offices of at class. The operations of the Agency might also, they consiered, extend to the countries beyond the North-West frontier, g., Baluchistan, Turkestan, and Persia.

The General Committee approved of the Report, subject to certain mendments of minor importance. In accordance with the decision me to at the last meeting, they had recommended the London ommittee, by telegraph, to allot Rs.50,000 from the American nd Foreign Market Fund to the work of developing the Indian arket. A reply had been received to the effect that the London ommittee desired to see the scheme which it was proposed to ut into operation before deciding to make the allotment. In sponse to this the General Committee had sent copies of the Sub-ommittee's Report to London by the mail of 21st March. In ew, however, of the urgency of the matter, and also of the fact at the London Committee were understood to be strongly in vour of the idea in a general way, they decided to telegraph gain asking that they should have discretionary power in regard the allotment.

In the meantime the report was to be referred back to the Sub-Committee forrevision, and for proposals as to the action to be taken.

Considered a letter, dated 19th March, from Mr. J. M. Korb of alimpong, regarding the introduction of Indian tea into Tibet. In ecember last, the Committee had arranged for the manufacture, a Darjeeling Garden, of a small quantity of brick tea, which was be given to the Tibetan wool traders who visit Kalimpong. The aders were to be asked to take the tea openly, as Indian tea, rough the trade mart at Yatung. The object was to ascertain ecisely the attitude the Chinese Customs authorities would take towards Indian tea, and more especially the rate of duty they ould levy upon it.

Mr. Korb had kindly undertaken to distribute the tea to the aders. From his letter the Committee learned that the traders ere not very favourably inclined to the tea; and although they d accepted some small quantities of it, Mr. Korb could not induce en one of them to take whole boxes into Tibet in the way desired the Committee. They stated as the reason for their refusal that ey were afraid of punishment at the hands of the Llamas.

The Committee noted this information with some regret. And ey decided, before taking further action, to ask Mr. Korb to give em further particulars on the subject.

Considered a letter, dated 24th March, from Mr. H. H. Mann, in ich the Committee were asked if they would object to the publiion, by Dr. Geo. Watt, C.I.E., Reporter on Economic Products, the *Agricultural Ledger* of such of Mr. Mann's reports as might deemed suitable.

The Committee had no objection to the proposal, and they decided inform Mr. Mann accordingly.

They also agreed to write to Dr. Watt on the matter. And as they understood he would shortly be proceeding to Simla for some time, they desired to take the opportunity of expressing to him their cordial thanks for the many services he had rendered to the tea industry in his capacity as Reporter on Economic Products. They wished specially to refer to his valuable work on the pests and blights of the tea plant, and to the uniformly courteous manner in which he had always been ready to assist any one interested in the industry with scientific information and advice upon matters relating to the cultivation and manufacture of tea.

COORG.

Proceedings of a Quarterly General Meeting held at the Bamboo Club, on Saturday, 30th March, 1901. PRESENT :—Messrs. H. R. Craig, H. E. Cockerton, W. Davies, Geo. Davies. J. W. Finlayson, J. Logan, H. M. Mann, F. Macrae, H. G. Parsons, J. W. Scott, N. M. Scholefield (*visitor*), and A. Lambert (*Honorary Secretary*).

Proposed by Mr. Logan, seconded by Mr. Parsons that Mr. Craig do take the chair.

The Honorary Secretary went through minutes of last meeting and in connection therewith mentioned that the .Mysore Government whilst agreeable to meet our wishes in connection with Dr. Lehmann's visit to Coorg, were unable to spare his services until after the S.-W. Monsoon, when we hoped to welcome him to Coorg.

Local Fund Board.—The Chairman spoke at some length on this subject carefully explaining his views, after which the chief sections of the notification concerning the new District Fund were fully discussed. It was finally resolved to apply for an increase of Planter members on the said Board, considering the large interests represented by the planting industry in the Province. It was proposed, also, by Mr. Craig, seconded by Mr. H. M. Mann, that ballotting papers be issued for the election of the S. Coorg member. Carried unanimously.

Advertisement of Coffee.—Mr. Parsons, who brought forward this subject, expressed his views thereon in clear and concise language and moved the following resolution, seconded by Mr. Lambert.

That, in the opinion of this Association, a cess amounting to two annas per cwt. should be imposed on all coffee exported from India for the sole purpose of advertising and pushing the sale of pure East Indian Coffee in Great Britain, the Continent, and wherever, hereafter, may be deemed advisable.

That the Government of India be asked to collect the cess at port of export, all proceeds to be paid into a fund to be exclusively administered by a Select Committee of the U. P. A. S. I.

(Signed) H. G. PARSONS.
(,,) A. LAMBERT.

There was some discussion thereon, during which the Chairman spoke strongly in favour of the scheme; and the advisability of asking Government to collect the cess was questioned. But on the resolution being put to the vote it was carried with hardly a dissentient voice.

Read Mr. Sprott's letter on the above subject. Recorded with satisfaction.

French Import Tariff on tea, coffee, pepper, and other Colonial products. The Honorary Secretary read correspondence thereon and pointed out that according to the latest information on the subject received from the French Ambassador, through the Foreign Office, the French Government had owing to the large interests of the English commerce in connection with these Colonial products, granted her two years' grace, but that she was willing to concede to her the advantage of a minor tariff definitely, if the English Government was disposed to offer, in return, equivalent advantages for a certain French product to be agreed upon. The Honorary Secretary also stated that the Government of India had been addressed on the subject by the Chairman of the U. P. A. S. I. in a strong and able letter supporting the request of the Malabar Chamber of Commerce that the Government of India take early steps to enquire fully into the abovenamed question.

Prevention of Coffee-stealing.—Read letter from H. E. Sullivan, Esq., Superintendent of Police, S. Canara. Resolved that Mr. Sullivan be thanked for the trouble and zealous care he has displayed concerning this matter, and that the various curing firms be asked for their opinion and advice on the various points touched upon, with a view to taking further action on the suggestions contained therein.

General.—Read Mr. A. J. Wright's letter *re* the Salem incident—recorded with satisfaction. Mr. Parsons brought to the notice of the meeting the perfunctory manner in which metal is being stacked along the Ammutti-Sittimutti Road, making it very inconvenient, if not absolutely dangerous, in parts, for wheel traffic. Resolved to address the Executive Engineer on the subject.

A vote of thanks to the chair terminated the proceedings.

The following papers were laid on the table :—

Proceedings of Central Travancore Planters' Association.

Do.	Nilgiri	do.
Do.	Shevaroy	do.
Do.	N. Mysore	do.
Do.	Wynaad	do.

Polli Betta, *6th April, 1901.* } (Signed) A. Lambert, *Honorary Secretary, C. P. A.*

A STORY OF THE CENTURY.

Here is a quotation from an old friend of mine and of yours—a doctor, one of the wisest, most kindly-hearted, and successful of the men who compose his useful profession.

"One thing," he says, "I have been telling my patients for the past forty years, that, so far at least as the science of medicine is concerned, the human mind is merely a name for a group of brain functions. The food in the blood acts chemically upon certain nerve centres, and this is mysteriously worked up into what we call reason. In other words, the condition of the mind depends upon that of the body.

"For example," continues the doctor, "there are people who are troubled by irritability, great mental depression, sleeplessness, mental hallucination, and those symptoms expressed by the general term '*nervousness*' (and who also fear insanity), who might either avoid such sufferings or be cured in a month, if they but knew that at the bottom of the whole business lie the poisonous products of imperfect digestion. *Ninety per cent. of all the cases of mental and nervous ailments in persons under fifty are directly due to dyspepsia.*"

Now we will listen to Mr. George Bath.

"For many years," he says, "my life was marred and spoilt by indigestion. At first only slight, the attacks became more and more severe as the years rolled by, until at last I was a mere physical wreck, a ready prey for every disease. My head was racked with pain, fierce darting, stabbing, rending pains, that almost drove me frantic. I had no relish for food, and what morsel I did swallow filled my body with wind and caused a most oppressive sense of fulness on the chest.

"What with a distressing sense of sinking in the stomach, and a constant feeling of sickness, through the foul state of my tongue, I felt, as I looked, 'of all men most miserable.'

"This wretched existence—it wasn't life—I dragged on for *twenty years* with just a short respite now and then. Each year the disease tightened its grip, sapping my strength and vitality. Doctors examined me and gave me medicine. They lightened my purse but not my ills. At times I turned quite dizzy and faint, and got so nervous and depressed that I scarcely dared venture out of doors.

"My whole nervous system seemed unstrung; the slightest noise distressed me. Why, the ticking of a clock, in *another room*, was sufficient to keep me awake for hours, and a knock at the door would make me jump and tremble all over.

"Friends shook their heads as they saw me tottering about more dead than alive, and said 'Bath has not long to live, poor fellow.' That was six years ago, but I'm alive still and very much alive too. Why, I seem to be getting younger every day. Though I am now seventy years of age, I am so brimful of energy and animal spirits that I feel equal to anything. It was Seigel's Syrup that wrought the change, nothing else; I owe my life to its wonderful power.

"Now, forty clocks ticking wouldn't spoil my sleep, and food must be very indigestible indeed to upset me. I would rather lose £50 than be without Seigel's Syrup, for it has made a man of me, and added years of happiness to my life." George Bath, Trefusis Villa, Windmill Road, New Brompton, Kent. April 25th, 1900.

No word of the writer's can add one jot or tittle to Mr. Bath's frank and eloquent statement, the truth of which is vouched for by many independent witnesses, among them being Mr. John Scrace, Relieving Officer, Medway Union, Chatham, and Mr. A. Durrant, Short Street, Luton Road, Chatham, to both of whom Mr. Bath is personally known.

Now turn back to the quotation from the old doctor, and y will learn what Mr. Bath's disease was. No, never mind, I will it down here—it was dyspepsia. Oh, if my voice could but rea all the suffering men and women in dear old England, how I wou shout to them the old doctor's deep saying and the story of M Bath's illness and cure. But, as it is, we must take the chanc of their seeing this report in print.

MARKET REPORT.

[*Per Mail advices of 22nd March* 1901.]

COFFEE.

The London Commercial Record says :—Supplies advertised ha been far too heavy to admit of them being disposed of within t usual hours, and many catalogues have had to be postponed fr day to day. The demand has been very irregular. Good to f East India, as a rule, met with fair competition and full pri were paid, but at the close there was very little bidding even these, and the week finishes with a decidedly flat tone; other grad of East India are sold of sale at a decline of 1s to 2s per c Plantation Ceylon cheaper. Costa Rica and other Central Americ descriptions sold slowly at prices favoring buyers. The market "futures" has been variable, fluctuating with the daily receip and close with some irregularity; yesterday May delivery sold 31s 3d, September at 32s to 32s 3d, and December at 32s 7½d to 9d. To-day's auction supplies consisted of 981 bags East Ind 3,119 bags Costa Rica, 196 bags Mexican, 1,232 bags Guatema 582 bags Salvador, 59 bags New Granada, and 374 bags Guayaqu The sales went of with a dull tone and generally lower—1s per c down for common qualities, such as Guatemala at about 44s 45s per cwt.

London ...	... Santos ...	May delivery	... 31s 6d.
New York	... No. 7 Rio...	,,	... 5·60 cen
Hamburg...	... Santos ...	,,	... 31¼ pf.
Havre ...	... Santos ...	,,	... 38½ fran

The next Dutch auctions are advertised for the 26th instant Amsterdam, when 15,800 bags 10 cases will be offered. Good or nary Java is valued at 31½ cents.

Imports, Deliveries and Stock of Coffee in London are as follows :—

	Stock.		Imports.	
	1901.	1900.	1901.	19
Tons	15,454	13,540	9,796	8,1
	Home Consumption.		Export.	
	1901.	1900	1901.	19
Tons ...	5,034	4,484	4,288	4,9

The preceding figures exhibit—

In the Imports an increase this year of ... 1,6
Home Consumption an increase of 5
Export a decrease of 6
Stock an increase of 1,9

The details of this week's public sales are as follows :—

Ceylon.—*Plantation.*—21 casks 6 tierces 11 barrels 3 bags bare half sold—low middling greenish 60s, middling brownish 81s, b to extra bold 92s 6d to 107s. peaberry 60s to 94s.

East India.—5,785 bags partly sold as follows :—*Mysore*, sma 40s to 58s 6d, low middling to middling 50s to 56s 6d, good mid ing 60s to 65s, bold 59s to 83s. fine bold 90s 6d to 99s 6d, peaber 53s to 90s. *Coorg*, smalls 41s to 59s 6d, low middling 49s to 5 middling to good middling 56s to 60s, fine middling 70s 6d to 8 6d, bold 64s to 80s. fine to very fine bold 90s 6d to 101s 6d, peaber 60s to 96s 6d. *Neilgherry*, smalls 40s to 44s 6d, middling 52s, b 66s 6d to 74s, peaberry 58s to 63s. *Wynaad*, smalls 40s 6d to 4 low middling to middling 45s 6d to 55s, bold 55s to 74s, peaber 55s to 75s.

Mocha.—28 half-bales bought in.

Jamaica.—127 barrels 38 bags mostly sold, small 34s, good to fi fine ordinary greenish 37s to 44s 6d, low middling to middli brownish 46s to 53s.

Costa Rica.—Of 3,705 bags catalogued 3,130 bags sold, sma 33s to 48s, good ordinary 43s 6d to 44s, low middling to middli 46s to 58s, good middling 60s 6d to 64s 6d, bold 59s 6d to 71s 6 good to fine bold 72s to 94s, peaberry 52s to 85s 6d.

Guatemala.—Of 2,308 bags offered 1,600 bags sold, smalls 33s to 42s, fine ordinary to low middling 42s to 49s, middling 50s 6d 54s, bold 61s 6d to 76s, peaberry 52s to 64s.

NICARAGUA.—90 bags mostly sold, low middling 44s., good mid-ng colory 54s, good to fine extra bold 75s to 80s 6d, peaberry s to 62s.

COLOMBIAN.—773 bags practically all sold, smalls 38s 6d. low ddling to middling 44s to 47s, fine middling 70s, bold pale eenish 53s 6d, fine blue 89s 6d, peaberry 49s 6d to 68s; damaged: alls 31s 6d to 33s 6d, low middling 42s 6d to 44s 6d, bold 47s 6d 51s, peaberry 46s to 47s 6d.

MEXICAN.—312 bags partly sold, smalls 35s, low middling 45s to s, middling 49s, bold 59s 6d, peaberry 57s to 51s.

SALVADOR.—494 bags sold, smalls 35s, fine ordinary 40s, low ddling to middling 44s 6d to 48s, bold 60s, peaberry 46s to 63s.

Receipts in Rio and Santos.

nce July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	2,242,000	2,874,000	2,578,000	3,580,000
Santos ...	6,847,000	5,246,000	4,799,000	5,444,000
Total...	9,089,000	8,120,000	7,377,000	9,024,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange $11\frac{19}{32}$d, previous day $11\frac{23}{32}$d.

HAVRE, *Mar.* 21.—Good average Santos March opened steady $38\frac{1}{4}$f. and closed steady at $38\frac{1}{4}$f., May opened at $38\frac{1}{2}$f. and closed $38\frac{1}{2}$f., September opened at $39\frac{1}{4}$f. and closed at $39\frac{1}{4}$f., Decem-r opened at $39\frac{3}{4}$f. and closed at $39\frac{3}{4}$f.

HAMBURG, *Mar.* 21.—Good average Santos March opened quiet $30\frac{3}{4}$pf. and closed steady at $30\frac{3}{4}$pf., May opened at $31\frac{1}{4}$pf. and sed at $31\frac{1}{4}$pf., September opened at $32\frac{1}{4}$pf., and closed at $32\frac{1}{4}$pf., cember opened at 33pf. and closed at 33pf.

NEW YORK, *Mar.* 21.—Closing prices of No. 7 Rio were as follow:—

	Mar.	April.	May.	June.	July.
arch 21...	5·50	5·50	5·60	5·60	5·70
arch 20...	5·60	5·60	5·65	5·75	5·75

TEA.

INDIAN.—Sales amounted to 43,800 packages compared with ,800 packages in the preceding week, and 42,000 packages at this riod of 1900.

A somewhat stronger tone prevailed, except in the case of low mmon kinds, which remained steady at previous rates. Above per lb. however, there was more competition for all useful and e liquoring sorts, higher prices being generally obtained, pecially for parcels with full cold-weather flavor.

For 34,400 packages on Estate Account $7\frac{1}{8}$d per lb. was realised ainst 8d per lb. for 33,500 packages and $9\frac{1}{2}$d per lb. for 25,000 ckages in the two foregoing seasons.

CEYLON.—Auctions totalled 24,700 packages *versus* 28,400 packa-s on the 12th instant and 27,600 packages twelve months since. After allowing for improved quality in many of the arrivals, no terial change occurred in quotations, though bidding was brisker most descriptions. Inferior Pekoe Souchongs and Pekoes were altered, but the latter and Orange Pekoes with desirable cup d in favor of importers. Broken Pekoes for the greater part led firm, and the best liquoring were in good request, while oice lines on the whole went well.

The average is a little under $6\frac{3}{4}$d per lb. On the 14th instant it s $6\frac{1}{2}$d per lb. and $7\frac{1}{2}$d per lb. in 1900.

JAVA.—Rather over 1,600 packages of direct import passed the mmer with spirit, a slight upward tendency being noticeable in ne instances.

Only 220 packages are advertised for next week at present.

Deliveries.—The clearances of all Tea (on which duty has been id) from the London warehouses, as per official returns are, .:—

From 1st to 19th March,	1901	... ...	10,891,018 lbs.
Do. do.	1900	... ...	28,294,765 ,,

During the week the following have been printed for sale by blic auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offered. Pkgs.
India	39,045	4,754	43,799
Ceylon	22,991	1,664	24,655
Java	1,291	375	1,666
Total ...	63,327	6,793	70,120

Also 861 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated March 22nd, 1901, says :—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian. Pkgs.	Ceylon. Pkgs.	Java. Pkgs.
1900-1901	1,458,251	1,066,505	51,676
1899-1900	1,469,677	982,157	47,886

44,272 *pkgs.* INDIAN
25,257 ,, CEYLON
2,117 ,, JAVA
} Total 71,646 packages were offered in public auction this week.

The total crop of Indian Teas for the past season was nearly 13 million lbs. ahead of that of 1899, and nearly 35 millions greater than that of 1898; this does not include the Teas grown in Travancore.

INDIAN.—The market was steady for all descriptions, choice liquoring Teas meeting with very strong competition. 74 last of the season invoices have been sold, against 62 last year. The official wire from Calcutta gives exports to U.K. for first half of March as 983,000 lbs., against 200,000 lbs., same Period last year making the total from 1st April to date 161,813,000 lbs., against 48,692,000 lbs. last year. The following averages are worthy of note:—"Makum T Co.," $1/4\frac{1}{2}$; "Jokai T Co. Sabansiri P.," $1/2\frac{3}{4}$; "Koomtai" and "Suddia Road T Co.," 1/1; "Amal Tea Est. Lattakoojan," $1/0\frac{3}{4}$; "Balijan T Co., $1/0\frac{1}{4}$; "Assam Fron. T Co. Hilika" and "Darj. Con. T Co. Ting Ling." 1/0.

Week's average of Tea sold on Garden Account 1901, 34,628 pkgs., av. 6·82d. 1900, 34,293 pkgs., av. 7·97d.

Total Tea sold on Garden Account 1st June, 1900, to date, 1,210,201 pkgs., av. 7·23d. 1900, 1,151,838 pkgs., av. 8·32d.

CEYLON.—With a smaller sale, bidding was animated, and prices for medium and good Teas were, if anything, stronger common grades selling without change on last week's rates. Quality from several estates has much improved during the last few weeks, and many of the Teas now arriving have a nice attractive flavour. Private advices from Ceylon gives exports to U.K. for first half of the month as 4,500,000 lbs., against 5,200,000 lbs. same period last year, and estimate the quantity available for March at 8,750,000 lbs. against 10,500,000 lbs. in 1899. The following average may be mentioned:—"Nuwara Eliya T Co. Concordia" and "Sutton," 1/1; "Portmore T Co.," $11\frac{1}{2}$; "Loinorn," $11\frac{1}{4}$; "Devon" and "Mount Vernon," 11d.; "C T P & Co. West Holyrood," $10\frac{3}{4}$d.

Average for week 6·65d. against 7·58d. in 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 308,185 pkgs., av. 6·48d. 1900, 280,219 pkgs., av. 7·58d.

JAVA.—2,117 packages were brought to auction, of which 1,650 pkgs. were of direct import. Competition was good, and comparatively little Tea was withdrawn, the market for all descriptions being steady at prices fully up to late rates. As is the case with Indian and Ceylon Tea, there has been an appreciable rise in Javas from the lowest point of the market.

Bank Rate 4 per cent. Exchange on London, three months' sight:—Calcutta $1/4\frac{3}{16}$. Colombo $1/4\frac{7}{32}$.

COCOA.

There was a large supply brought to the hammer on Tuesday, the total aggregating 11,928 bags. For fine grades of West India full to rather higher prices were obtained, but medium qualities were 6d to 1s lower, and other growths almost neglected. Of 1,561 bags Trinidad catalogued about 900 bags sold—good to fine red at 68s to 71s, being fully steady. Grenada was represented by 7,894 bags, which heavy quantity went off well, although opening slow, at a slight advance for the standout lots, about valuations for medium and fair, and 6d to 1s decline on the lower grades; fine realised 64s 6d to 66s, fair to good 63s to 64s, and common 60s 6d to 62s 6d. 180 bags Dominica about half sold at 60 to 63s, while 39 bags fermented Jamaica mostly sold at 64s 6d. 86 bags St. Lucia about one-fourth part sold at 62s to 63s, while 23 bags St. Vincent were quitted at 69s for superior red and 60s 6d to 65s 6d for common to fine. Of 713 bags Guayaquil catalogued only 70 bags sea damaged sold at 62s 6d. Ceylon absolutely neglected, and the 1,124 bags catalogued all passed the hammer unsold, as did 308 bags Samana Private transactions include 300 bags Trinidad at auctions' rates, 250 bags Ceylon at 82s 6d to 90s for good bold and medium, and 70s for ordinary; 200 bags Guayaquil, greyish Caraquez at 64s to 65s, good Arriba 80s, and a small lot of Puerto Cabello at 105s per cwt.

GINGER.

Cochin.—Is very firm but there is little trade being done. Catalogues embraced 125 cases 492 bags of which 20 bags sold prior to the auctions at 36s for good medium and small washed rough, the remainder all passing the hammer unsold at 45s to 48s for medium and small Native cut and at 38s per cwt. for ordinary Calicut rough.

African.—43s bags were bought in at 35s per cwt.

Jamaica.—Very firm. 78 barrels sold—middling bright washed 44s 6d to 45s, low middling 31s to 41s, small and dark 35s to 36s 6d. per cwt.

PEPPER.

Black.—The market has been quiet this week, and easier prices have been taken. About 100 tons Singapore have been sold for arrival—at $6\frac{3}{16}$d for March-May shipment, and at $6\frac{5}{16}$d for April-June. On the spot sales of fair Singapore have been made at 6d to $6\frac{1}{32}$d.

Only 8 bags Aleppy were brought to the hammer on Wednesday; they were brought in.

To-day. Black Pepper steady. Singapore April-June shipment $6\frac{3}{16}$d buyers. In White very little business done.

For arrival Tellicherry has been sold at 54s 6d to 55s per cwt. delivered weights Continental ports, per March-May and May-June (s).

The shipments of Black Pepper for the first half of March compare as follows:—

	1901.		1900.	
U. K.—Singapore ...	70	80	120	240
,, Penang	10		120	
Continent		170		190
U. S.		*nil*		330
Total tons ...		250		760

White.—Is also quiet and easier. Singapore has been sold the spot at $8\frac{7}{8}$d to 9d, and Penang at $8\frac{3}{8}$d. For arrival 50 t Singapore have changed hands at $8\frac{7}{8}$d for April-June, and at May July shipment (s).

At public sale on the 20th instant only 3 bags Ceylon w offered; they realised $9\frac{3}{4}$d for fine bold and $8\frac{1}{4}$d per lb. brownish.

The shipments of White Pepper for the first half of Ma compare as follows:—

	1901.		19	
U.K.—Singapore	*nil*	30	20	
,, Penang	30		130	
Continent		70		
Total tons		100		

CINCHONA.

The first shipments from Ceylon for 1901 commenced in week ending February 18, when 21,679 lbs. were exported: following week 52,190 lbs. were shipped, bringing the total 73,869 lbs., against 45,286 lbs. for the corresponding period of 19 To the auctions to be held at Amsterdam on March 28,852 ba (weighing 79,512 kilos.) have been added, bringing the total 6,614 bales and 218 cases (624,980 kilos.)

QUININE.

The comparatively heavy shipments of cinchona from Java the first half of March have had a depressing effect on the speculat market this week, and no business of consequence is report The spot price for good German brands of sulphate in seco hands has dropped to 1s 3d, but the small sales have chiefly b for August delivery at from 1s $3\frac{1}{2}$d to 1s $3\frac{7}{8}$d, with sellers to-d at the inside figure. Howards' advanced their quotation last we to 1s 8d for 1,000-oz. lots in vials. Amsterdam also advanced th quotation to 1s $4\frac{1}{2}$d.

(Average for all India 6·82d., March 22nd.)

Garden.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, D and Various	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Pric
Travancore ...	**886**	**5·27**												
Atchencoil ...	27½c	4½	...	...	10½c	4¼	10½c	5¼	7½c	3½	...	...	...	...
CMR	48½c	3½	...	...	24½c	3¼	16	4¼	...	8½c	2½	...	...	...
Fairfield ...	108	5¾	21	6	34	5	22	9	24	4½	1	3¾	6	3¾
Glenmary ...	140	5¼	55	4¾	...	...	35	7	30	4	...	...	20	5
Invercauld ...	75 p	4	16	4½	29	4	...		17	3¾	...	...	13 p	2¾4
Isfield T Co. ...	57	5¼	9	5¾	29	4¾	19	5¾	..	..	...	...	...	...
Ladrum ...	93	5¾	41	5½8¾	20	4½	...	...	15	3¾	...	...	17	5¼
Trav T Est Co MM	142	5½	57	6¾8½	44	4½		...	39	3¾	...	...	2	2¾
,, Pambanar ...	97 p	4¾	20	6¼	37	4¼	23	5	14	3½	...	...	3½c	3
Wallardi ...	99	5¾	72	4¾7½	15	3½	...	...	...	...	...	...	12	5

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

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By Special Warrant Purveyors to The Queen and Empress of India.

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[w. 1-10-98 –t.f.o.]

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, lanting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 26th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad. *April 16th.*—*Weather*—Hot days with East winds changing to West and cooler at nights. *Works*—Many estates have stopped work entirely now, others are finishing pruning and manuring. *Plant diseases*—This year is expected to be a heavy one for borer. *Health*—Good. *Labour*—Abundant. *Interesting item*—The appeal in the local Igoor murder case failed, and the accused are now free.

FOREST ENGINEERING FOR INDIA.

We have received for review Volume I. of "A Manual of Forest Engineering for India," by Charles Gilbert Rogers, Fellow of Cooper's Hill, Deputy Conservator of Forests. Imperial Forest Service of India, published at Calcutta, at the office of the Superintendent of Government Printing, India, at Rs.4 per copy. The preface informs us that the Manual was written by order of the Government of India. Specially intended for the use of Forest Officers in this country, it is certain nevertheless to commend itself to planters, for it contains a great deal of information of the highest utility to them. It is intended that the Manual shall treat of Building Materials, Building Construction, Road-making, Bridges, Transport of Timber, Wells, Construction of Embankments and Water Channels, River Training Works, and Demarcation of Forests. The first two items are discussed in the volume before us, the next two will form Vol. II., and the remaining sections will be dealt with in Vol. III. (the last of the series). A book of nearly 300 pages, comprising numerous illustrations, plans, etc., and dealing only with building materials and construction, must necessarily contain a great deal to interest planting readers. The last volume of the three will

be more in the way of a speciality for the Forest Officer. The first is a most useful compendium of hints regarding buildings, well arranged, copiously indexed and as free as possible from confusing technical terms. A brief outline of the heads into which the author divides his work will give a fair idea of the ground covered. We have gone through the book with some care and have satisfied ourselves that it is reliable as well as comprehensive.

Building Materials are so numerous that the author has had to divide his remarks on this subject into many sections. Stone; bricks; tiles; earth; grass and bamboos; lime; timber; Indian timber trees; preparations for preserving or beautifying words; and carpentry and joinery; these are the sections. The list shows the writer's desire to be "thorough." To show that this desire pervades the work under notice, we have only to cite an example. Under the head of bricks, we find very careful notes on the best kind of earth for use in brick-making, the mechanical analysis of earth, its preparation, the moulding, drying of the brick, together with useful hints on the quality of a really good brick. Under the head of "Tiles" we certainly miss our old friend the Mangalore variety, and we note that the pot and pan tiles described are those that are made in more Northern parts of India. This, however, by no means detracts from the value of the hints given. There is scarcely a sentence that does not apply, with very little modification, to the Madras Presidency, and the builder here can easily adapt to his own requirements the illustrations and the descriptions given. On the subject of Kilns, Mr. Rogers writes particularly well, and what he says should help readers to arrange for the cheap manufacture of good bricks in almost any of the planting districts. In certain localities, of course, suitable earth may not be available, but in such there is usually a supply of Stone, and in the book under review they are informed how to turn this material to good account.

The Construction of Buildings is a very wide subject, but Mr. Rogers starts at the foundations and leads us step by step to roofs; beyond these to lightning conductors, and eventually to estimates. Turn the pages over where we will there is sound advice; open it almost anywhere and we find a neat illustration, at the least, to make the letterpress thoroughly clear. There is a considerable amount of what we may term 'engineering detail,' for instance, as to the thickness of walls in relation to their height, the dimensions of roof trusses, etc. But everything is simple, everything clear; and any planter who wishes to build unto himself a house adapted to the golden days of a boom or one suited to the necessities of times of crises, or unto his coolies so many huts, may learn from Mr. Rogers how he should set about the work. The fixing of corrugated iron roofing sheets is as carefully explained as are the dimensions of roof trusses. Plans and estimates are gone into, in such a way that it almost seems easy to calculate the cost of a palace. That estimates are misleading is, however, proverbal; and planters would do well to apply to themselves the hint given by the author to Forest Officers:—"In the construction of Government works the Estimate should be a fairly lib one." It is always better to reckon the cost too high t too low, so that you may be at least sure of having fu enough to complete the erection of any building undertak No man who follows Mr. Rogers' instructions carefully very well fall into this error. In short, the book is what professes to be, a Manual, and a very useful manual, o subject, or series of subjects, with which every planter bound to have to familiarise himself sooner or later. would be difficult to commend it too strongly to the notice our readers.

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nicholson's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf people, unable to procure the Ear Drums, may have them free.

Address—No. 989 D, The Nicholson Institute,
Longcott, Gunnersbury,
London.

[w. 26-5-00—26-5-1901.]

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S.

Fiscal Federation.

The planters of India and Ceylon, backed by the Ind chambers of commerce, says the *Chicago Record*, are ask the West Indian colonies to support them in agitating for imperial fiscal federation for the protection of British agric tural and commercial interests against those of the rest of world,". . . The scheme seems rather a wild one, and is likely to commend itself to the British Government or British people at present. It might be carried out twe years hence, but it is decidedly ahead of public opinion to-d At the same time it is felt in these colonies that measures have to be taken to render the position of British comme more secure in regard to the mutability of foreign tari It is pointed out that, although it is possible the French G ernment may be induced to reconsider the action referred yet what has been already done serves as an unmistaka warning of the grave risk to which British trade is at pres exposed and the burdens it may at any time be called up to bear.

* * * *

Commerce says:—In connection with the duty on foreign colo produce, it may be useful to point out that the law of 24th February, 1900, providing for a maximum tariff upon fore colonial produce, has had an effect which the French were far f expecting. This effect has been to lead India, which hitherto not taken a very active interest in the commercial relations Great Britain and of the Empire generally with foreign countr to consider whether it would not be advisable for her to iden her attitude with that of Canada and to urge Great Britain towa a British Imperial Customs Union against the world. Suc Union is hardly what the French would desire, considering that t send to Great Britain one-third of their exports. Yet by their act in this matter of the Colonial produce duty they have clearly sh the British Colonies as a whole that the time has come for the Colo to consider whether the furtherance of their interests does require that they should make themselves independent of fore markets. A circular was received from one of the most powe trade Associations of India, the United Planters' Association Southern India, Madras, embodying a resolution adopted at t annual meeting held last August. This was as follows:—"T considering the critical condition of the tea and coffee industr this Association do communicate with the Indian Tea Associat the Ceylon Planters' Association, the Indian Chambers of C merce, and the leading firms of merchants and brokers interested tea and coffee, etc., in this country and in England and her Colo with a view to ascertaining whether a movement in favour commercial combination of Great Britain and her Colonies India against the world (which would by a system of differen duties afford some protection to British-grown products manufactures) would receive support." This resolution has b communicated by them to all Chambers of Commerce and c mercial bodies throughout the British Empire, and the co-opera

the Chamber was desired. It is felt that there is a strong and rowing feeling in England and her Dependencies and Colonies in vour of what may be termed an Imperial Fiscal Federation for e protection of British interests as against those of the rest of e world. Some difficulty having lately arisen as to the duty yable by an article imported from the United States of America d known as gluten meal, the matter was referred to the consulta- ve Committee. Under Note 318 of the tariff, articles of this scription are to be classed as oil-seed cakes provided they are to exclusively used as cattle food and cannot be utilised for distil- ng purposes or for starch-making, or for the manufacture of paste d glue. If the gluten meal is rich in fecula it is liable to the ty of maize. The Committee considered that, if the meal contains ore than 40 per cent. of fecula it can be utilised for industrial rposes, but that under that percentage it is only good as cattle od. They have, therefore, fixed at 40 per cent. the distinction tween gluten meal that is to be admitted as oil-seed cake free of ty and that which is to pay 3 francs per 100 kilos., or, with the rtaxe d'entrepôt, 6 francs 60 centimes per 100 kilos.

AMERICAN TEA.

Strenuous journalistic efforts are being made with a view getting Americans to take Dr. Shephard's tea-gardens riously. The American *Review of Reviews* is the last to ve a detailed account of the Pinehurst experiment and to rite as if it were but the beginning of a mighty American a-growing industry. One remark made is :—

"The question of labor has been dealt with quite as ilfully as the natural problems of heat and moisture ; and hile it still costs something like eight times as much to ave a pound of tea picked in South Carolina as the same ervice would demand in Asia, yet much of this comparative ss has already been balanced—and much more it is hoped ill soon be balanced—by greater productiveness in the eld by the substitution machinery for hand labor in the ctory, and by the manufacture of varieties of teas which, om inherent chemical causes, cannot be brought from the rient." Yet again we read :—"The practical results of ese ten trial years are before us, and tea culture on a usiness basis is an actuality in the United States. Already vals of the Pinehurst gardens are being inaugurated in a uiet way—one in Louisiana—another in South Carolina, a ird at the Georgia experiment station." The more the errier ! That is to say, the more American tea-gardens the reater the merriment of the tea planter in the East.

TEA.

A Specialist contributes to the *Ceylon Observer* some nsible remarks on "The Condition and Prospects of Tea." e does not believe in "resting" certain tea areas nor is he favour of curtailing the yield from estates on the lines laid own by the London Association. Neither of these schemes, ven if generally adopted, would be likely to ensure anything ore than temporary relief. A better plan, he says, would e for estates to *abandon outright* their unremunerative fields nd not allow them to be a burden on areas which can be rofitably cultivated, as they frequently are. The relief to e market, if some such plan as this were adopted, would be ery appreciable and it would rest on a thoroughly sound asis. "Abandoning" is obviously better than "resting." he latter would constitute a permanent menace to the enter- rise, making it difficult to sell estates, or shares in Companies, r who would invest in tea property if it were known that a large acreage of land was resting, waiting in fact in readiness for an improved range of prices to place its produce on the market? As regards plucking, his conviction is that careful plucking, as distinguished from *fine* plucking, is all that is necessary, and if continued, will very soon have an appreciable effect on the output. It may add to the cost of plucking a little, but a better class of tea will be produced. Great stress is laid upon the necessity for really wide-awake management of Estates.

NOTES.

Cinchona. The London Market is firm, price per unit being 1⅞d. Monthly sales, 1,600 packages.

Coffee in New Jersey. Out of 56 samples of coffee collected and analysed by the New Jersey State Dairy Commissioner, 7 were found to be adulterated.

Pepper at Havre. The importations of pepper in 1900 increased by 7,108 bags. It was nearly all from the French possession of Saigon, and enters France at 50 per cent. lower customs duty than pepper from India and Singapore.

Java Quinine. The exports from Java for October, 1900, amounted to 214 cases, of which 152 cases were shipped to the United Kingdom and the remainder to New York. From July 1 to October 31, 1900, the shipments were 1,039 cases, against 562 cases and 499 cases for the like period of 1899 and 1898.

Rubbish ! South India has been mentioned as a producer of rubbishy tea ; but the *Ceylon Observer* seems to think that Ceylon is a very big sinner in this matter. It asks :—"Can it be true that native dealers' stores in Nawalapitiya are at the present "chockfull" of refuse tea from estates in the upper districts, right away to Maskeliya, and that such tea after some sifting is being sent in bags to Colombo for sale?

Amsterdam Bark Market. At the bark auctions held on March 28th in Amsterdam, 6,899 packages, containing 624,980 kilogrammes of bark were offered. The quinine content of this reckoned as sulphate amounted to about 31,000 kilos. of which 27,867 kilos. sold, 24,756 kilos. in the form of manufacturers' bark, and 3,111 kilos. in the form of druggists' bark. The unit came out at 8·95 Dutch cents per half kilo. (about 1⅗d. per lb.), against 7·50 cents (about 1½d.) at the last auction.

The Indian Tea Season. Now that the season is closed the total export for 1900-1 is shown to be 184,793,188 lbs. Total quantity of Tea passed through Calcutta from 1st April, 1900 to 31st March, 1900 :—

	1900-1901	1899-1900.	1898-99.
Great Britain	160,753,157	149,374,164.	135,381,722
Foreign Europe ...	1,783,904	1,435,046	1,171,146
America	4,530,604	5,923,404	3,273,096
Asia	7,370,231	5,492,815	6,972,251
Australia	10,355,292	8,250,436	6,398,002
	184,793,188	170,475,965	153,196,217

Tea Inspectors.

An ex-Ceylon planter now in Southern India writes :—" I am with you entirely as to the advisability and even urgency of appointing an Expert Inspector of Teas for export. There is no doubt that the only way to stop the export of rubbish is for the 'King's Pipe' to be established in Colombo—and, it will be found, after a few 'fills' that the wherewithal will not be forthcoming to fill it. I wish only in India it were as easy as in Ceylon to set the ball a rolling." We always have our doubts about a man who thinks it easy for his neighbour to make a sacrifice, but difficult for himself to do likewise.

The London Coffee Market.

The *Produce Markets' Review* of 26th ultimo remarks :—In the terminal market quotations have further receded, influenced by the still excessive receipts, and it now appears almost certain that the current crop will total nearly 10½ million bags, instead of under 9 million, as originally estimated. As has been pointed out before, the advance in the exchange is a factor which must be taken into account, for the planters to-day are, as a result, getting materially less for their Coffee than when the price here was 6s. lower, and it is a question whether current rates will allow of the coming crop to be picked.

The India and China Tea Seasons.

The totals of exports from India and China, the season of the former being closed, present an interesting comparison. India has increased by nearly 11½ millions as against a 14 million increase the previous year—in her exports to Great Britain ; China however shews a decrease of over eight millions. But to the Continent China has sent over 10 millions as against 4 millions the previous year—India showing only 350,000 lbs. increase. To America, China has nearly seven million lbs. increase, India a drop of 600,000 lbs. To Australia, India has sent two million lbs. more than last year, an increase of 25 per cent. while China's increase is only 7 or 8 per cent. The proportion of Indian business to that of China is as 3 to 2—184,793,188 lbs. as against 122,461,494—for the season 1900-01.

Java Government Cinchona.

The report on the Government cinchona plantations in Java for the quarter ending December 31, 1900, states that the young plants are in excellent condition, and are developing strongly. This is due not only to the favourable weather during the period under review, but also to the fact that only healthy and large plants have been used for planting out. The plantations are free from disease and insect-pests, with the exception of those in the western part of Tirtasari, which are somewhat seriously affected. Contrary to recent experience, there has been a great lack of labourers, a fact which is also felt in private tea and cinchona plantations. By the end of December practically the whole output had been shipped, partly to Tandjong Priok (for export) and partly to the Bandong quinine-factory. The whole yield of bark in 1900 came to about 560 tons ; of this quantity 378 tons were exported to Holland, and 182 tons worked up at Bandong. At the auctions of cinchona-seed some specimens fetched as much as 46*l.* per packet of 25 grammes ; shoots for grafting were sold at 16s. 8d. each.

The London Tea Market.

The *Produce Markets' Review* of March 23, 1901. says :—The market has been active, and last week's prices have on the wh been well maintained. The low rates prevailing for the co mon descriptions having stimulated the export demand, considerably increased business has been transacted. As th appears every prospect of ample supplies, and a continuan of low prices, business in this direction bids fair to furth develop, and it is doubtful when the taste is more genera acquired for Indian and Ceylon Teas if consumers will retu to the use of other growths. Formerly, China Teas predon nated largely, in fact practically monopolised the export tra but from recent statistics this is almost entirely chang During the past eight months, *viz.*, to the end of Februa the exports of Indian and Ceylon Tea amounted to 18,508,0 lbs. as compared with 10,256,000 lbs. of other growths, wh for last month alone the figures respectively were 2,557,0 lbs. and 1,026,000 lbs., or considerably more than doub It appears evident, therefore, that British-grown Teas a fast displacing the China and other growths in forei markets, and should this increased demand continue it will much to take off the excess of the requirements in this mark

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Fish Culture at the Crystal Palace.

Many planters will be interested the following note from the Lond *Times* :—An interesting experim in fish culture is being made at the Crystal Palace. I some time past trout have been hatched and reared in t aquarium from eggs received from various parts of t country, and the process of treatment from the time wh the eggs are placed in the hatching apparatus up to the f growth of the fish may be seen by visitors. The tanks co tain a number of fine two and three-year-old trout. T experiment of rearing them has been undertaken by t Crystal Palace Company for the purpose of ascertaini whether the trout will live in the stagnant water of the gr lake in the palace grounds. About 150 two-year-old rainb trout (*Salmo Iridens*) have just been taken from the reari tanks and placed in the lake. The number will be added from time to time, and it is hoped that the trout will thri as there are no jack in the lake. In course of time, if t experiment succeeds, fly-fishing will be introduced at Syde ham. Anglers in the district are taking great interest in t matter, and a joint Committee of various angling Clubs is course of formation with the view of protecting waters a of arranging conditions under which the trout will be fish for. It has been already agreed that for the first year all f hooked shall be returned to the water.

Tobacco in Ireland.

M. Lecornet, the expert employ to superintend the experiment tobacco culture in Ireland, reports of the trials of 1900 t the plots grown in the various districts show considera differences in their results. These are attributed to the ti of planting, the varieties grown, the care and experience b stowed upon the plants and the manuring of the plots, and t skill devoted to the gathering of the leaves. The planti was out, as a rule, much too late, a mischance that arose fr the careless handing of the first seedlings, which resulted their damping off. Exceptionally, however, the cultivat of the tobacco plant by Colonel Everard, at Randlestown, w quite satisfactory. The results in this case would, inde have been better still if the planting out had taken plac fortnight earlier with thoroughly vigorous seedlings, if t plants had been set closer together to improve the quality

tobacco, and if the manuring had been more intensive in
er to induce a more rapid growth. As it was, however,
1,800 plants raised at Randlestown gave 14,060 leaves, of
ch 3,320 were placed in the first class and 10,746 in the
ond class. The total weight of the dried leaves was
½ lbs., those of the first class weighing 96½ and those of
second class 255 lbs. These results are considered satis-
ory, in view of the fact that the varities tried—Havannah,
noca, and Kentucky—are very poor leaves of the
t class.

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ee in B. C. Africa.

If British Central Africa be hardly able to hold its ground in the culti-
ion of coffee, remarks the *African Review*, it would seem
imed to talk of fostering other planting industries there,
we see that the question of tea production is receiving
ie attention. The general opinion of planters in the Shire
ghlands in regard to the cultivation of tea there is that,
lst other conditions are favourable, the rainfall is not
icient. In seeking to dispose of this idea, a tea planter,
ting in the *Central African Times*, points out that tea has
ider range of cultivation and can be grown under more
ied conditions of climate than any other product. Natal,
says, where tea has been successfully grown, has a similar
nfall to the drier parts of Nyassaland, and some of the
ia districts where tea pays well, have a very limited
nfall. In conclusion the writer says: 'Experience of
pical agriculture in other countries as well as here should
l one to the conviction that British Central Africa, judging
m its soil and climate, is more suited to be a tea than a
fee-producing country, chiefly because there is a very
ited area fit for coffee-growing. I see nothing to hinder
assaland from taking a place amongst the tea-producing
ntries of the world.' If the planters of British Central
ica decide to try tea-planting they may, in the opinion of
contemporary, rest assured that the consumption is likely
keep pace with the production, and that the price is not
ely to go below that which will yield a profit to the
tivator!

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fee at Havre.

In his report for the year 1900 the British Consul remarks :—In my last
ort I referred to the anxiety caused to the coffee mer-
nts of Havre by a proposal of the Brazilian Government
apply their maximum tariff to French produce, an action
ich, if carried into effect, might have induced the French
vernment to increase the duty on coffee, which at that time
s 156 fr. (£6 4s. 9d.) per 100 kilos. (220 lbs). Negotia-
ns were entered into between the two countries, which
ulted in a *modus vivendi*, by the terms of which, in
urn for a reduction of the French duty from 156 to 136
(£5 8s. 9d.) per 100 kilos., the products of France would
ntinue to enter Brazil under the minimum tariff. At
present time the French minimum tariff of 136 fr. per
kilos. is applied to coffee from all foreign countries
cept Venezuela, in which country French goods are
jected to the maximum tariff. The importations from
azil in 1900 fell off by 550,551 bags, a quantity more than
f the total amount received from that country in 1899.
ere was an increase in the importations from the West
dies, Hayti, Central America, and India, but the amounts
ceived from those countries are small compared with the
portations from Brazil. The sails slightly increased, and the stock at the end of the year was less by 352,418 bags than the stock at the end of 1899. The decline in the importations is due to the fact that Havre was the market at which coffee was at the lowest price. The markets at Hamburg, Antwerp, Rotterdam, and Trieste were much higher than that of Havre, and the importers at those places could, therefore, afford to pay higher prices to the Brazilian shippers for coffee from Santos and Rio de Janeiro. Towards the end of the year prices at the other Continental markets were declining fast, but the Havre market still remained the lowest. It is estimated that about 90 per cent. of the coffee from Brazil, imported into Havre, is sold in the terminal market so as to insure against any sudden decline in the prices.

Destruction of Insect Pests.

The *Queensland Agricultural Journal* says :—" Those who have done some farming in the old country are well acquainted with the depredations caused there by the beetle called Cockchafer (*Melolontha vulgaris*). For three years it destroys crops from the roots under the form of a greedy white worm. Then, as a beetle or perfect insect, he harvests where he had sown. Many means have been recommended to destroy it, but none perhaps is more efficient than the one devised and used for the last ten years by the French Engineer M. Dibos. His apparatus is very simple. It can be made of an ordinary washing-tub, to which is attached a sort of funnel made either of sheet iron or simply of linoleum from 4 to 5 feet broad. The tub is half filled with water. From the middle of the tub emerges a sort of iron stand, ending in a candlestick on which is fixed a resin torch. Towards the evening the apparatus is placed amongst the trees in the orchard or in the field, and the torch lighted. The beetles fly in thousands round the light, getting burnt or blinded, and they fall straight into the water or on the sides of the funnel whence they roll down to the water. Thus from 10,000 to 12,000 are caught in a week—if the season lasts about three weeks, that means 36,000 insects destroyed every year. M. Dibos reckons that half of them (18,000) are females, each of which would have produced 40 eggs. He has thus prevented the formation of 720,000 insects, each of which would have destroyed 3d. worth of crop during the season. As the torch cost him only 3d. or 4d. per season, one can see at a glance that it pays to catch the beetles. The device seems well worth trying against the enemies of the orchards and crops of Queensland." There seems to be no good reason why it should not be tried also in India. It is at least a cheaper method than spraying with chemical preparations.

The Eureka Coffee Separator.

Cream Separators have come to stay. How about coffee separators? The *American Grocer* says of the Eureka Coffee Separator :—By the use of this machine six distinct grades of coffee are made—large, medium, and small flats, large and small peaberry, broken and unmatured. Where lesser grades are desired, blank screens are used. As there are so many different kinds of coffee, requiring different treatment, each machine is furnished with a full set of screens, all of which are interchangeable, thus enabling the operator to grade any class of coffee. Nothing but the best material enters into the construction of these machines, making them durable in all climates. The coffee is fed into the hopper of the machine and is distributed in an even stream into the suction leg by means of a feeding device of

an improved type. It is then acted upon by a powerful air current, controllable by valves. This air current removes all refuse, such as quakers, chaff, parchment, etc., the coffee going to the main screen in a perfectly clean condition. The coffee is divided on this screen for close grading. A portion goes to the screen in the first shoe and the balance to screens in the second shoe. What coffee tails over on the main screen is such as cannot be removed by air suction, and consists of sticks, shells, beans, and unhulled berries. The perforations on the main screen allow the small flats, small peaberry, and broken flats to go to the first shoe. Large and medium flats and large peaberry pass to the second shoe. The top grading screen of first shoe separates small peaberry; the second grading screen removes small flats. The broken parts pass through the bottom screen and are discharged from the machine at the bottom. The upper grading screen of the second shoe removes the large flats, the second screen the large peaberry, and the medium flats pass through the second screen and come out at the bottom, thus making all the grades clean, perfect, and distinct. Automatic travelling brushes are placed under each grading screen, keeping the perforations open, so that the screens can perform their work in an even and perfect manner.

GENERAL ARTICLES.

INDIAN TEA MARKET REVIEW, SEASON 1900-1901.

Messrs. Carritt & Co's Annual circular says :—

The season has closed with an actual crop of 187½ millions, of which 161 millions have been exported to the United Kingdom; the corresponding figures for last year were 174¾ and 149 millions respectively.

The quality of the crop has been indifferent. Some of the well-known marks have maintained their reputation for producing a high standard of quality, but Indian tea taken as a whole, has been poor, and appreciably inferior to the crops of several years past; this verdict is not an excuse for a low market; the crop has been over abundant and of an unusually low standard.

There has been nothing abnormal in the conditions of weather in the districts to account for the constantly disappointing quality coming forward, it is in a great measure explained by a freer system of manufactures and an anxiety to produce a crop of quantity rather than quality. The desire has by no means been universal, but it has undoubtedly overstepped the limit of prudence.

The movement in 1899-1900, when common tea was the centre of attraction and was indicative of an unusually active trade in the low grades, was deceptive and misleading and it was feared that this abnormal feature might have its effect in the immediate future. Our review on last year contained the following:—

"With the experience of the concluding season before them, there will doubtless be a tendency amongst growers to adopt a coarser system of plucking and there will be danger of this being overdone and the other extreme reached, *i.e.*, an over abundant supply of a *lower grade article* and a consequent great shrinkage in value."

The evils of a crop heavy in weight and low in quality have been aggravated by other causes beyond the control of those engaged in the Industry. Not only has the increased duty itself adversely affected consumption to a very serious degree, but the action of distributors at home, in anticipating it, was productive of a disorganised trade for several months to come.

It was estimated that the clearances out of bond during the budget scare in March last amounted to about 40 millions in excess of the *bonâ-fide* requirements of the trade; a burden which was carried by distributors and occupied their attention in working off probably as late as December. Of Indians it was all old season's tea and a few weeks later a fresh and cheaper supply was on the market.

The trade at home was therefore handicapped at the out set of the season; the distributors' dealings were hampered by heavy holdings of old tea, but their position was nevertheless an enviable one. They straightway raised the value of their teas throughout 2d. per lb., to correspond with the increased duty, and have since seen the price lower in Mincing Lane by almost an equal figure.

The position of the distributor, therefore, is one of prosperity. The producer, on the other hand, finds himself face to face with, at the best, an infinitesimal profit, or a heavy debit balance as a result of the last season's working.

So far as the actual working of concerns goes every possible economy has been strictly enforced, and the cost of production cannot be further reduced; a rigorous cutting down of expenditure which in some measure may have assisted in swelling the outturn at the expense of quality, became compulsory and producers are now forced to look in other directions for the bettering of their interests.

It has been unmistakably shown that with the increase of 50 per cent. in duty, consumption has been unable to keep pace with production; an unprecedently low price has not resulted in any appreciably increase in the offtake, and stocks have rapidly accumulated. The sacrifice of quality for quantity at this juncture has reacted to the disadvantage of the producer It has weakened his hand against the distributor and brought down the standard of quality to a level of value that does not cover cost of production on a large proportion of the crop. Producing interests have recognized that something must be done and an agitation is now on foot for the restriction of outturn from both India and Ceylon during the ensuing season.

Several schemes with this object in view have been suggested, all more or less worthy of careful consideration; but a common agreement whereby a smaller crop of improved standard of quality would be ensured, is undoubtedly the wisest. In other words, the plucking area should remain the same, but it should be covered at shorter regular intervals and the leaf taken off at an earlier stage of growth. By abandoning a certain proportion of the yielding area no improvement in quality is likely to follow and a reduced outturn would be the sole result. The former would doubtless cost more, but the desired end would be more easily and expeditiously achieved by giving the trade a smaller crop of improved quality than one of similarly indifferent, or possibly inferior standard to that produced last season.

So far the industry has not the record of being a homogeneous body, but there should be no difficulty in bringing this about under existing circumstances. A combined action of some sort or other is absolutely necessary. Similar combinations have culminated to the advantage of producers in other industries and if the give-and-take principle is observed and united action assured, an improved position would soon be manifest.

The reduction of supply and the raising of the standard of quality are not the only means by which the future of the industry may be improved; they are uncertain methods and may prove to be impossible of working. There are others which for years have persistently manifested themselves in spite of want of encouragement, nevertheless they continue to be unconsciously ignored. Outside markets are no mean factor in determining the prices of tea in Calcutta. They have absorbed no less than 50¼ per cent. of the total offerings on this market and they have come to stay.

Calcutta has been made the dumping-ground for commonest teas, odds and ends, and for practically the entire supply of dust made and the free expansion of our trade with new markets has consequently been handicapped. An indication of their strength and the persistent nature of their demand is that, notwithstanding this drawback and also the fact that the Calcutta market has been meagrely supplied, the increase in export to places other than the United Kingdom reaches the respectable total of 16 millions or 17 per cent. in six years.

These figures are remarkable, and if such progress is made under adverse circumstances, it is unquestionable that this branch of the trade is capable of astonishing development if only encouraged by a more liberal and suitable supply. At the close of the season the unexecuted orders for new outlets in this market totalled about 10,000 packages.

These various demands deserve more appreciation than they get from growers. They should be recognized by them as the means of bringing about a healthier working of the trade, as in reality they are, and it becomes a duty not only to impress upon them the urgent necessity for encouraging their growth, but to demonstrate the reasons for doing so.

It does not seem to be realized that Calcutta has a multitude of interests and is practically the distributing centre for the world, all these interests are working against each other to secure tea,—and it is palpable that the more numerous the competitors the better it is for the seller—while London has practically but one demand to supply, that of home consumption, the trade outside this accounting for a very small proportion of the dealings.

Not only this, but with the crop of India, Ceylon, China, Java, Travancore, and other minor sources of supply the selection in London is spread over about 300 millions. In Calcutta, the dealings are confined to about 50 millions only; the buying power is therefore more diverse in its constitution, and more concentrated in its field of operations and under such circumstances the advantage to the seller, is obvious. The following statistics show unmistakably the strength and drift of these demands, the relief they have afforded London, and the effect they have had on the value of tea on the two markets.

	1894-1895. Millions.	1899-1900. Millions.	1900-1901. Millions.
Received in London	115	149	161
Exported from London ...	3¾	8½	* 10½
Average price in London (up to March)	9·95	8·35	7·33
Sold in Calcutta	43	50	49¾
Exported to outside markets	9	22	25
Average price in Callcutta (for season)	9½d.	7¾d.	6⅞d.

The above figures also explain the cause of the congested state of the London market and the possibilities there have been of avoiding it during recent years. It will be seen that supplies have been poured into London and have increased from 115 to 161 millions during the period under review, and the off-take in exports though improving has only expanded from 3¾ to 10½ millions On the other hand the supply in Calcutta has increased form 43 to 49¾ millions only, while the off-take in exports to new markets has risen from 9 to 25 millions. The outside buying power has, therefore, advanced from 3¼ per cent. 6½ per cent. in London, whereas in Calcutta it has advanced from 21 per cent. to 50¼ per cent.

It will be seen from these convincing figures that our new outlets have received little or no support, for while they have steadily *increased* their business in Calcutta the supply to meet it has *decreased*. The inference is obvious. Calcutta is starved and London glutted, and much tea finds its way to the wrong market.

The effect on prices is also shown, and it is particularly marked in a comparison of the last two seasons. Calcutta with its overwhelming proportion of common tea shows a drop in its average of 8 pie (equal to rather more than ¾d.). London with practically all the fine tea from India shows a fall of 1d. to the end of March, and it is likely to decline still further between now and June, as there are heavy holdings of low-price tea yet to come on the market.

Further indication of the retrograde movement in regard to the handling of the crop and the fostering of new markets is disclosed by the following figures:—

	1894-1895. Millions.	1900-1901. Millions.
Total crop	127	187½
Proportion of crop sold in Calcutta	43=34%	49¾=26½%
Proportion of Calcutta sales absorbed by outside markets ...	9=21%	25=50¼%

Thus, outside demands have taken 177% more tea during the above period and yet supplies to meet it have only increased 51½%; or taking the actual crops (which have increased from to 127 to 187½ millions) there is an *actual decrease* of 7½% in the proportion given to the Calcutta market to meet this extensively increasing trade.

In addition to the requirements of outside markets there is another very important demand to be satisfied in Calcutta, *viz.*, that of direct buying by the large home distributing houses. In accounts for a very appreciable proportion of the quantity sold in Calcutta, and as the teas thus bought do not appear in Mincing Lane, it is still a further ready means of affording relief to that over-stocked market. In 1896, from the June to December, 266,000 packages of Calcutta-bought teas were re-offered in London. In 1900, during the same period, only 130,000 packages appeared. The difference of over 130,000 packages is accounted for in a great measure by the increase in direct business between the distributors and the Calcutta market; heavy warehouse charges being thus avoided, the Calcutta buyer is in a position to pay a price proportionate to the charges he saves to the benefit of the producer.

Taking into consideration therefore the benefits and drawbacks which exist, a scheme for improving the position of growers, which would be most likely to prove successful, may be outlined as follows:—

Restrict outturn by a system of more careful plucking and thus assure not only *a smaller supply* but one of *better quality*.

Stop extensions; and deal separately with areas in course of development, otherwise the effect of a 10 per cent. reduction on gardens in full bearing *may be negatived* by the yield from "new tea."

Encourage relief where it *already exists* by liberally feeding new markets through Caluctta. This is a certain remedy and is ready at hand. The demands are firmly established in the Calcutta market and their strength and possibilities of much greater expansion are evident. On last year's working the buying power of all demands outside that for the Mincing Lane market is represented by 60 to 70 per cent. of the total offerings in Calcutta.

Endeavour to force consumption *in India itself;* the natives in some parts of the country are large tea-drinkers, and others will follow if opportunities are given them. There is plenty of ground well worth exploiting which will in time account for an appreciable off-take.

We have dwelt at length on this subject, as we believe it to be one of paramount importance. As Ceylon increases her business with new markets, so, in like proportion, is the supply and selection in that market increased by producers. Why should India continue to do the extract opposite? So surely as more tea is sold in Calcutta so surely will the off-take for new markets be increased. Here is a case for distribution of supply, where the Indian Tea Association, following the example of its kindred Association in Ceylon, might well lift up its voice. Every effort is being made to open out markets, yet when the buyer wishes to come to Calcutta he is informed that already there is not sufficient tea sold on this market to go round.

The distribution of the crop from Calcutta as compared with the previous two seasons has been as follows:—

	1900-1901. Millions.	1899-1900. Millions.	1898-1899. Millions.
To United Kingdom ...	161	149¼	133¾
„ Colonies	10½	8½	6¼
„ America	4½	6	3¼
„ Other outside markets ...	10	7¾	8¼

As already remarked, the above figures show satisfactory progress with the exception of those for America, which is due to speculative buying of China tea early in the season in anticipation of disturbances in that quarter. The interruption, however, is only temporary, and an appreciably larger export may be looked for during the ensuing season. The appearance of Russia in the list is a welcome addition to our new market; it has been a steady buyer throughout the season.

The quantity taken by outside markets from Calcutta sales has amounted to 25 millions, which is equal to 50¼ per cent. of the total offerings. Last year the proportion was 44 per cent. and the year before 36¾ per cent. Comparative details are as follows:—

	1900-1901. Millions.	1899-1900. Millions.	1898-1899. Millions.
Total quantity sold in Calcutta ...	49¾	50	49
Percentage of above exported to the Colonies...	21¼ %	16½ %	13 %
Percentage of above exported to the America	9 %	12 %	6¾ %
Percentage of above other outside markets...	20 %	15½ %	17 %

The above figures merely confirm the preceding remarks regarding the vital importance of outside markets to the welfare of the industry and the urgent necessity of supporting them.

The Duty question has engaged the attention of the trade during the past twelve months. The increased tax of 2d. per lb., which came into force in March last year, has undoubtedly done much harm, and whatever arguments may be brought forward in support

*Approximate.

of the measure from a theoretical point of view, there is no getting over actual facts and figures which unmistakably show that the trade has suffered seriously.

Consumption has been severely checked at a time when it has been of vital importance to force it, and the cry of over-production might never have been heard had the impost remained at 4d. per lb. It is only natural that a sudden and violent advance of 50 per cent. in the duty-value of an article of universal consumption must do considerable harm to a trade, especially when that enhancement takes the form of a tax payable by those engaged in forcing its use. Last year it was seen that this branch of the trade was suddenly transformed into an excited community, and the extravagant eagerness to secure tea and remove it from bond was productive of incalculable injury to the industry; the re-action came as a result of the locking up of enormous capital for an indefinite period, and was evidenced in the half-hearted and entangled working which lasted for so many months.

A happier state of affairs was reasonably expected after Christmas, but no sooner had the trade recovered from one disorganisation, than it received another shock from rumours of a probable further addition to the duty this year.

In comparison with kindred products, tea is not only taxed unfairly and is made to contribute more than its share towards the revenue of the country, but the duty itself is out of all proportion to its value; a large percentage of the crop is now taxed to the extent of 150 per cent. of its value, and taking the average price of all Indian tea for the season it is taxed 80 per cent.

The scheme for regulating weekly offerings in London, which was virtually on its trial has during the past season fallen through, and the effects of an unequal distribution of supply have again been apparent. The necessity of insuring a more uniform supply is fully recognised by importers, and it is unfortunate for the industry especially during the past season that more strength of purpose was not shown in dealing with this drawback. It is an absolute impossiblity for the home trade to handle the enormous weight of tea, which at times spontaneously finds its way to the London market, the supply is out of all proportion to the demand and the importer's anxiety to realise, results in the forcing down of prices. The question should again be brought forward, and the working of the scheme should go back further than holding tea in London to growers, who should contrive to bring about a system for regulating the *forwarding of supplies from the country of production.*

The Calcutta branch of the Indian Tea Association has resolved to set aside a portion of the available funds for the purpose or pushing the consumption of tea in India; arrangements are being made to employ agents in various parts of the country, and as the scheme is to be thoroughly worked through the proper channels, it will doubtless prove a success.

With a view to increasing the demand for new outlets it has been proposed to levy a cess corresponding to that in Ceylon for the purpose of advertising Indian tea in various parts of the world. A similar fund has been in existence for several years, and it may in some measure have been useful in promoting a demand, but for better results would undoubtedly be obtained if, instead of devoting so much of the available funds to expensive forms of advertising in prospective countries, they were utilized in such a way as would induce the flow of supplies in such directions through proper and healthy channels.

Every buyer in Calcutta has an outside market constituency, and the inducement offered might take the form of a bounty, payable out of the funds to shippers of teas bought in Calcutta. Let a percentage, on the public sale cost of the teas, be made over to the shipper on production of *bonâ fide* certified invoices and others supporting documents.

It is not now necessary to spend money in *creating* demands, as they are already here, and only want encouragement, and this would be yet another sure means of forcing trade and affording relief, and it would be immediately responded to.

As it is, the system of spending money in opening new markets, while at the same time starving their source or supply, continues. The one policy is apparently being suffocated by the other.

During the past season there has been some discussion regarding the various kinds of packages now being used. The trade at home and also in the colonies and other markets, as a rule, object to some of the latest patterns of patent packages, and sales have been consequently affected. There seems to be no doubt that the ordinary wood package, with corner pieces and tea lead cannot be improved upon, and is best suited to the requirements of the trade generall With corner pieces, this package is strong and can be easily repaire and it undoubtedly carries the tea best as regards freshness an general condition.

As regards the outlook and prospects for the future, it may b said that the position is almost entirely dependant upon the attitud of growers during the ensuing season. The remedies for dealin with the present depression are in their hands, and they have only make it evident that they are determined to curtail outturn, impro the standard of quality and devote more attention to the deman for new outlets, to bring about more prosperous times.

There are agencies at work which may tend to check any im mediate response, foremost amongst them being the heavy clea ances from bond recently made, and the consequent restriction the free use of money.

About 35 millions over and above the legitimate requiremen for consumption have been recently cleared; the proportion Indians appears in delivery figures and is therefore misleading it does not represent movement from stock into consumption. Th bulk of it still remains in stock, held by distributors, and simila to last year, this great weight of tea must for some little tim affect trade to some extent during the process of working it off.

At the same time it must be borne in mind that these clearanc hold a very different position of value to the excess taken out bond last year. They were brought at the lowest point touche and stand in at a fully 30 per cent. lower cost, and the market h since been noticeably firmer.

The outlook, therefore, is not so gloomy as it would seem; smaller crop of improved quality is in view, outside markets a ready to respond to a more liberal supply, and it is to be hope that even if a reduction in duty may not be secured, there will b no enhancement.

Exchange is still a severe handicap to growers, and the appr ciated value of the rupee is responsible to some extent for the present position. The question has been dropped, but the burde nevertheless exists and asserts itself all the more during th present troublous times through which the industry is passing.

9, Mission Row,
Calcutta, *April*, 1901. } Carritt & Co.

NOTES FROM BRAZIL.

(From the *Brazilian Review.*)

Exchange.—*March 2nd*, 1901.—Ninety days' Bank rate on Lond opened on Monday the 25th, at 11d, rose to 11 3/4d. this morni and closed this evening at 11 23/32d.

Whatever it may be that is working the rise, as to which opinio vary immensely, there can be no question whatever that it is neith healthy nor advantageous. A few daring speculators may, perha make money by it, but most, even, of them will be left again if th attempt to push things too far as they were last year. A rise 1 11/16d. or over 17% in a month leaves no time for the adjustme of prices, is ruinous to trade and fatal to the stability that t country is so sorely in need of. Moreover no movement that is n founded on economic conditions, can be lasting and, though the is unquestionably an immense improvement, it is not and cannot for some years such as to support a much higher rate of exchan than that now current. As to the reason of the rise, opinions a very various and contradictory. At both Santos and São Pau the feeling is, unquestionably, bearish, the rise being there attribut almost wholly to speculation. Here opinion is divided, two Ba managers, for example, assuring us that the movement is chie speculative, facilitated by the stringency of money; whilst t others maintain with equal confidence that it is the legitimate effe of the excess of the supply of bills over demand. On the one ha we were assured that produce bills are barely enough to satis current demand, and on the other that the rise was the result heavy sales by Santos and Pará.

When such authorities differ so fundamentally in the appreciati of a phenomenon that must come under their peculiar attention, is likely that some factor or factors must be in operation know to some but not to others.

It seems probable that apart from a possible natural tendency improvement, the syndicate that are said to be operating fro

ew York and Paris for a rise in coffee, expectations of which are unded almost entirely on an anticipated rise of exchange, are lling exchange as has been reported. Local speculation has cer-inly heightened the effect, but if the rate were to be maintained ly by these sales, the reaction could not be long delayed. So long, owever, as outsiders are willing to sell and carry their purchases, ere are no reasons why exchange should stop going up at all, ecause the supply of bills thus artificially supplemented, would be excess of actual requirements. Sometime or other the reaction ust come, although if our surmise is right as regards the nature the selling, it may be put off perhaps for months. The same ndicate operated last year realising coffee and exchange in July. n the course of a day or so the Bank balances will show if our pposition is correct.

Coffee.—Sales of coffee were again very heavy, 236,000 bags at io and Santos as against 201,000 for the corresponding week last ear. The value of shipments during the week ending March st was £471,557 as compared with £458,368 for the corresponding eek last year. During the month of February the value of coffee hipped here and at Santos amounted to £1,170,576 as compared ith £1,085,214 last year. In view of the enormous stock in hand, nterminable appearance of the present crop and prospect of heavy rrivals of new crop in June, it is quite possible that the value of onthly shipments may be maintained on an average of over 1,000,000. However prejudicial and unhealthy the immediate osition may be, it is undeniable that everything points to another henomenal rise in exchange which may probably leave in the shade he performances of last year. It will, of course, be followed by the nevitable fall and ruinous liquidations that could only be avoided ere there an institution strong enough to control the rate by buying eavily when it goes up, and selling when it comes down again. As here is none the sooner we back to specie payments the better!

Santos, March 1st, 1901.—During the past week the market was generally firm, easing off on Wednesday in consequence of weaker ews from New York, but advanced again on Thursday and Friday. Dealers met the demand fairly and transactions in consequence were large, but rapidity of the rise in exchange prevented any improvement in currency prices to the serious prejudice of regular business.

Quotations for "superior" were 5$600 to 5$900, "Primes" 300 reis better, "Goods" 200 to 300 reis and "Regular" (Nos. 8 and 9. New York types) 400 to 600 reis below.

Enquiries were mostly for "Superior" and good medium qualities, "Peaberries" being neglected.

Europe bought reluctantly on the basis of 32s. 6d. to 35s. for "Superior" and 34s. 6d. to 36s. 6d. for "Primes." but buying on account of the speculative so called "metal syndicate" of New York continued active for an average of n. 5 at 71/ 4c to 79/ 16c, other demand from that quarter being slack.

Receipts during the week were very heavy but now show a tendency to diminish. The weather is now bright and clear and, should it continue, will ensure an early crop.

THE FEBRUARY COFFEE MOVEMENT IN THE U. S.

During the past month coffee, says the *American Grocer*, has been under speculative influence, with Lewisohn Brothers the principal operators. They claim to have faith in coffee, and believe they can dispose of their purchases at a profit. One of the firm says: "We believe we shall secure a greater return for our money than if we invested in ordinary ventures which bring but 3 or 4 per cent. dividends. What we have bought we may not sell for two or three years. In no way can our investments unfavorably affect the local coffee trade."

With the heaviest supply in sight the world has ever known—a visible supply equal to six months' requirements—there is not much ground upon which to justify an advance, unless, as claimed, it is based on a big advance in Exchange, which is likely to be still further increased.

Probably the trade will revert to its old tactics and buy coffee for nearby requirements only. As a rule, most attempts to unduly raise the cost of coffee, or any other great staple, results in failure. The history of the coffee trade for the past twenty-five years is marked by financial wrecks caused by too much of the bean "which comforteth the heart and aideth digestion," but ruins the speculator.

The February deliveries of coffee were light and below the monthly average for the preceding seven months.

The following statement shows the movement and general position of the article:

	Bags.	Bags.
Stocks, February 1, 1901—		
United States	797,167	
Europe	3,950,758—	4,747,925
Receipts during February—		
United States	576,360	
Europe	613,990—	1,190,350
Total supply, March 1 ...		5,938,275
Less stocks, March 1, 1901—		
United States	953,031	
Europe	3,917,637—	4,870,668
Deliveries, February—		
United States	420,496	
Europe	647,111—	1,067,607
Deliveries, February, 1900—		
United States	435,481	
Europe	708,346—	1,143,827
Decrease as compared with February, 1900		76,220
Deliveries (United States and Europe), February ...		1,067,607
Do. do. do. January ...		1,328,216
Do. do. do. December ...		1,180,838
Do. do. do. November ...		1,281,638
Do. do. do. October ...		1,340,059
Do. do. do. September ...		981,198
Do. do. do. August ...		917,608
Do. do. do. July ...		1,219,058
Total for eight months, 1900-1901		9,316,222
Do. do. 1899-1900		10,487,496
Decrease as compared with 1900-1901 ...		1,171,274

The February deliveries in the United States consisted of 333,080 bags of Brazil; 87,416 bags of all other sorts.

The visible supply of the world on March 1, 1901, was 7,276,668 bags, against 7,217,925 bags on February 1 (an increase of 58,743 bags), and 6,447,936 bags on March 1, 1900.

The visible supply on July 1, 1900, was 5,840,561 bags, so that in eight months it has been increased 1,436,107 bags.

The total receipts at Rio and Santos for the first eight months of the trade year were 8,487,000 bags, against 7,799,000 bags for the same time the previous year, and 6,891,000 bags in 1898-99.

Trading in options on the New York Coffee Exchange was heavy, the sales reaching a total of 724,500 bags. The lowest price for options was 5·40 cents for February and March; the highest, 6·75 cents for March, 1902. Spot coffee, No. 7 Rio, fluctuated between $7\frac{1}{2}$ and $7\frac{7}{8}$ cents.

COFFEE CULTURE IN QUEENSLAND—No. 6.

Mr. Howard P. Newport writes in the *Queensland Agricultural Journal* a sixth paper on this subject, dealing specially with

PICKING

He says in the last article of this series, I wrote, by special request, on "Pulping and Curing"; this article, also by special request, is therefore out of its natural order, which should have been immediately before Article No. 4.

The age of coffee is generally reckoned from the time of planting out in the field, for a plant may be anything from a six-month-old seedling to a three-year-old stump, as will be seen on reference to my chapter on "Nurseries" (No. 2, published 1st February, 1900, *Queensland Agricultural Journal*, Vol. VI., p. 120); and, though a few months may be gained with a well-grown stump plant at times, a tree does not really begin its business in life until it is planted in the field where it is to remain.

Coffee takes three years to bear its maiden crop, as a rule, and with bad cultivation or neglect (*vide* "Root Growth of Coffee Plants," *Queensland Agricultural Journal*, 1st November, 1900, Vol. VII., p. 214) it may take longer. In this country, however, coffee is somewhat precious, and the maiden crop is frequently obtained

in less than the usual three years. The climate not being so dry, and the soil richer and more retentive than in most countries where coffee is grown as a staple, the showers about the time of blossoming (come to beknown as "blossoming showers") are not such an inexorable necessity in this country. The moisture in the soil is, in most cases here, sufficient to ensure the opening and setting of the blossom even if no rain has fallen for some little time. This results in an absence of the loss, so frequently occasioned in other countries, by the burning of the blossom and failure of a portion of each blossoming to fructify or "set," thus ensuring not only a regular crop but a much larger one in proportion to the amount of blossom.

Plants put out in January in North Queensland will frequently blossom in December of the next year or the following January, and ripen a small crop in July or August—that is, in from two years and six months to two years and eight months from the time of planting. In well situated localities I have known coffee to bear after late planting when two years' old, but such early bearing is always a strain on the trees and very dangerous. Any tendency to bear at so early an age should be discouraged, and here in Queensland, even in the third year, it is advisable to disbud from the green wood (*see* article on "Disbudding Young Coffee").

About December or January, the time varying a month or more in different localities, the coffee-tree will give indications of blossoming again. In the axils of the leaves or the eyes of the branches, from the youngest piece of new wood to the old stem, small buds will make their appearance. At first only the minute leaves or brakts (?) will be seen enveloping the bud proper and attached to it by a coating of wax that will always be found to cover the buds of the coffee plant. This wax appears at first as a light-yellow or brown ball at the end of the bud, and its use is to protect the delicate young bud from heat or cold; in hot weather the wax forms a thin coating over the bud and saves it from being burnt by the heat of the sun, and in cold weather cakes quite hard and saves it from the effect of a sudden dropping of the temperature—in either case, of course, only within limits.

So far the buds of leaf or wood and of blossom are indistinguishable, but as it grows the white of the blossom bud soon becomes evident, and about this time it will split and disclose from three to five (usually four) distinct blossom-buds; occasionally the bud will be found thick and double, and will early disclose three or four sets of four buds each. As it continues to grow, it stands out like small thorns in all directions, and the blossoms will individually grow to a length of from a-half to 1 inch before opening, earning for themselves the technical term of "spike." This spike will, in dry countries, when nearly full size, stand for several days and sometimes weeks, but will not open without rain. After rain it opens promptly in from eight to ten days, according to the amount of fall; in this country however, for the reason already given, it will frequently open and set without waiting for the showers, and herein lies one of the secrets of the heavy crops that Queensland can produce per acre and per tree as compared to the other countries.

The sight of a coffee estate in blossom, especially when well kept, is one that needs an artist to describe, and once seen is never forgotten. The small, white, star-like blossoms quite lose their individuality in the immensity of the whole, and no prettier sight can be imagined than the ropes of perfect white entirely hiding the brown wood, set off by the gorgeous dark-green leaves of the coffee. Blossom has scarcely ever been known to open in the day-time; a little patch here and there, especially under shade, may do so, but it generally opens between 2 and 5 o'clock in the morning, or just before or at daybreak. The sight of a whole field in blossom is one, therefore, that breaks on one almost as a surprise first thi in the morning, and the scent, which, though scarcely discerni in any one little blossom, becomes a delicate fragrance in the appreciable at great distances and too strong in the field to pleasant.

The size of the individual blossoms will be found to vary c siderably, and it was at one time thought that the size of the be varied accordingly; but this has been proved a fallacy, as the sm blossoms have been shown to produce as large a bean and berry the larger ones. The scent will vary, too, being much strong some seasons than others. This has not been accounted for y but the strength of the scent has a very marked effect on the s ting of the blossom by attracting insects, butterflies, bees, flies, e which can, of course, detect it further off than human beings, a flock to the scene in numbers. Although coffee is hermaphrod and able to fertilise itself, these insects materially assist in process. Frequent infertilisation tends to deterioration of sample, and is not so effective or general. A good strong sce therefore, and consequent presence of the insects, will make a ve marked difference in the output.

The blossom will begin to fade in twelve hours or so, but a go blossoming will last—that is, will continue to open more spike ea day for three days or so. While the blossom is open all work the field must be stopped, for not only are the insects interrupt in their work, but the blossom itself, being very delicate, is eas knocked or rubbed off. The short time while the blossom is op is, perhaps, the most anxious time for the grower. An untim shower of rain means a great loss by damping the pollen a hindering fertilisation, or even knocking off the blossom altogeth and strong wind may shake the blossom off before it has time to s

In very dry weather the blossom is not so large, as a rule, bu dry month or two before blossoming generally means a good setti Ideal weather, while the blossom is open, would be a bright su shiny morning after a shower of rain the evening before with gentle breeze.

As a rule, in coffee, there are from two to four blossomings abo ten days or a fortnight apart. In Queensland there are genera more. This is unnatural, however, and it is the grower's obj to reduce the number of blossomings in favour of heavier on which can be done to a great extent by handling and pruning.

As the blossom sets, the petals will, as a rule, fall away from calyx and hang on to the end of the pistil; when this is freque and regular, it is generally considered a sign of good setti Another method of judging is to turn the branch up and look underside of the very young berries three days or so after blossom has faded; those that have not set will appear yellowi while the properly fertilised ones will be a healthy and brig green colour.

After this, the young berries swell gradually and take some sev to nine months to ripen; the most dangerous stage of their being when about the size of peppercorns, when very dry weath or any accident to the roots, may cause them to wither and fall.

The berry should grow steadily until of full size, when the ker will "set" or change from a milky soft matter to a jard bluish see after this the pulp or fruit of the berry will ripen, turning fron bright green to yellowish, and then red. Occasionally, berries v turn from green to red with hardly any appreciable period of yell but those that ripen unevenly or ripen at the tip, will generally found to be "light," or have imperfectly formed beans. Wh quite ripe, the coffee berry is about the size and shape of a cher and not unlike one in colour also, so much so that the term "cherr has been taken into general use as denoting the berry at this sta of its growth.

When to Pick.—To wait until the berry is a perfect and bright all over, or what is known as "dead ripe," is quite unnecessa It might seem the only commonsense way of picking fruit, but coffee it is not so. Coffee culture may, in a general way, be class as a species of fruit culture, but it has this great difference, that cultivation to produce this fruit, the seed only is required. It also a fact that, just so soon as and no sooner than the seed is fu formed and full-grown, the fruit round the seed begins to ripen, a by this time it will be possible to separte it by squeezing. Beari in mind that the fruit part, or pulp, is the part we throw away a that the seed will not grow any more once the berry ceases to green, it is obvious that the time to pick is when the berry begun to change colour, and the seed can be easily sqeezed out fr the pulp between the finger and thumb. If picked green,

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

mount of pressure will separate the seed, and if put through a ulping machine in this state, some of the green pulp will ither be chopped off, or the berry be cut in two, such cut eans, subsequently turning green, or copper-coloured, from their ontract with the metal of the machine, and discolouring and poiling other beans in the sample. Green berries must, therefore be avoided. In picking in the field some attention must be iven to this matter, but it will be found impossible to avoid a ew green berries; some will fall in by accident and must go hrough, but carelessness in this respect will often account for a arge amount of loss.

On the other hand, over-ripeness must be avoided also; it will ften take only a few hours of sunshine to turn a dead-ripe herry to an over-ripe one Coffee will never naturally be a purple ed; if it is so, it has become over-ripe—that is fermentation as set in under the outer skin. This has the effect of discolouring the parchment and spoiling the appearance of the sample, nd if allowed to go on too long will also discolour and spoil the lavour of the bean through the parchment skin. In very wet veather, if the cherry is not gathered in good time, some will be ound to split when dead-ripe, and either drop to seed or drop off ltogether. This splitting discolours the parchment, too, and very effort should be made to get the crop in before much can ake place. In very dry seasons a little will be found to dry on the rees in spite of careful and regular picking. This cannot be voided, but should be a very small percentage. This dry crop hould not be put through the machine with the ripe, but picked eparately if possible, dried as it is, and subsequently mixed with he "tails." The time for picking being just so soon as the crop hows red on the trees it is not safe to leave it much longer, and, nce red, there is no fear of it not separating properly in the pulper. Of course each berry cannot be tested by feel, but the grower will very soon, by testing a few, be able to tell by sight when it will pulp. It is obviously to the advantage of the grower to get he crop off the trees as soon as possible: Firstly, to get it cured nd away; secondly, to save the strain on the trees; thirdly, to dmit of the subsequent berries ripening quickly, as well as having more sap to fill out with; and, fourthly to give the tree as much ime as possible before and strength to blossom again.

An estate on which the berries are allowed to ripen too much seldom pays, for not only does the picking cost more, but it drags out its weary length to the detriment of everything after it, until, he blossoming season coming round again, the tree can make but a poor show under the circumstances. It is often of great advantage to "strip"—*i.e.*, in the last round of picking to take of every berry whether green or ripe, and to subsequently sort out and pulp the ripe stuff and dry the other in the skin adding it to the dry cherry, of which there is always some in a coffee crop. This does not necessarily mean all loss either, as the strippings dry dry quicker and better green than cherries will, and make good second-class coffee when cleaned.

How to Pick.—The picking is generally considered, especially by those who don't grow coffee, a formidable task and an insurmountable difficulty in the cultivation of coffee. There is no getting away from the monotony of steady picking, but, if properly set about, a great deal of the monotony is removed and a great deal more work can be got through. In choosing, as has been done to a great extent hitherto, only the dead-ripe, it can be understood how much time is wasted in selecting and leaving, while if all that is sufficiently red to admit of pulping is taken off at the one time, half the trouble and cost is removed at once for the cost of picking depends a great deal upon the quantity available at the time of picking.

In pulling off the cherry, if each is picked with the finger and thumb separately and from above, a very little can be gathered in the day, especially if a billy-can is carried in one hand, as I have seen done, and only one hand used for picking; 50 lbs. of cherries is in this way made a hard day's task. For quick picking a small bag should be tied round the waist or hung round the neck, which can be held open by a bent piece of wire if desired, and both hands used for the gathering. If the hands are held together, and the picking always started from the middle of the tree outwards, it will be found that it is comparatively easy to pull off the beans with the thumbs, or first fingers and thumbs, and to drop them into the palms of the hands thus held together. In this way a double handful of cherry will be quickly collected, and is easily deposited in the bag at the waist or chest by one natural movement, before the hands are stretched out again to pick along another branch. In this way 200 lbs. and more will not be found a heavy task for one day's work. The bearing that pruning has upon the cost of picking can now be seen. In looking into the matter of expensive picking, or the small quantities gathered, hitherto in Queensland, I find that in all instances the trees were unpruned, and in most were matted and thick if not tall and out of reach. The crop from a tree having its branches regularly and systematically arranged can be got in in half the time of that from a tree that needs one hand to hold the branches back, a contortionist to get at the crop, or a step ladder to reach it.

Systematic pruning previous to the cropping means not only easier and quicker picking, more crop, better sample or quality—*i.e.*, bigger berries—but a more systematic ripening, thus again materially reducing the cost of gathering. It will be readily seen, therefore, that the picking must of necessity cost more on a badly cultivated than on a well-worked estate.

Ordinarily there should be as many distinct pickings over the estate as there were blossomings, but when the blossomings are close together, when ripe it is difficult to distinguish between the different settings. Five to seven times round the estate, with ten days to a fortnight between the beginning of each round, should get the crop off. The first is a small pick gathered from a few trees that are in favoured situations, and ripen their crops specially quickly, and, coming only from a few trees here and there, is called a "fly-picking." The third and fourth pickings will bring most of the cherry into the sheds. Systematic work in picking is as necessary and useful as in weeding or any other work, and if the estate is regularly picked over, line by line, from one end to the other at first, the subsequent ripening will be more regular and more easily dealt with. At present in Queensland, it will be found necessary to pick more frequently than once a fortnight, perhaps, and, many cases, eight or ten times round the estate will be necessary, but this can, in time, be very materially reduced.

With attention to these points, it will be found that a wage of from 20s to 30s. a week could be made at 4lb to the 1d. by a fair ordinary picker, except for the first or "fly-picking" or so cheap picking, however, cannot be expected from trees that not only offer every obstruction to the picker, but produce small berries at the same time from want of cultivation. Some attention to this important branch of field work and methodical procedure will not only remove the apparent formidableness of the task, and the grower surprise himself at the amount he can pick, but a very marked improvement will very soon become evident in the sample of his coffee.

THE DUTY ON INDIAN TEA.

The Secretary of the Indian Tea Association (London) has addressed the following letter to the Secretary of State for India in Council:—

My Lord, I am directed by the Indian Tea Association, London, to address you on the subject of the late enhancement of the Import Duty upon Tea, with a view to your urging the Chancellor of the Exchequer to reduce the Duty to its former level of 4d. per lb. The industry, which this Association represents, though supported by many millions of British Capital, is carried on in India, and is thus, perhaps, outside the sympathetic consideration of the Chancellor of the Exchequer. Indian interests are, however, especially within your Lordship's cognizance and protection and the Association venture to hope for your sympathy and assistance in the present highly critical state of the Industry. That Industry has brought wide and unhealthy wastes under cultivation. It supports several hundreds of thousands of native labourers, and it makes a material contribution to the Land Revenue of the Empire of India. It holds an important position in Northern Bengal and Southern India and is the very backbone of the well being of the Province of Assam. Moreover, after some vicissitudes it has proved financially a success. The Industry for a considerable period, prior to 1897, showed a steady prosperity. It was found to return to English investors, regular, and in some cases liberal, dividends. This prosperity naturally attracted further capital, which was employed in making additions to the area under tea. These extensions were, perhaps, in some cases unduly large, but they would have had no serious effect upon the well-being of the Indian Tea Industry, but for the

occurrence of two grave events. The first of those events was the action taken by the Government of India, by which the exchange value of the rupee was fixed at about 1s. 4d. Without entering into the question of the effect of this action on the country generally, I am desired to point out that the policy adopted has undoubtedly resulted in heavy loss to the Indian Tea Industry. The artificial enhancement of the rupees has in regard to tea greatly increased the cost of production, and has thereby reduced the margin of profit to an extent which can hardly be conceived. But for the very serious increase in the cost of production, caused in this way, producers would now be able to accept with small risk of loss the low prices of tea at present ruling. The second event was the addition last year of 2d. per lb. to the Duty, which is proving most injurious to the producers of Indian Tea. The increase in the duty cannot fail in one of two things; it must either, by an increased price exacted from the consumer, check consumption, or, if not paid by the consumer, it must come out of the pockets of the producers. The result so far appears to be that the increase has materially checked the regular expansion of consumption, and at the same time thrown upon producers the payment of a large share of the additional Duty. These two events have so seriously affected the Indian Tea Industry—the first by raising the cost of production, and the second by reducing to the producer his net price—that, coming as they do on the top of the increased production, they have brought the Industry into such straits that at the present moment but few tea properties can be carried on without loss.

It is hardly necessary to point out to a Statesman how much the failure of a large proportion of the Indian Tea Industry is to be deprecated. The public revenues, both of Assam and Bengal, are much interested in the prosperity of tea, and if, as seems probable, many estates must be closed up, the distress to the labourers employed on them will be very great. Moreover, I am to urge upon your Lordship's consideration that, both for the United Kingdom, where capital is ever seeking for new channels of employment, and for India, where capital is greatly needed, it would be a mistaken policy to allow the one Indian Industry, into which private capital has flowed freely from this country, to be crushed in its hour of weakness and difficulty by the addition of heavy State burdens. The Association desire to draw attention to the very heavy percentage which the Duty on Tea now bears to the wholesale price of the article. In 1881, the average price of Indian Tea in London was 1s. 5d. per lb., the Duty being then 6d. per lb. (about 35 per cent). In 1891 the average price was 10½d. the Duty being 4d., or about 38 per cent. During the current season the average price has been 7⅓d, and at the present moment it is about 6d, while the Duty is also 6d. or 100 per cent. on the average price. Large quantities of tea are now being sold at less than 4d. per lb., the Duty here being 150 per cent. further point to which the Association respectfully venture to draw your attention. While agreeing with the Chancellor of the Exchequer in thinking that 'a very large class of the population who do not pay income-tax, who do not consume alcohol and do not smoke' should contribute towards the expeuses of the South African War, they do not consider it to be equitable that tea alone, of the commodities used by that class of the people of England, should be singled out for an increase of Duty. It seems to the Association that there are other commodities more capable than tea of bearing increased taxation—cocoa, coffee, and sugar for instance. The Duty on cocoa, the consumption of which has largely increased of late years, varies between 1d. and 2½d. per lb. for different qualities, that on raw cocoa being 1d. The quantity of raw cocoa entered for home consumption in 1879 was 10,111,526 lbs. as against 37,750,000 lbs. in 1900, showing an increase of 270 per cent, while during the same period, the consumption of tea rose from 160,500,000 to 249,750,000 lbs. being an increase of 55 per cent. only, The Duty on coffee, which has an average value of 8d per lb., is 1½d. per lb., or only 25 per cent. of the Duty on Tea, with which article it competes as a beverage. Sugar at present contributes nothing to the Exchequer, but a Duty of even ½d. per lb. which could hardly be felt by consumers, would realize, it is calculated, about £6.750,000. My Association have endeavoured to show in this letter that the increased Duty has struck their Industry heavily at the very moment when, from other causes, it was least able to bear up against such a blow. They now venture to pray your Lordship to press upon the Government the serious nature of the crisis in which the Indian Tea Industry is involved, and the disastrous effect upon it of the continuance of the present high rate of Duty.

PLANTING IN DOMINICA.

The Administrator of Dominica has furnished a Ceylon planter with a series of answers to a number of questions that have been addressed to him by various correspondents on the subject of planting in Dominica

He adds that, as the distances are not long in Dominica, Crown land can be purchased for 10s an acre, payable by instalment. There are one or two partly developed estates for sale, but a large price is being asked. The first comers will naturally get the pick of the land that is being opened up by the new roads. Dominica has never suffered very severely from a hurricane, and the effects of a West Indian storm are frequently exaggerated for various reasons. Mr. Gordon Fowler, an ex-Ceylon planter, who started a coffee estate there about three years ago, is so satisfied with his results that he has increased his holding, during the last year, from 300 to 1,100 acres. His coffee is magnificent, and there is a complete absence of blight.

NOTES ON DOMINICA FOR INTENDING PLANTERS.

1. *Best route from England.*—By Royal Mail from Southampton. Leaves every fortnight. Fare £25 single, £40 return. Voyage lasts 13 days. Can also go by Scrutton's line cheaper, but a good deal longer, also *viâ* New York.

2. *Hotels and their Charges.*—There is one hotel in the town of Roseau, suitable for bachelors. Terms 8s a day.

3. *Pensions or Boarding Houses and their Charges.*—Several kept by ladies, very comfortable and moderate terms. Miss Pemberton's and Miss Shew's specially recommended.

4. *House Rent.*—Vacant houses are at present scarce. Rents vary from £30 to £60 a year.

5. *Cost of Living.*—A bachelor living on his own plantation, of careful habits, need not spend more than 30s to 40s a week on house keeping. A great many spend much less, as they raise their own poultry, sheep, pigs, vegetables, and fruit. Fish is very cheap and plentiful.

6. *Servants' Wages.*—Female servants get from 3s 6d to 5s a week. Men from 4s to 6s a week, and are usually not boarded.

7. *Prices of Horses and Mules.*—Ponies cost from £10 to £20. Mules average £20. Donkeys 30s.

8. *Horse Hire.*—Six to eight shillings a day.

9. *Horse keep per Month.*—From 30s to 40s.

10 *Can Harness and Saddlery be obtained in the Country?*—They can be obtained locally, but it is better to get them from England.

11. *Is there any Shooting? If so, where and of what does it consist?*—Pigeons (Ramier), Doves, Parrots, Opossum, Agouti, and Wild Pig, are fairly plentiful, but shooting in Dominica is not sufficiently good to make it a special object of a visit. A week can however be very pleasantly spent in the forests with a gun.

12. *What is the best Rifle or Gun for the Country?*—An ordinary fowling piece.

13. *Can Ammunition and Sporting Requisites be obtained in the Country, and where?*—They cannot be obtained locally of good quality, but everything can be got from Barbadoes in a few days.

14. *What is the Import Duty on Guns and Cartriages, and what other Restrictions are there in the Import of Guns and Dogs?*—10s a piece. No restrictions on dogs. Long haired ones are not very suitable. Fox terriers thrive best.

15. *Is there any angling? If so, what kind and where, and what baits are used?*—The rivers are well stocked with fish, principally mullet. Local Grasshoppers make the best bait.

16. *Amusements, Clubs, etc.*—The Golf Links 9 Holes, are very sporting and are managed by a Club. There is also a Tennis and Croquet Club. A Social Club House is about to be built. Cricket is also played.

17. *Are there good Roads, and are any fit for Cycling?*—Very large works are being undertaken on the Roads, and bridle paths are being turned into Cart Roads. There is a good road round the Island with branch tracks leading up the Valleys. The sum of £15,000 is now being expended in making a central trunk Road which is intended to open up the very fertile lands that lie behind the seaboard. The Island is rather too mountainous for easy cycling, but owing to the improvement in the roads now being carried on, several bicycles have recently been imported.

18. *Is the Climate healthy, and what is the best Time to visit the Country?*—The climate is very healthy, especially in the mountains. Temperature rarely excessive. Rainful varies from 60 inches to

) inches per annum, according to locality and altitude. No ecial outfit is needed, ordinary English summer clothing does y well. A Terai hat is useful, also strong leather boots. All dinary articles can be purchased locally at moderate prices. The st season to visit the Island is from November to May; but any- e intending to take up and plant Crown lands, that are covered th forest growth, should commence operations early in the year, as to get a good "burn" during dry weather.

19. *Amount of Capital necessary.*—An intending planter should be supplied with *less* than £1,000. With this Capital he might rchase a block of 300 or 400 acres of Crown lands. He might clear d plant 20 or 25 acres the first year, and ten additional each suc- eding year. A cottage suitable for a bachelor could be built ally, by using native timber and shingles, for something under 5. Sufficient furniture could be purchased for £25. After the st year, the planter ought to begin to make some money out of atch-crops," such as early vegetables, bananas, tobacco, etc. neapples yield a crop after 20 months, and their cultivation gives ge profits. Vanilla and coffee bear in three years. Limes and anges give good crops at four years. An acre in cocoa, five years, l, ought to yield from six to nine cwt. of beans per annum, and e price, during the last 20 years, has averaged over 60s a cwt. inidad cocoa fetches over 90s a cwt., and there is no reason why e Dominica product, if properly cured, should not be equally luable. Nutmegs are of slow growth, but the value of their yield very high. The cultivation of ramie-grass has lately been com- enced in Dominica, and promises much success. There are vast eas particularly suited to rubber, and the "Castiloa" is found to ive admirably. In fact, the most eminent authorities on tropical riculture have given the opinion that owing to its diversity of l, rainfall and altitude Dominica offers remarkable advantages the profitable culture of almost every sub-tropical product. ere are good shipping facilities to the markets of America and the ited Kingdom, and an increasing demand for all its products.

20. *Supply of Labour.*—The local supply is provided by the oured inhabitants of the Island, and is fairly abundant. The ld hands require to be dealt with tactfully. There is a considerd- le influx of labourers from the Sugar Islands further north, and 1899 these immigrants numbered over 1,700. In the event of ry large demands arising for an increase of labourers, it is pro- ble that coolies would be imported from India.

21. *Danger from Hurricanes?*—Dominica has been remarkably e from hurricanes for very many years. The last severe storm curred in 1883, but did comparatively little damage. The very cidented configuration of the Island would probably prevent any olesale destruction of growing crops, and there is really very tle danger to be apprehended from hurricanes in Dominica.

22. *Insect Pests?*—The Island is very free from noxious insects. me trees in some localities are troubled by a borer, but the mage done is, so far, not serious. Great care is taken, to guard ainst the importation of plant diseases from abroad. There are venomous snakes and mosquito curtains are rarely used in the untry districts.

23. *Crown Lands* v. *Old Sugar Estates?*—The whole of the coast nds, right round the Island, are occupied by old estates which, r the most part, once produced sugar but are now planted with cao, limes, and fruit. Very few of them are for sale, and it is a gnificant fact that it is almost impossible to buy, for a reasonable gure, a plantation that is already yielding a large crop of either cao, limes, or fruit. The returns from these products are too luable to be parted with save under force of circumstances. The own lands comprise about 120,000 acres, and occupy the whole the centre of the Island. They are undulating, well-watered, d covered with a magnificent forest growth. The soil, in most aces, is remarkably fertile, and no fertilisers would be necessary r many years. In these virgin lands there are practically no eeds, and the continual tillage required on old plantations would largely avoided.

The felling, clearing and burning of the forests is usually done native contractors, and it has been estimated that the clearing, aining, and planting of an acre of virgin land costs in the first ar, between £4 and £5.

The "Imperial Road" which is now being constructed through large section of Crown lands, opens up two large "spheres" of il, and will soon render available some 30,000 acres. In one cality, the land varies in altitude from 3,500 feet to 1,000 and this act is principally suited to the cultivation of high-grade coffee, nutmegs, oranges, rubber, and early English vegetables; cacao, limes, vanilla, and pineapples are believed to be better adapted to lands varying from 500 to 1,000 feet, and the best conditions are to be found in the Layou Valley.

24. *Instruction in Agriculture?*—The Curator of the Botanic Station and the Agricultural Instructor are always ready to afford all assistance in their power, but it should be clearly understood that the Government will assume no responsibility for the success or otherwise of any settler. An intending planter should carefully follow the work that is being carried on in the sample cultivations at the Botanic Garden, and he would gain much valuable information. The planters in Dominica are very friendly and hospitable, and any new-comer with proper recommendations would be welcomed and assisted by them. It would be advisable for any inexperienced person not to decide upon the purchase of land until he shall have stayed some weeks in the Island. He will then be in a position to judge for himself of the merits and prospects of various cultivations, and be able to decide upon the nature and locality of the soil which would best suit his purpose. The return fare to Dominica is only £40, and a month's expenses in the Island could easily be restricted to £20. For an outlay of £60, a single man could most pleasantly spend a couple of months in making a voyage to Dominica and back, and there is every reason to believe that, having once seen that very beautiful and promising Island, he will develop a strong desire to identify himself with its progressive fortunes.

For further information concerning Dominica, see "Report on the Agricultural capabilities of Dominica," by C. O. Naftel, late Inspector of Estates in Ceylon. This pamphlet is published by Messrs. Eyre & Spottiswoode, East Harding Street, Fleet Street, and costs 9½d. It contains a good map of the Island and a large amount of valuable information concerning the cultivation of various products that are suited to Dominica.

TEA SEASON, 1901.

J. writes in *Capital*:—

The abnormal drought now obtaining over most of the tea districts looks as if nature was going to solve the question of reduction of crop, which seemed to defy human ingenuity to find a way out of, that did not bristle with difficulties; indeed whatever scheme was propounded, it was immediately combated as impossible; and a nostrum for the disease seemed as far off as ever until this drought set in, and now many of the districts will probably find, before the drought is over, that 5 to 10 per cent. of plant is dead; and it is a much more severe remedy than any of the proposed nostrums, for it means cultivating an area all giving 5 to 10 per cent. less yield, and which must continue for ever and ever for no matter how vacancies are filled in they never yield the same as original plant. Indeed, it is a question whether putting out new area to the same extent does not pay better, as from this the tea in cup is much stronger and the yield greater and earlier per acre—possibly double. We cannot say that we agree with Sir Patrick Playfair in his utterance that a fine dry cold weather was followed by a good "vintage," in fact we have always been led to believe the opposite. The human subject, when it has undergone a period of training, calculated to give it the opportunity of exerting its best effort, cannot long undergo the system without deleterious effects to its constitution. In the same way exactly is the tea bush effected, and season 1901 will not, we are afraid, be noted as a good vintage year, but it is possible, as in 1898, that it may be followed up by an extraordinarily favourable cold weather, and the vintage of 1902, like that of 1899, be of extra good quality and strength; but let us hope, if such be the case that the lesson of 1900 will not be repeated, and leaf of any kind plucked, foisted on the market. If our columns are looked back through in 1899, it will be found we sounded a word of warning and were somewhat taken to task by several of our contemporaries for even hinting, that it was not a good thing for the industry that such a prosperous year had succeeded a disastrous one, but that it would have been better for the industry generally had it had one or two more seasons like 1898, and our prophetic words have been more or less true, and we hope that the lesson taught will not be lost sight of; but, we are afraid, if an abnormal yield and good vintage came to pass in 1902, that the hope that springeth eternal in the human breast would be too much for the planters, the agents, and proprietors, and the

lesson now being seriously taught would be forgotten, and the dream often dreamt had come true, that the halcyon days often had come round with the swing of the pendulum of time. There are a number of economic problems now seriously interesting to those most intimately connected with the industry, that would go to the wall, were our words to come true, instead of being persevered with, as they should be, and a golden opportunity was lost at the last general election when the cry of a free breakfast table might have had some effect, notwithstanding the enormous increase of expenditure due to the Transvaal War. Now that the Government are secure for another septennial period, we are afraid that any attempt to lower the duty would be like the voice of one crying in the wilderness and attended with the same results. There is little doubt many subjects, which ought to, do not engage the attention of the Indian Tea Association, but now that there is a vigorous Chairman, and Vice-Chairman at work, we wonder they do not apply themselves to the question of freights and reduction of passage money for planters and their families. Shipowners complain of a high price paid for coals last year, but say nothing of the fine freight rates they were receiving. There have probably never been more remunerative rates for shipping than have obtained during the last two or three years, which is reflected by the shipping reports and dividends earned by the different public companies, and yet in face of all this a 10 per cent. addition to passage money is quietly accepted. Why do not the Tea Association in London and Calcutta put a stop to the present bondage of tea proprietors, and give notice to end the contract with the Conference liners, and let Calcutta, like Colombo, be a free port. There is any amount of tonnage knocking about in search of employment, and the carrying of Indian and Ceylon tea is so much run after that it would insure good competition, and might be carried remuneratively at 10s. to 15s. a ton less than that now paid. There is little doubt the opening of the Chittagong Port should have a tendency to breaking the present scandalous bondage of tea garden. This is practically now in view. Besides this there are many other economic problems which might just now be solved by unity, if such could be ever counted on, in this distressful industry.

COFFEE IN THE SURMA VALLEY.

The Indian Planters' Gazette's correspondent writes :—

Given suitable soil and shade there does not appear to be any reason why coffee should not grow and pay as well in the Valley of the Surma as elsewhere. But suitable soil and shade must be the very first consideration. As we mentioned in our issue of the 16th, the yield per acre in South Sylhet has not as yet been made public. Now we learn that this cannot be done, for the simple reason that the most of the land planted has been put down with the Liberian species 10′ by 10′ apart and the spaces between filled up with Arabian as a catch crop. Under the circumstances it would be difficult, if not impossible to give a definite estimate of what may be reckoned on per acre. We have advocated, when putting down fresh plant, to introduce the best Jamaica procurable, as the finest of this is now quoted on the London market at 125s. per cwt. Of course it is possible, we may say very probable, that the species which brings a top price when grown in Jamaica might turn out an entirely different berry if grown in South Sylhet. Given the soil and climate, elevation is now looked upon as only a secondary consideration. Formerly it was found that coffee was better flavoured when grown at considerable elevations above sea-level. But the fact was generally lost sight of that on the highest elevations the most suitable flavouring soils, as a rule, were to be found. Coffee of any species when grown upon strong alluvium naturally will not, as a matter of fact does not, produce such a well-flavoured berry as when it is grown upon soil which, to a certain extent, is composed of humus. The Liberian berry has been recently described as a heavy enough bean but wanting in flavour; but we have been, assured that when this species is grown upon a light laterite, which has been under forest, it has even a superior flavour to a great many of our Arabian growths, which are famed for their flavour. The flavour of the Liberian bean, even when grown upon alluvial land, is said to be improved so much when kept in the parchment and thoroughly seasoned, that it compares very favourably with good Arabian. Be this as it may there is no doubt about all the species improving much in flavour by keeping the beans in the unroasted state. Botanists, it would appear, have enumerated about sixty species of the genus cof and these are spread over various countries in both the East and Western hemispheres. According to a well known author most of these must be mere varieties resulting from accident soil, climate or cultivation, produced subsequently to the natura ing of the plant, for we know that all the coffee trees now gr in America and the West Indies are the progeny of one pl introduced in the year 1714, and yet botanists have individ ised no less than sixteen species in Brazil alone and nine Peru, whilst in the East Indies we have seven, and Africa credited with five. Among the Indian species at least one, Bengalensis Roxb., is a native of Sylhet and in former times u to be cultivated in Bengal. But all the species most valuable economic or commercial purposes are confined to Africa, or ar African origin. So intending growers of the flavoury berry South Sylhet have a large enough number of species to cho from to suit their soil and climate. The choice of a suita species is by no means the least important thing to be taken i very careful consideration. Although the present season's l drought is by no means normal, and cannot be taken as the aver of the South Sylhet climate, still it must be always borne in m that such a spell will be experienced from time to time. Th are species, if not varieties, of our finest coffees which st drought and certain conditions of soil and sunshine be than others. A writer recently accounted for the Arabian spe standing the drought better in South Sylhet than the Liber because the latter was essentially an ever-green tree, and that Arabian was either deciduous or otherwise according to clim soil and general environment. Although this may be to a cert extent quite correct, we would point out that there are cert kinds of coffee which stand sunshine much better than others are more productive when exposed than they are when shaded. the other hand, again, there are kinds which will not thrive at unless they are grown under shade. We are inclined to th that a moderate shade, that can be thinned when necessary, wil found to be a *sine quâ non* to successful coffee culture in So Sylhet. We wish the pioneers of this and other industries in t district every success. Coffee is by no means the only prod which is being tried. Some of them already give promise of coming very important staple products, which will not be limi to the Surma Valley, and we hope to be enabled to congratul the district of South Sylhet upon being in the very forefron success, as it certainly deserves to be for its tropical agricultu enterprise.

THE DUKE OF CORNWALL AND THE CEYL PLANTERS.

The presentation of the address of the Planters' Association t place at Kandy, shortly after noon on April 13th, in the Pavilio

The Planters' Association was represented by Messrs. Edw Rosling (*Chairman*), A. C. Kingsford, Joseph Fraser, W. D. Gibb E. Hamlie W. and F. Tatham, Patterson, Jas. Ryan, Major P Bliss, St. G. Carey, T. Farr, H. and E. Webb, J. Whith W. D. Bosanquet, H. J. Vollar, A. Coollingwood Smail, F. We ham, W. Sinclair, J. G. Crow, C. Ryan, Alderson Smith and Anderson.

THE ADDRESS.

Mr. Rosling read the address. It was presented in the fam gold and gem casket which Messrs. D. F. de Silva & Co. sen last year's Paris Exposition, and was on vellum. The text printed in black and gold with the initial letters in purple, rounded by an ornamental border illuminated by hand. Typ Ceylon scenes were embodied in this border, with flag trophies, in the centre at the top was the enlarged crest of the Associat with its motto "*Unitas salus nostra.*" The wording of the addr was as follows :—

To His Royal Highness the Duke of Cornwall and York.

May it please your Royal Highness,—We, the Planters' Asso tion of Ceylon, beg, on behalf of the Planting Community, to o Your Royal Highness, and Her Royal Highness, the Duchess Cornwall and York, a most loyal and hearty welcome to Kandy, Capital of the Planting Districts.

We feel that the great occasion which draws Your Ro Highness to the Southern Hemisphere and has created for us

portunity of receiving this gracious visit, will serve to knit, en closer than before, those ties of love which we all bear to our vereign and our Mother-Country, and will enhance our feelings pride in the magnificent Kingdom and Empire inherited by His ost Gracious Majesty King Edward the Seventh from Her late ajesty Queen Victoria, whose memory we shall ever revere.

Had time permitted a visit to Nuwara Eliya and the higher anting Districts, we have no doubt Your Royal Highness would ve been interested in the evidence of the great extent of the dustry which we represent.

We trust, however, that Your Royal Highness may carry away ne but pleasant memories of your stay in the island, and that you ll accept our assurance that in this small but loyal community ere is no more loyal body of men than the planters.

THE DUKE'S REPLY.

His Royal Higness said in reply:—

One of the most pleasant memories of my visit to Ceylon, nine- en years ago, in company with my dear brother, is the loyal and thusiatic reception accorded us by the planters of this Colony. he same kindly spirit has been displayed towards the Duchess d myself on this occasion; and we sincerely thank you for your arty welcome, and for the loyal statements expressed in your ldress. In 1882 the great tea cultivation was yet in its infancy d Ceylon planters were still engaged with one hand combating e disease which threatened their staple, coffee, and with the other eking for new products to replace or supplement it. To add to ese difficulties came a serious financial crisis; but this combina- on of misfortune was faced with that intelligent resource, and ith that pluck, patience, and determination which have ever aracterized the planters of Ceylon. It is owing to these qualities at your products have won the high position in the markets of e world which they have enjoyed. I feel sure you are fully alive the necessity in these days of keen competition of maintaining e same high standard of skill and energy for keeping and extend- g the position you have secured. I much regret that at the resent time your prospects are not so bright as usual. I earnest- trust that this depression is but temporary; and I shall watch ith interest for an early revival of prosperity, which you so well eserve. I thank you for the language in which you refer to the mportant mission with which I have been entrusted by my dear ther, and for your wishes that it may serve to knit even closer e ties of affection which bind together the Empire over which is Majesty rules. I shall not fail to convey to him your expres- ons of loyalty and attachment to his throne and person, and of our reverence for the memory of our late beloved and universally ourned Sovereign.

MARKET REPORT.

[*Per Mail advices of 29th March* 1901.]

COFFEE.

The London Commercial Record says:—A continued feeling of ulness exists in this market and the public sales drag on in a onotonous manner. Even fine qualities are not exempt from the ecline in prices, which varies from 2s to 3s per cwt. for the week. ast India has been particularly under the influence of the prevail- ng flatness and a large proportion of the supplies at auction were ithdrawn for want of adequate offers. At the reduction a fair mount of business was transacted in Costa Rica and Central merican descriptions. The market for "futures" has been strong- r and prices rose 1s per cwt., principally on moderate receipts nd a rise in Exchange closing, however, below this improvement, May delivery being 32s 3d, September 33s to 33s 1½d, December at 3s 7¼d, March (1902) at 34s 3d.

London ...	Santos ...	May delivery	... 32s 3d.
New York	... No. 7 Rio...	,,	... 5·60 cents.
Hamburg...	... Santos ...	,,	... 32 pf.
Havre ...	... Santos ...	,,	... 39 francs.

The public market will close on Wednesday next for the Easter ecess and re-open on the 11th proximo.

Auction supplies to-day consisted of 40 cases 990 bags East ndia, 92 bags Jamaica, 297 bags Salvador, 529 bags Mexican, 701 ags Hawaii, 431 bags Costa Rica, 590 bags Guatemala, 264 bags Nicaragua, 1,826 bags Santos. The sales went off without new eature; demand quiet and prices about unchanged.

At the Dutch Trading Co.'s public sale, held on Tuesday, in Amsterdam, 15,804 bags were offered and sold; good ordinary Java realised 32½c against 31½c valuation, and 30½c last sales held in Rotterdam. The following are some of the particulars:—

Lying in Amsterdam.

No.	Bags.	Valued at Cents.	Result Cents.
1	1,625	31½	32 @ 32¾
10	471	32	33¼ „ 33½
11	316	32	33½ „ —
12	305	32	33½ „ 33¾
13	207	30	31 „ —
14	403	30	30¼ „ —
15	250	30	30¼ „ 30½
24	358	38	37½ „ 37¾
26	249	37	37¼ „ 37½
27	264	41	43½ „ —
28	800	80	70¼ „ 72

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	16,432	14,242	11,788	9,637
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	5,459	4,888	4,879	5,252

The preceding figures exhibit—

	Tons.
In the Imports an increase this year of	2,151
Home Consumption an increase of	571
Export a decrease of	373
Stock an increase of	2,190

Auctions this week have passed off as under:—

CEYLON.—*Plantation*—6 casks 3 tierces 11 barrels partly sold, common bold 66s to 77s, good bold 107s to 109s, peaberry 50s

EAST INDIA.—Of 1,750 bags offered a small part sold:—*Mysore* smalls 44s. *Coorg*, smalls 42s to 42s 6d, middling grayish 52s. *Nellampathies*, smalls 42s to 45s, bold 57s.

JAMAICA.—4 casks 43 barrels 2 bags partly sold, at 31s for ordinary palish.

COSTA RICA.—Of 8,068 bags catalogued the greater past sold—smalls 30s to 47s, fine ordinary to low middling 42s to 48s, middling 48s 6d to 57s, good middling 58s 6d to 63s 6d, common bold 53s to 57s 6d, fair to good 62s to 73s, fine 85s, peaberry 48s to 81s.

GUATEMALA.—2,527 bags mostly sold, smalls 30s 6d to 37s 6d, fine ordinary 40s 6d, low middling to middling 42s to 51s, good middling 56s 6d to 57s, bold 58s 6d to 73s 6d, peaberry 48s to 61s 6d.

SALVADOR.—1,580 bags mostly sold, smalls 33s 6d to 34s, low middling to middling 43s to 49s, good middling 54s, bold 55s to 67s, peaberry 43s to 60s.

COLOMBIAN.—380 bags sold, fine ordinary 43s 6d, middling 48s 6d to 49s, good bold 53s to 56s, peaberry 45s to 45s 6d.

NICARAGUA.—454 bags partly sold, small 33s, good ordinary greenish 37s, bold 51s to 62s, peaberry 35s to 50s.

MEXICAN.—Of 196 bags offered 90 bags sold, fine ordinary dull greenish 42s 6d.

ECUADOR.—Of 894 bags 130 bags sold, fine ordinary bold 38s.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	2,295,000	2,916,000	2,627,000	3,637,000
Santos ...	6,961,000	5,278,000	4,862,000	5,517,000
Total...	9,256,000	8,194,000	7,489,000	9,154,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 11¾d, previous day 11$\frac{23}{32}$d.

HAVRE, *Mar.* 28.—Good average Santos March opened steady at 38¾f. and closed steady at 38¾f., May opened at 39f. and closed at 39f., September opened at 39¾f. and closed at 39¾f., December opened at 40¼f. and closed at 40¼f.

HAMBURG, *Mar.* 28.—Good average Santos March opened steady at 31¾pf. and closed steady at 31¾pf., May opened at 32pf. and closed at 32pf., September opened at 33pf. and closed at 33pf., December opened at 33½pf. and closed at 33½pf.

New York, *Mar.* 28.—Closing prices of No. 7 Rio were as follow:—

		Mar.	April.	May.	June.	July.
March	28...	5·50	5·50	5·60	5·65	5·75
March	27...	5·50	5·50	5·60	5·65	5·75

TEA.

Indian.—Auctions were about on a par with the previous week, *viz.*:—43,200 packages against 43,800 packages and 33,600 packages at the corresponding time of 1900.

The improved enquiry recently noticeable has continued, and prices for useful and fine liquoring descriptions as a rule were in favour of sellers. Common to fair grades, with mixed and stalky leaf, were difficult to dispose of unless at comparatively low rates, but others marked a firmer tendency. Fine and finest were well competed for and high figures were in some instances paid, among the best being—Assam, Pabbajan Co., B. O. P. 5s 2d and 2s 6d Samdang Estate, D. D. T. Co., B. P., 2s 7d, B. O. P. 2s; Hansura Estate, D. D. T. Co., B. O. P. 2s 2½d; Beesakopi Estate, D. D. T. Co., B. O. P., 2s 1¼d; Cinnamara Estate, Jor. T. Co., O. P., 1s 11½d, and Deamoolie Co., B. P., 1s. 11¼d per lb.

For 33,700 packages on Garden Account 7⅛d per ld. was obtained, versus 7¾d per lb. for 28,400 packages and 9¾d per lb. for 17,700 packages in the two preceding seasons.

In the month the following have been printed for importers:—

1901.	1900.	1899.
181,000 pkgs.	123,300 pkgs.	127,500 pkgs.

Making to date 1,463,000 packages of the 1900 crop which have passed the hammer contrasted with 1,437,000 packages and 1,396,000 packages to the end of March in the similar periods of 1899-1900 and 1898-1899.

Ceylon.—The quantity offered amounted to 24,000 packages opposed to 24,700 packages on the Tuesday before and 25,600 packages a year ago.

This market has benefited considerably by the better quality placed on it lately, apparently owing to finer plucking on many estates so that the assortment brought forward was more varied, and relief afforded to the fair and good kinds which were before in superabundant supply. Common hardend fractionally and from 5d per lb., upwards, quotations for both leafy and broken sorts were often appreciably above those current for the same lines in prior invoices. For fine Pekoes, Orange Pekoes, and Broken Pekoes irregularity was observable in the biddings, but choicest lots were in demand. Annexed are a few of the top results:—Henfold Estate, 113 packages, 11¾d; Delmar Estate, 113 packages, Diyanilakelle Estate, 105 packages, and Meria Cotta Estate, 55 packages, 11½d; Ferham Estate, 121 packages, and Holmwood Estate, 64 packages, 11¼d per lb.

The average is rather over 7d per lb. On the 21st instant it was barely 6¾d per lb., and 7⅜d per lb. twelve months back.

Catalogues issued in March comprised:—

1901.	1900.	1899.
111,500 pkgs.	*77,600 pkgs.	92,900 pkgs.
(Avge. 6¾d per lb.)	(Avge. 7½d per lb.)	(Avge. 8⅞d per lb.)

Java.—Only 360 packages were submitted which went off well but do not call for any special comment.

The undermentioned were printed in the course of the month:—

1901.	1900.	1899.
5,700 pkgs.	*7,200 pkgs.	3,900 pkgs.
(Avge. 6⅛d per lb.)	(Avge. 6¼d per lb.)	(Avge. 7¾d per lb.)

Deliveries.—The clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 26th March, 1901 ... ... 14,766,461 lbs.
Do. do. 1900 ... ... 30,676,453 „

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India ...	38,343	4,810	43,153
Ceylon ...	22,857	1,151	24,008
Java ...	362	—	362
Total ...	61,562	5,961	67,523

Also 1,096 packages from second hands.

*During one week no sales were held, dealers being engaged with clearances at Budget time.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Ja Tea Report, dated March 29th, 1901, says:—

Quantity brought to Auction in London from 1st June to da

	Indian.	Ceylon.	J
	Pkgs.	Pkgs.	P
1900-1901	1,502,082	1,091,373	5
1899-1900	1,503,327	1,007,923	5

43,831 *pkgs.* Indian
24,868 „ Ceylon
362 „ Java
} Total 69,961 packages were offered in public auc this week.

The export of Indian and Ceylon Tea from the United King last year shows that considerable progress has been made in sev different markets; had it not been for the depression in N America, exports would have shown a still greater increase.

Germany and Russia have both taken considerably larger q tities. South America is now becoming an important consume both Indian and Ceylon Tea, and the detailed figures show w satisfactory progress has recently been made.

Indian.

	1900.	1899.	1898.	1897.	18
U. S. A. ...	555,800	624,008	705,829	624,711	90
Canada ...	1,292,904	1,721,254	1,459,183	1,132,850	84
Newfoundland ...	109,511	91,011	47,014	47,328	5
Turkey ...	353,647	238,036	273,940	247,033	38
Holland ...	483,975	486,103	474,509	522,110	41
*Germany ...	3,132,666	1,838,233	1,528,401	1,098,703	40
Chili	454,496	323,899	210,623	206,525	
Uruguay ...	63,234	50,591	41,436	35,439	†27
Argentine Republic	135,937	90,861	70,802	44,487	
France ...	88,890	50,537	56,347	48,221	5
S. Africa ...	1,190,407	423,832	565,561	441,201	32
*Russia ...	1,283,909	727,253	1,377,019	537,083	27
Channel Islands ...	332,996	371,943	288,113	277,249	22
Denmark ...	96,016	197,646	238,670	91,111	9
British W. Indies...	57,614	62,665	37,637	33,801	2
Belgium ...	90,930	98,255	73,522	57,693	
Sweden & Norway	54,720	45,698	43,743		
Roumania ...	19,029	16,406	40,863		
Malta and Gozo ...	17,661	27,469	30,464	265,695	10
Gibraltar ...	28,502	31,859			
Peru ...	39,200	32,519	282,824		
Other Places ...	290,905	184,185			
Total lbs. ...	10,172,949	7,724,262	7,846,500	5,711,240	4,39

Ceylon.

	1900.	1899.	1898.	1897.	189
U. S. A. ...	987,500	1,391,930	1,299,716	1,624,774	1,40
Canada ...	1,820,531	1,837,562	1,865,450	1,376,679	1,26
Newfoundland ...	313,696	247,303	200,380	185,215	15
Turkey ...	65,284	20,379	37,693	16,812	1
Holland ...	311,993	278,938	255,185	262,046	24
*Germany ...	5,055,795	4,074,688	3,577,526	3,475,236	2,67
Chili	510,455	406,639	273,176	255,363	
Uruguay ...	65,085	47,830	39,460	29,892	†31
Argentine Republic	139,690	99,163	68,439	60,231	
France ...	133,111	83,867	89,207	75,424	7
S. Africa ...	1,031,031	490,522	737,232	541,105	44
*Russia ...	1,722,162	1,587,286	1,605,701	1,578,389	76
Channel Islands ...	579,131	466,952	454,082	413,494	40
Denmark ...	102,820	315,065	286,361	169,619	28
British W. Indies...	130,826	116,925	96,880	93,590	8
Belgium ...	151,311	163,084	108,327	75,341	
Sweden & Norway	135,879	112,892	90,137		
Roumania ...	15,113	9,124	8,700		
Malta and Gozo ...	47,672	40,696	65,691	450,775	34
Gibraltar ...	110,576	77,751			
Peru	44,611	18,519	363,844		
Other Places ...	301,161	257,274			
Total lbs. ...	13,775,433	12,144,389	11,523,186	10,683,885	8,49

† S. America. * Probably the bulk of the Tea exported to Germa was for Russia.

RESTRICTION OF OUTPUT.—A Circular has just been issued by the dian Tea Association urging upon Planters the importance of ving their adherence to the proposal of the Indian and Ceylon ssociations for restricting the output.

INDIAN.—With a generally strong demand the market showed mness, competition being especially keen for all better class as, of which there is a fairly large proportion in the Autumn op. Averages:—"Doom Dooma T Co. Samdang," 1/4¾; "Pabbojan Co.," 1/4¼; "Amal T Ests. Lattakoojan," 1/2.

Week's average of Tea sold on Garden Account 1901, 34,183 pkgs., . 6·95d. 1900, 28,755 pkgs., av. 7·64d.

Total Tea sold on Garden Account 1st June, 1900, to date, 1,244,384 kgs., av. 7·32d. 1900, 1,180,593 pkgs., av. 8·31d.

CEYLON.—The sale was again comparatively small, and prices owed a distinctly firmer tendency, common Teas being occasionly dearer, while choice liquoring kinds showed a distinct advance quotations. Quality continues to show improvement. Averages:—"Henfold," 11¾d. "Ang. Cey. & Gen. Delmar" and "Diyalakelle," 11½d.; "Ferham," 11¼d.; "Talawakelle," 11d. Average r week 7·08d. against 7·39d. in 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 331,788 kgs., av. 6·52d. 1900, 304,860 pkgs., av. 7·57d.

JAVA.—The few Javas brought forward were all of direct import. ompetition was strong, prices showing asome what dearer market.

Bank Rate 4 per cent. Exchange on London, three months' sight:—alcutta 1/4 3/16. Colombo 1/4 7/32.

COCOA.

The market is not very active, Ceylon remaining especially flat. t auction on Tuesday 4,586 bags were brought forward, and 2,100 ags sold—Guayaquil at 1s decline, other growths showing no hange. Of 1,317 bags Trinidad catalogued 920 bags sold at about aluations—fine 70s to 71s, middling to good 67s to 69s. Only 5 ags Grenada were offered; they realised 60s to 62s. 12 bags ominica realised 60s 6d to 61s, 6 bags St. Lucia 61s, and 5 bags amaica 60s 6d. Of 1,213 bags Guayaquil 560 bags sold at a epreciation of 1s per cwt., *viz*, common Caraquez 63s to 63s 6d, winter rriba 66s. 37 bags Puerto Cabello mostly sold at 120s for fine layed. 353 bags Haiti realised 62s to 62s 6d for fermented, and 8s to 59s 6d for grayish red. Of 280 bags African 30 bags sold at 3s. Of 63 bags Java a few lots sold at 35s to 40s for garblings nd broken. Of 1,176 bags Ceylon only 170 bags sold—fine bold nd medium red 90s to 95s, common to ordinary small and medium ls to 66s, and small, 54s 6d to 57s 6d. 110 bags Caracas and 3 ags Seychelles retired.

PEPPER.

BLACK.—The market has been dull in tone and value is lower in all positions, but at the close there is steadier feeling. About 100 tons Singapore have been sold during the week—at 6d for fair on the spot, at 6 3/32d for February-April shipment, at 6⅞d down to 6 1/16d March-May, at 6 3/32d for April-June, and at 6 5/32d down to 6⅛d for June-August. At auction on Wednesday, 60 bags Singapore retired at 6⅛d per lb. *To-day*, quiet and no sales in Singapore reported.

To arrive, business done in Tellicherry at 54s 6d to 54s per cwt. c.i.f. delivered weights continental ports, per April-May (s).

WHITE.—Very little business done. Sales of fair Singapore on the spot at 9d, and of fair Penang at 8⅜d. For arrival no sales reported.

At public sale on the 27th instant 17 cases Singapore were bought in at 10¼d to 10½d. per

GINGER.

COCHIN.—Only 99 bags ordinary rough Calicut were brought to the hammer, and these, in the absence of demand, were bought in at 35s per cwt.

JAMAICA.—In excellent request, and the whole of the 459 barrels offered sold at higher prices. Fair to good bright washed realised 47s 6d to 60s, low middling to middling 40s to 46s, common 35s to 38s 6d per cwt.

JAPAN.—123 bags dark slightly limed bought in at 38s per cwt.

CINCHONA.

The N. V. Vriesseveem cinchona-bark department at Amsterdam report the shipments from Java to Europe from January 18 to March 24 at 1,083,000 Amsterdam lbs., and the total from January 1 to March 24 at 2,073,825 Amsterdam lbs. The above figures do not tally with those of the Nederlandsche Veem monthly shipments, and are thought by many not to be correct. At the drug-auctions 11 bales of good bright flat broken Calisaya sold at 1s for sound and 11½d to 11¾d for damaged. One seron of broken Loxa quill sold at 1s 2d, and 4 serons of Huanoco ditto at 6¾d per lb.

QUININE.

The market has been very quiet this week, and prices are easier again in second-hands. After being firmer in the early part of the week, the spot price has declined to 1s 3d, with a small business thereat. August delivery has sold at 1s 3⅜d to 1s 3¾d per oz. Buyers generally are waiting the result of the Amsterdam bark-sales to-day, at which the quantity offered was larger than anticipated. It will also be noted that the average percentage of quinine in the manufacturing-bark has improved on this occasion.

(AVERAGE FOR ALL INDIA 6·95d., MARCH 29TH.)

GARDEN.	Total.		Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity		Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price.
Neilgherry ...															
Non Such ...	108½c		10½	50½c	11 1/1	58½c	9½	...	...	...	...	...	..	...	...
Travancore ...	1412		4·69												
Carady Goody ...	90		5¾	25	7¾	20	4½	25	6	20	3¾	...	...	...	...
Kan Dev H Co A ...	298	p	4½	...	...	86½c	4½	80½c	5¾	28	3¾	13	3½	91½c	2⅔ 5¼
,, Munaar ...	139	p	6½	32	6	...	...	78½c	7	...	...	...	...	29½c	6¼
Lockhart ...	15½c		4½	...	...	...	...	9½c	5	...	...	6½c	3⅛	...	...
Merchiston ...	241	p	4½	56½c	5	47	3¾ 4	92½c	5½5¾	...	...	26	3 3¼	20	3
Poonmudi T C Bo .	223	p	4¾	...	...	81	4¼4½	71	6¼	31	3¾	22	3¼	18 p	3¼ 5
Poonmudi T Co Br .	71	p	4¾	15	5¼	26	4¼	12	7	9	3¾	5	3¼	4½c	3
,, Poonmudi	112	p	4¾	24	6	45	4½	...	..	20	4	9	2¼3½	14 p	3 5
Stagbrook ...	81	p	6	23½c	9½	..	..		...	44	5⅛	11	3¾5¼	3	3¼
St Trav Co Ven ...	142	p	5¾	...	...	73	5¼	37	8	24	4¼	...	...	8½c	4
Wynaad ...	260		5.76												
Cholah Peak ...	44	p	5¾	...	...	15½c	6	12½c	9¾	8	4½	9	4	...	...
Chulika ...	45	p	5½	18½c	8	15	5	...	...	12	4	...	...	...	...
Pootoomulla .	107	p	6	...	...	29	6	31⅛c	8¾	16	4½	31	5¼	.	...
Walkers Achoor ...	64	p	5½	...	...	...	...	31½c	8¼	27	4¼	6	3¼	...	..

ROAD, MINING & ESTATE TOOLS.

MASSEY & CO.

Madras, 1st May 1900

		RS.	A.	P.
Picks, best steel, Miners', 5 lbs.	...per dozen...	17	0	0
Do. do. 6 „	... „ ...	20	0	0
Headed Shafts for Miners' picks	... „ ...	15	0	0
Picks, best steeled, Road, 6 lbs.	... „ ...	17	8	0
Do. do. 7 „	... „ ...	19	12	0
Mamooties, all steel, 9″ x 7″	... „ ...	11	0	0
Do. do. 10″ x 8″	... „ ...	11	8	0
Do. long-neck, steel, 5 lbs.	... „ ...	15	8	0
Do. do. 6 „	... „ ...	23	0	0
Do. do. 7 „	... „ ...	26	0	0
Quintanies, all steel, 12″ x 5½″	... „ ...	16	0	0
Do. do. 15″ x 6″	... „ ...	17	0	0
Felling Axes, round eye, 4 lbs.	... „ ...	26	0	0
Bill Hooks	... „ ...	16	0	0
Pruning Knives ...	... „ ...	12	0	0
Do. **Saws**	... „ ...	25	0	0
Cross Cut Saws, 4 feet long ...	... each ...	5	0	0
Do. 5 „	... „ ...	9	0	0
Digging Forks, 3 prong	...per dozen...	27	0	0
Do. 4 prong ...	... „ ...	29	0	0
Mamootie Forks	... „ ...	23	0	0
Shovels, Ordinary, all steel ...	... „ ...	17	0	0
Hammers, best steel, Rivetters, flogging, etc., over 2 lbs.	per lb. ...	0	8	0

		RS.	A.
Hammers, best steel Miners' Drilling (Anchor)	... per lb. ...	0	6
Do. do. Sledge ...	... „ ...	0	8
Hammers, steel, Road, over 3 lbs. (Tennis)	... „ ...	0	4
Do. do. do. 3 lbs. and under	... „ ...	0	6
Crowbars, iron, steeled points, English muster	... per cwt. ...	19	0
Do. do. do. ordinary „	... „ ...	15	0
Pitting Bars, iron, steeled points, ⅞″ x 3′—0″ 1¼″ wide at point	6½ lb. per doz.	13	0
Do. do. do. do. 3″	„ 7 „	14	0
Do. do. Octagon steel ⅞″ x 3′—0″ 1½″	„ 6½ „	20	0
Do. do. do. do. 3″	„ 7 „	25	0
Do. do. do. 1″ x 3′—6″ 1½″	„ 9¾ „	28	0
Do. do. do. do. 3″	„ 11 „	33	0
Steel Jumpers ... ... **SB**	... per doz. ...	26	0
Road Rammers, cast iron, under 12 lbs.	... „ ...	9	0
Do. do. do 15 „	... „ ...	8	0
Do. do. 15 lbs. and over	... „ ...	7	0
Wheel Barrows, galvanized ...	... each ...	23	0
Carpenters' Adzes	each Rs. 2-8 and	2	12
Anvils, best warranted	...per cwt ...	26	0
Grindstones ... ... 24″ x 4″ Rs. 10 / 30″ x 6″ Rs.24 / 36″ x 6″ Rs.28			
Bench Vices ... 3½″ jaw, Rs.15-0, 5″ jaw, Rs.34, 6″ jaw...		45	0
Single Splitters	...each ...	7	8

FOR PRIVATE SALE.

Mount Graham Coffee Plantation.

Cairns, N. Queensland.

The Plantation is situated on the banks of the Russell River, about Thirty-five (35) miles from Cairns, and within Three (3) miles of the proposed Terminus of the Mulgrave Tramway. It comprises

160 Acres Freehold
100 Acres Unconditional Selection.

The Improvements consist of

Comfortable Dwelling House
Numerous Kanaka Outhouses,

Also

25 Acres of Coffee in Full Bearing
Coffee Pulping Machinery, etc.

The crop coming on now looks well, and should produce quite Twelve tons by April next.

As an Investment this Property is well worth consideration. The crop of Coffee now coming on should be value for quite £800.

The Trees are all being well cared for, and the Property can be taken over as a Going Concern.

In addition to the clearing planted with Coffee, there are about 100 acres of Scrub felled.

The quality of the Soil cannot be surpassed, and the Property will bear inspection.

Splendid Water Supply. Age of Coffee 5 to 10 years.

Terms and full particulars on application to

D. R. LEWIS, Esq.,
Lake St.,
CAIRNS, N. Q.

[w. 6-4-01—20-4-01.]

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BOOT AND SHOE MANUFACTURERS

COIMBATORE.

	RS.
Gent's Balmoral Boots, Tan	6
Do. do. Black	5
Gent's Oxford Walking Shoes, Tan	4
Do. do. Black	3
Ladies' Lace Boots, Tan	5
Do. do. Black	4
Ladies' Oxford Walking Shoes, Tan	3
Do. do. Black	3

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[w. 13-4-01—t.f.o]

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 3rd proximo. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Coorg.

POLLI BETTA, *23rd April.*—*Weather*—Severe thunder-storm passed over the district on night of 8th. Over an inch of rain in parts. There has been little rain hereabouts since, though heavy rain has fallen in other parts. The atmosphere is surcharged with humidity. Yesterday 40 cents. of rain fell. *Crops.*—The season would have been another good one if there had been the wood on the trees. There will be good outturns in individual cases. *Labour*—is plentiful for the time of year. *General Health*—Fair.

Munzerabad.

April 23rd.—*Weather*—Unbearably hot in the middle of the day though somewhat mitigated by a strong West wind. *Works*—Manure and borer. *Health*—Fair. *Labour*—Abundant. *Plant diseases*—Borer is very strong this year; there are also many complaints of much wood going blind.

THE INDIAN TEA ASSOCIATION.

THE Indian Tea Association has changed its "official year," consequently its last "annual" report refers to a period of only ten months, *viz.*, from 1st March to 31st December, 1900. In some respects it is a more interesting report than usual to tea-planters in Southern India. Some of the points referred to are of direct interest to them, and we are glad to say that the bonds of fellowship between tea-planters in the North and their brethren in the South have been drawn closer, and are likely to become still more close. It must be acknowledged that planters in the South have not yet co-operated heartily with the Indian Tea Association in the matter of providing funds for the purpose of pushing Indian Tea into foreign markets. Some have, and a majority have expressed

their willingness to submit to a compulsory cess for the purpose of raising funds to be expended with this view. But the American and Foreign Market Fund of the Indian Tea Association still receives all too little practical support from the generality of South Indian tea-planters. Indeed, support from planters throughout India shows a falling off. As against Rs.1,05,000 in 1899-1900 only Rs.1,00,000 was received by the Indian Tea Association in 1900-01. Yet there was never greater need than there is now for energy and "push." Tea needs to be popularised in many countries, to be vigorously pushed in others; and this cannot be done without liberal expenditure. Unfortunately, the need for expenditure of this kind is always most clearly visible at times, like the present, when prices are low, demand slack, and the position of the industry unsatisfactory. It is specially disheartening also, at the present time, that circumstances should have so shaped themselves that there is a chance, if not a probability, that all the special efforts made at the Paris Exhibition to popularise Indian Tea in France may be neutralised by the action of the French Government.

On the other hand, planters may fairly assume a large amount of the credit due to those who have persuaded the British Government not to enhance the present tax on Tea. They are also taking steps to develop the demand for tea in India, where a large consumption may yet be worked up. They are manifesting an ever-increasing appreciation of their just claims, and the manner in which this has been expressed of late compares very favourably with some of the less successful representations made in former years with regard to very similar points. In regard to the 1-lb. draft agitation in London they have little to congratulate themselves upon; nor much more in respect to the small concession gained in respect of bonded warehouse charges in London. On the whole, however, they have begun to realise their strength as a body: the strength that proceeds from unity and union, the strength that is only attained by combination. More than this, they have learnt, or are learning, to abandon time-worn grooves and adapt themselves to the requirements of the times. All this is shown in the report under review, a careful study of which is commended to every tea-planter in India. They have already achieved much, and however little this may be in comparison with their aspirations it is all in the right direction, it is all encouraging, it is all an incentive to fresh effort along similar lines of progress. The position of tea-planters is not a very pleasant one as compared with what it was a few years ago. The position of the Indian Tea Association has improved and has been strengthened, and what this body has done for planters in the past is likely to appear small before the record of what it will have achieved by the time another five or ten years, at most, have passed.

On its own account, aided by the Local Government, it has engaged an Agricultural Chemist for the investigation of questions connected with the cultivation and manufacture of tea. It has been allowed to avail itself for a time of the services of Dr. Geo. Watt, the Economic Reporter to the Government of India. Through its influence a European Entomologist has been appointed to take charge of the Entomological Section of the Indian Museum, and to give attention to both Economic and Agricultural Entomology. These are among a few of its greater achievements, but even by its minor work alone it has earned the confidence of all engaged in the Indian Tea industry. The Association is a truly representative body, it is vigorous, its range of vision is comprehensive, its actions are, on the whole, well conside Hence the value of its annual report to planters. Every p shows what strenuous efforts have been made to gauge o advance the position of the tea industry; and we venture assert that the Association's power for good is stea increasing. There are always men ready to assert that Association of the kind is "a one man show" or "a C mittee show" and who by their very abstinence from an ac part in its affairs help to increase the risk of its becoming But few planters who read the report now under notice fail to see that the Indian Tea Association has prove powerful protector and promoter of their interests. become still more powerful, it needs greater support and m active co-operation than it receives at present.

BRAZILIAN COFFEE.

Although in the matter of currency the Brazilian cof planter has a great pull over his competitors in India, his is by no means free from troubles. Even in regard to c rency he has had cause for anxiety of late, for there has b an unaccountable rise in the milreis, and this has reduced currency prices of his coffee. Labour supply is short If prices do not improve, there may be labour enough; if prices make it worth the while of all planters to pick th crops there will be a scarcity of labour for the purpose. prices and the milreis stand now, it is said that a great ma planters will let their crops rot rather than spend more the picking than they could hope to regain by the s Although, therefore, a good deal has been said about enormous crop that is expected, it cannot be safely cal lated upon until actually market. Last year the gr reduction in currency prices caught Brazilian planters *a* they had gathered their crops, and they had no recourse to sell. This year circumstances are very different, and ma a planter who sees a fine crop in prospect must be ful bitter reflections on the possibility and even the probabil that he will have to let it rot on the trees. We can imag no greater trial of a planter's temper than this. The Brazil coffee-planter may yet repeat in his own, the history of t mythological celebrity—Tantalus.

PROPOSED TEA EXCHANGE IN LONDON.

Several attempts have been made lately to arrange for sale of Tea in London without estate or case marks. Hithe every effort has resulted in failure, and we are by no me convinced that this is not just as well for the tea indust However, on February 7th a private meeting of dealers a their friends was held at the London Chamber of Comme and the following resolution was passed:—"That in opinion of this meeting there appear to be many advanta in a Tea Exchange, and that the following gentlemen appointed a Committee to draft a scheme, including a finan programme and a set of rules and bye-laws for considerat and approval:—Messrs. Bryans, Cruickshank, Rutherf and Bois; Messrs. Long, Lloyd, W. T. Wilson and Thompson; Messrs. Lecky, Smith, Appleton and Brook A set of rules sixteen in number was drafted, and the me randum and articles of association were drawn up. intention was to start a Tea Exchange, after the fashion i small way of a Stock Exchange. According to the Lon

correspondent, a fair estimate of the members of the Exchange is given as :—

Growers and Importers, etc.,	about	...	80
Brokers	,,	...	40
Dealers and Blenders	,,	...	80
Warehouse Keepers	,,	...	15
			215

The expense of running the Exchange is put down at £3,500 per annum, but against this is the saving effected by not using the present public sale-room, estimated at £1,400. Thus the net expense is £2,100 per annum. The details given are not sufficient to enable us to weigh the scheme in the balance. That growers should join it shows that *they* think there is money in it ; but the same may be said in regard to dealers and brokers. If there is any idea of arranging for operations in "futures," the new move is, viewed from the planters' standpoint, blunder. Experience has proved that, on the whole, transactions in "futures" tend much more towards a depression of prices than towards their enhancement. In any case, it would appear probable that whenever rubbish is offered, if any ever is, under the new scheme, the chances of tracing it home to the culprit who put it on the market will be greatly diminished. Moreover any estate that has already achieved a good reputation for its mark is likely to be very chary of abandoning the prestige attaching to its mark, the outward and visible sign of its real merit.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

On 18th April, 1901, the General Committee of the Indian Tea Association (Calcutta) issued their Monthly Return of Sailings and Daily Customs Entries of Tea from Calcutta, and also a Return of Exports of Ceylon Tea for four years up to 1st April, 1901 :—

Exports of Indian Tea from Calcutta.

	1901. Lbs.	1900. Lbs.	1899. Lbs.
Sailings to Great Britain in March.	1,960,799	287,393	805,894
Sailings to Great Britain from 1st April to 31st March ...	160,487,154	149,330,050	135,402,527
Sailings to Australia and New Zealand in March	771,539	116,375	*Nil*
Sailings to Australia and New Zealand from 1st April to 31st March	10,350,715	8,340,665	6,293,950
Sailings to America in March ..	58,309	73,344	19,114
Sailings to America from 1st April to 31st March	4,229,236	6,249,729	3,232,027
Sailings to other places in March ...	363,967	324,648	214,448
Sailings to other places from 1st April to 31st March ...	10,997,164	8,172,299	9,136,740
Total Sailings from 1st April to 31st March	186,064,269	172.092,743	154,065,244

			Lbs.
Daily Customs Entries for Export to Great Britain from 1st April to 31st March ...	...	1901 ...	162,095,661
Do.	do.	1900 ...	149,008,481

Exports of Tea from Ceylon.

Total Exports from 1st January to 1st April	...	1901 ...	34,810,986
Do. do.	do.	... 1900 ...	33,982,329
Do. do.	do.	... 1899 ...	28,843,453
Do. do.	do.	... 1898 ...	28,152,560

Yours faithfully,
W. PARSONS,
Secretary.

Statement showing the Exports of Tea to Sundry Ports during the month of March, 1901.

FOREIGN PORTS.

				Lbs.	
Trieste	...	...	...	510	
Copenhagen	...	...	...	1,000	
Marseilles	...	...	...	235	
Bremerhaven	...	...	...	2,340	
Hamburg	...	...	...	21,883	
Naples	...	...	...	30	
Rotterdam	...	...	...	120	
Constantinople	...	...	...	30,727	
Cape Town	...	...	...	3,200	
Zanzibar	...	...	...	300	
Mombassa	...	...	...	310	
Port Said	...	...	...	640	
Suez	...	...	...	5,140	
Aden ...	...	...	...	9,429	
Hong-Kong	...	...	...	21,349*	
Shanghai	...	...	...	7,355	
Bushire	...	...	...	40,510	
Bunder Abbas	...	...	...	28,866	
Penang	...	...	...	780	
Singapore	...	...	...	2,077	
Trebizonde	...	...	...	35,504	
					212, 305 lbs.
Bombay	...	...	125,296		
Kurrachee	...	...	950		
Other Indian Ports		...	25,416		
					151,662 ,,
		Total	...	...	363,967 ,,

NOTES.

India's Tea Exports.

186 million lbs.

The total of Indian tea exported, for the year ending March 31st, was

Samoa.

Vanilla and Kola are said to promise well in Samoa, and Rubber, it is thought, should also succeed.

Coffee.

The total production of coffee for the season of 1901-1902 is estimated by the four leading brokers of Rotterdam at 16,677,000 bags.

Coffee in London.

Telegraphic advices, dated 23rd instant, state that present stock is 19,191 tons. Fortnight's landings, 3,800 tons ; Deliveries, 2,400 tons.

Java Coffee.

The latest estimate of the private Java coffee crop is 170,000 piculs Java and 110,000 piculs Liberian, as against an outturn of 360,000 piculs Java and 95,000 piculs Liberian last year.

Some Brazilian Figures.

The *Rio News* says : "In the ten years ending December 31, 1899, the State of Rio de Janeiro exported 749,425,837 kilos. of coffee, against 1,165,698,152 kilos. in the previous ten years. The decrease was 371,272,315 kilos."

Coffee in Samoa.

In his annual report for 1900 the British Vice-Consul, Samoa, reports : —Coffee has been a failure. I learn that even the hardy Liberian coffee introduced a few years ago is now suffering from the same disease that destroyed the Mocha and other varieties.

* It is understood that the bulk of this tea consists of transhipments for the United States and Canada.

Darwin and Tea. At the last meeting of the Chartered Bank, the Chairman congratulated the Indian Government on setting aside the profit on coinage and said that the survival of the fittest seemed the only solution to the rivalry between Indian and Ceylon tea, unless it was generally agreed to reduce picking for two or three years.

Tea in the U. S. The *American Grocer* states that the amount of tea in warehouse on January 31, 1901, at all points, was 54,881,219 pounds, of which 35,463,192 pounds were held in New York, 9,362,076 pounds in Chicago, and 5,337,857 pounds in San Francisco. At the same date in 1900 the total was only 45,702,913 pounds.

Tea and the Budget. Sir M. Hicks-Beach referred to tea in his Budget speech as follows:—Tea is already taxed 75 per cent. of its value, and is the produce, mainly, of India and Ceylon. It is a crop in which our own fellow-subjects at home and abroad are deeply interested; and the trade, largely owing to over-production, is by no means in a satisfactory condition.

A Present to Royalty. In response to an inquiry, H. R. H. the Duchess of Cornwall and York, while in Ceylon, consented to receive a present of a small case of tea from Mr. S. P. Jeffery on behalf of Sir Thomas Lipton. The tea was grown and specially plucked from Dambatenna estate, and the case was to be sent to the "*Ophir*" for the use of H. R. H. the Duchess—*Toujours* Lipton.

The "Resting" of Tea. It is argued in a Colombo paper that, provided the jât is fairly good and the climate not too dry, the "resting" of tea is undoubtedly beneficial, but the only instance adduced in support of the assertion relates solely to *young* tea. How about *old* shrubs? If planters mean to "rest" their young shrubs that are not in bearing, we do not quite see when the reduction of output is to come in!

"High" Tea in Ceylon. One of a crop of "Specialists" recently raised by the *Ceylon Observer* writes:—"I consider for the last six months as far as Dikoya and Dimbula are concerned, we have had an exceptionally good season for tea, and although finer plucking has been resorted to, I should doubt if the crop was any less than in previous years. We have had no really dry weather, and I do not think that we need fear any big rush in the rest of April or in May."

"Prune Coffee." A corporation has been organized in San Jose, Cal., to manufacture prune "coffee," to take the place of tea and coffee. The beverage is to be composed of 70 per cent. prunes and the remainder of cereals, and absolutely free from coffee, chicory, extracts, or chemicals. Vouchers for the new beverage it can't be distinguished in taste from real coffee. Alre banana "coffee" is on the market and is sold in large quan ties. It is pronounced a great success.

In Letters of Red. Mr. James McGuane, the Mana of the Boston branch of the "Sala Tea Co., last week, says the *Canadian Grocer* of 22nd ultir did the largest business in the history of the branch, and was so elated over it that his report to head-quarters Toronto, was in large letters of red. Mr. McGuane, was, it will be remembered, married a few weeks ago, presented the other day with a handsome tea service by firm and its employés. With a helpmeet and a silver service, an increased trade is only what might be expecte

Amsterdam Bark Market. Further particulars have arri of the last cinchona auctions held Amterdam, and show that the bark was divided as follows *Succirubra*, 116,913 kilogrammes; *Ledgeriana*, 444,662 k grammes; *Hybrid* and other kinds, 63,405 kilogrammes. the total thus formed, root bark formed 99,567 kilogramm The exports of Java bark for March were 864,000 Amsterd lbs., against 650,000 Amsterdam lbs. last year, and 927,(Amsterdam lbs. in 1899. The total for the two months 2,591,000 Amsterdam lbs., against 1,894,000 Amsterdam last year, and 2,016,000 Amsterdam lbs. in 1899.

Coffee in Cochin. During 1899-1900 there were coffee estates in Cochin, compris an area of 8,502 acres. Of the cultivated area, 3,699 ac were under mature and 417 under immature plants, as agai 3,451 and 219 in the previous year. The total yield coffee during the year was 489,740 lbs. or an average 132 lbs. per acre of mature plants, as against 220 lbs. in previous year. The number of persons permanently employ on the estates throughout the year was 646 and the avera number of temporary hands was 1,240. The amount of qu rent due from the estates was Rs.12,719, which with arrear of Rs.600, made a total of Rs.13,319, of which a s of Rs.12,494 was collected, and Rs.375 written off, leavi a balance of Rs.450 at the end of the year.

The London Market. Latest mail advices regarding London market deal with the we just before Easter, a time when the "holiday feeling" is up all classes. As a consequence there is nothing much to learnt from the reports that have come to hand. In sta articles, such as coffee, sugar, tea, cotton, pepper, clov etc., little or nothing of importance occurred, only in a few the smaller markets belonging to the spice and drug tra a little activity was maintained with difficulty. In spic ginger displayed a better tone, owing to a sudden dema for cut descriptions on the part of Continental buye Several hundred packages, mostly consisting of poorly native sorts, have been taken out of the market, which prompted prices to harden and has lent a more promis aspect to the market.

The London Tea Market. Messrs. Gow, Wilson & Stan report in a cable dated 18th insta that the market generally is steady, and that the market medium liquoring Pekoes and broken Pekoes as well as

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nicholson's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf people, unable to procure the Ear Drums, may have them free.

Address—No. 989 D, THE NICHOLSON INSTITUTE,
Longcott, Gunnersbury,
London.

[w. 26-5-00—26-5-1901.]

mmon Pekoes and broken Pekoes is also steady. The price fair liquoring Ceylon Pekoe Souchong is 5½d and the erage price of Ceylon tea sold on garden account this week as 7¼d (half a farthing down)—as against 6¼d and 7⅜d spectively in the corresponding week last year. Reuter ports that the tone of fine qualities of Ceylon tea is steady d others are firm. Pekoe Souchongs are quoted at 4¼d and e average for the week at 7⅜d as against 7d quoted for dian tea. 32,000 packages of Ceylon tea were offered for le, of which 30,000 were disposed of; while of the 33,000 ckages of Indian tea offered, 30,000 also found purchasers.

ina Tea shipped to Canada.

The *Canadian Grocer* says :—The exports of tea from Shanghai and Yangtsze ports for the season 1900-901 to February 11, have been as follows: To Great ritain—Total to date, 8,483,390 lbs. black and 3,394,957 do. reen; corresponding date last season, 10,407,178 lbs. black nd 3,384,086 do. green. To United States—Total to date,),396,043 lbs. black and 13,619,705 do. green; corresponding ate last season, 5,393,179 lbs. black and 14,373,236 do. green. o Canada—Total to date, 845,158 lbs. black and 945,319 do. reen, against 459,031 lbs. black and 1,000,670 do. green last eason. Export of black tea to Russia direct and Russian Ianchuria, 39,220,000 lbs., as against 28,810,000 lbs. to corresonding date last season; export of green tea to Bombay, 896,000 lbs., as against 1,254,129 do. last season; do. to atoum, 4,326,000 lbs., against 4,722,600 do. last season.

offee in London.

The Santos receipts have at last shown some signs of falling off, and, s expected, remarks the *Produce Markets' Review*, quotations consequence hardened, the advance being as much as 1s. er cwt. Yesterday, however, they were again too heavy, nd prices fell back 3d to 6d without attracting much busiess. The demand at the auctions has remained slow, upplies continuing heavy. Importers have again shown a esire to meet the market, and values have accordingly given ay, notably for bold Costa Rica and Guatemala for export, hich had been in strong demand and relatively much dearer han the medium and small sizes. These latter have not shown uch change, though prices were generally irregular, and, in me cases, about 1s cheaper. Only smaller supplies of East ndia have been offered, and these have met with little emand and were difficult to dispose of; in fact a large proortion had to be withdrawn, though sales have since been ade at better prices than were offered at the auctions.

eylon Green Teas in Canada.

One of the fruits of the efforts that have been put forth to open up a market in Canada for Ceylon green as is, says the *Canadian Grocer*, to be seen in the fact that very wholesale house in Toronto is now handling these teas. f course, the quantity is relatively small in comparison with eylon black teas and Japan green teas, but the significance that so many houses are now dealing in them, whereas a w months ago only one teapackage firm dealt in them. nother significant fact is that during the last few weeks eylon green teas have begun to figure in the Toronto market eports, while brokers can be seen "drawing" them in the mple-rooms of the wholesale houses, something quite nusual. The following is a copy of a letter, dated March 7, ceived from H. Head, Cloyne, Ont., by the "Salada" Tea o.: "Kindly send me another 60 lbs. of 'Salada' Ceylon green tea as soon as you can, as I have only 5 or 6 lbs. left. Your tea has given great satisfaction. It sells very fast; and it is one of the very best teas I ever drank."

The Reduction of Output scheme.

The Indian Tea Association (London) announce that a sufficient number of Indian concerns have agreed to reduce the output by 10,000,000 lbs., conditional on the decision of Ceylon respecting its 8,000,000 lbs., which is now awaited. The *Ceylon Observer* makes the following ungracious comments upon this news :—"India has for once stepped out and passed Ceylon in its serious, practical facing of the problem of overproduction. 'A sufficient number of concerns' has agreed to reduce their output. Meanwhile Ceylon Companies—16 of them, locally, yesterday and to-day—are variously voting they will and they won't do likewise. The trade here seems to be against voluntary *direct* reduction. But we have yet to see whether the local 'I-go-not-and-afterwards-he-wents' will not effect more to the advantage of the tea industry, by finer plucking and careful manufacture than the 'I-go-sir-and-he-went-not-s' of our Indian brethren, with their simply reduced outturn apart from the question of manufacture or coarse plucking." It should be remembered that India's undertaking to reduce output is conditional upon the Ceylon men falling into line.

The Depression in Coffee.

The principal depressing factor has been the movement of the Brazil crop. The receipts at Santos have been unusually large for the season of the year, running considerably in excess of general expectations. The continued full movement of the crop, taken in connection with the fact that the receipts at Rio and Santos to date are 8,893,000 bags, and that the receipts during May and June, owing to an expected early movement of the new crop, are expected to amount to 750,000 bags, leaves little room for doubt that the receipts for the crop year, July 1, 1900, to July 1, 1901, will reach 10,000,000 bags. The advices received from Brazil quite generally are of the opinion that the yield from the growing crop will be in excess of all previous records. The four Dutch brokers in their circulars issued at Rotterdam at the close of February estimated the next Rio crop at 4,000,000 to 4,250,000 bags and the next Santos at 7,250,000 to 7,750,000. This large prospective supply of coffee, together with present large visible supply, naturally has a tendency to make many of the trade pessimistic as to the future of the market so far as prices have been concerned, and there has been comparatively little force to the buying power.

Colombo Tea Sales.

The first tea sale after the Easter holidays was held on the 9th, when about 18,896 packages, equal to about 1,512,546 lbs., were offered. The quantity was the largest offered so far this year, the previous big sale being on the 4th January, the first sale after the holidays, when about 18,227 packages, equal to about 1,401,630 lbs., were offered. The sale passed off with active competition at generally firm but irregular rates. There was considerable Russian competition. Prices generally were far above London. A merchant writes to a Colombo paper: —"The large tea sale yesterday made many feel it would pass off flatly and at lower rates; but thanks to the Russian buyers, there was excellent competition and prices were good all round. For years I have maintained that Russia would

be a far better market to exploit than America, the Russians being large consumers, close at hand, with excellent shipping opportunities, but our old friend Rogivue had hard work to get even a moderate grant from the 'Thirty Committee.' Mr. William Mackenzie's day is past. Ceylon wants a younger man who will live and travel through the country, and not try to work the oracle for six months in the year from a comfortable chair in London."

The Position of Ginger.

The whole position, the future of ginger, would appear, remarks the *London Commercial Record*, to be hinged on the movement of Jamaica Ginger. Had it not been for the large supplies of this description, the present position of our market would be a totally different one to what it is. Jamaica ginger has been the millstone round our neck ; its weight and low prices have frightened bull speculators, who, having regard to the favorable position of Indian sorts, appear ready to take up the article, and good and profitable business would have been the result. As it is, the season in India has practically closed for want of supplies, and the entire business done on arrival terms will hardly exceed 100 tons, a very poor result, indeed, compared with the large quantities which used to be contracted for in former years. We had become accustomed to look for some movement in ginger every season, but this year business has been confined to the Indian dealers and planters, who, it appears, have been operating against one another, much to the discomfort of the dealers, who, following a bear tactic, have been cornered, and will, no doubt, have to pay the piper for their rashness, unless, indeed, the hope expressed in some quarters be realised that some stocks are held back by planters with the view of squeezing prices still more. Whatever those stocks may be, they will, we fear, not alter the general conviction that the crop has turned out smaller than anticipated, that, in fact, it will be the smallest for many years past. It will take about one year before the next new crop makes its appearance, consumers will, therefore, do well to look after their stock, for it is not unreasonable to suppose that prices will experience a considerable advance, especially if the Summer should prove a hot one.

GENERAL ARTICLES.

THE NEW CEYLON TEA PAVILION IN PARIS.

A Paris lady resident writes to the *Times of Ceylon* :—

A flutter of excitement has been noticeable among the fashionable Parisian Tea Rooms by the appearance of a new Ceylon Tea Pavilion, which opened this month in the heart of the gay capital. This clever enterprise is strongly supported by Mr. R. V. Webster, whose interests are cleverly managed by Mr. Van Allen, his chief agent in France. The salon is unique for artistic charm and distinction, together with comfort and accommodation, for the fitting up is all that could be desired. Chang and the Cingalese boys, sent over by Mr. Webster, add a picturesque note to the refreshing surroundings of variegated green tapestried walls, dadoed with mahogany, and white-ash panels. From behind tall palms and floral decorations, and on an ingeniously arranged balcony, a Tsigane orchestra renders captivating music which is highly appreciated by the elegant *habituées* who congregate *en masse* to sip the delightful beverage known to Parisians as "Quaker" tea. This modest, but cute, little "Quaker" is well represented, for he appears in silver on the spoons and forks; whilst his well-known figure decorates all the tea pots and cups. Success has undoubtedly crowned this new tea salon, which is now a *rendezvous* for all notabilities in the social world of Paris. Beautifully dre Parisiennes meet their friends daily at this charmingly arran tea pavilion and show their appreciation by giving tea par among their friends. At the entrance a prettily carved wood d is banked up with packets of teas and two large glass cases dis rare specimens of "silver tips." It is extraordinary how the of this tea increases daily. These packets guarantee the Fre public securing pure Ceylon tea and are a safe-guard aga mixtures that are being sold under the title of Ceylon tea. Cer dealers had been taking advantage of the popularity of the Cey Court Tea during the Exhibition to push inferior teas. Parisi may not yet have acquired the excellent knowledge of a "tea tast but they certainly know when the flavor of the beverage they d is pleasant and Mr. R. V. Webster will be known as the man has helped them to appreciate good tea. The opening day was affair of social elegance when the graceful *movements* and q service of the Cingalese boys charmed all the guests to whom t presented bouquets of flowers. Notably among those present w the Baronne Rothschild, the Comte and Comtesse Sessmaisons, Comtesse de Lesseps, the Baronne de Ziegesar, the Comtesse Frise, Dr. Thyssin, Comte Constantin, M. and Mme. J. Porges a a whole host of all that Paris counts among its most elegant m daines. Mr. and Mrs. Van Allen are both energetically inter ing themselves in a manner that can only end in a complete succ for the Ceylon Tea Pavilion in the Rue Caumartin, whilst Mr. R. Webster's re-appearance is only needed to make those pres imagine themselves once more in the Exhibition grounds.

TEA GROWING AT BATOUM.

Mr. E. P. Willesford, who recently quitted Ceylon Batoum, there to show the Russians how to compete with Spicey Island in the growing of tea, has sent in a lett dated 18th March, 1901, to the *Times of Ceylon*. We ta the following extracts :—

We arrived at Odessa on the evening of the 28th Januar 19 days out—and landed next morning after the troops had dis barked. I was met on board here by a young gentleman who is act as my interpreter on the estate—he is an Austrian, born Moscow, and has spent some years in America and a few month England and speaks English well. He was kindly sent by Mr. Pop the proprietor of these estates, to assist me on my journ After a couple of days in Odessa, where I had to get some warm clothing, we took steamer down the North Eastern Coast of Black Sea calling at many ports, including Sevastopol and Ya in the Crimea: from Novorosisjk to Batoum the weather was foggy, we had to lie to, and sound foghorn and bell constan several times. At 1 p.m. on 5th February I landed at Batoum, drove out to my new home. Mr. Popoff owns three estates in Caucasus near Batoum; the principal one, Prevolnoyer, is wh I live. It is about 2 miles drive from Batoum—the hills, wh are very similar to those in Ceylon, run down close to the sea— house is situated on the top of the highest, overlooking a F and with the whole of Batoum and a long line of sea coast to north of it below. My interpreter lives with me, and there two rooms in the house reserved for Mr. Popoff's use when visits. The factory is on this estate. About 2 miles further inl is another estate called Zawatnoyer, and the third estate, Otrad yer, is reached by rail (station on the estate) 8 miles from Bato Out of 15,950 tea bushes brought by Mr. Popoff from China, Jap Ceylon, Himalayas, Assam and Java, only some 2,760 are alive; but there are on the three estates a total of plants put to end 1896 equal to 17 acres, and in 1897, 24 acres—taken at 2, to the acre—there are now in all about the equivalent of 185½ ac planted. After I had thoroughly gone over these three est I proceeded to Moscow—a day and night by steamer and 52 ho by train—to interview Mr. Popoff. I found the cold *too terri* in spite of the fur coat Mr. P. was good enough to lend me! estate matters, as conducted in Ceylon, were most thoroughly g into with a view to the introduction of such changes in working might be suitable here. It was decided that no new cleari should be opened this year, but that the existing area should worked up to a better state than at present. We were delayed gale on our return journey to Batoum. The hill sides are terra and the banks of the terraces turfed—from a distance this

a very untidy appearance—the levels of the terraces are dug two feet deep and planted, the flat land is also dug in a similar way and every root and stone removed. There are two large glass houses for germinating seed. At the present moment we are expecting from China 665 maunds of tea seed! which, planted 4′ by 4′ would, if all germinated, require nurseries to the extent of 81½ acres including drains, etc.!! and there are now *three* millions seedlings in nurseries. They tell me they have found pruning a mistake, and before last Winter only cut off the *ends* of each branch with scissors. The flush is now coming on, but has been delayed this year by the cold weather; in about a fortnight I hope we shall begin plucking and it will be my duty to give the order for this work to be carried out. My especial duty is the manufacture of the tea. There is a good factory—*all* iron, withering loft above with jute hessian tats—it was built by Messrs. "Sirocco" Davidson, who also supplied all the machinery, *viz.*:—12 H. P. steam engine, roller, dry tea sifter and equaliser, ditto cutter and equaliser, oxidizer, downdraft sirocco, packer, machine for compressing pillules and hydraulic press for tablets, and electric machine. Also, Chinese hand sieves, pans, chulas and winnowers. It is lighted by electricty; there is a telephone from the factory to the office and thence to my house.

Each of the estates is worked by a head-gardener with an assistant, the labour being Turks and Grozines—all *men*. The office and financial part is managed by a gentleman with an assistant, the latter being also a dispenser. A weekly meeting of the three gardeners, the book-keeper and myself takes place, when the work being, and to be, carried out is discussed, it being necessary for each of us to visit the three estates weekly. At these meetings we air our opinions and pass them on to Mr. Popoff, who decides what is to be done. Should the others differ from me on what I consider a vital point I am to write or wire to Mr. P. direct.

The crop will be only some 12,000 lbs. of tea this season, as I have advised husbanding a great part of the estate.

I called on the British Consul here, Mr. Patrick Stevens (Badminton Club), who was very civil. He showed me samples of Indian *green* teas which he says are largely consumed in the Asiatic provinces. (By the way, I am still in Asia!) On the 1st instant I entered in my diary that I thought it would be long, if ever, before Indian or Ceylon teas (black) ousted Chinas in Russia, for the reason that they do not lend themselves to the customs of the peoples, as does the China tea; and Mr. Stevens used to me almost identically the same words. The Russians like *very* weak tea, *very* hot, and *plenty* of it at a sitting, many times a day. The China article is put into a teapot with only a little boiling water and kept on the top of the Samovar (or urn) where it is continually "drawing," a little only of this is poured into a *tumbler*, which is filled up with boiling water from the Samovar, two or more lumps of sugar are added and generally a slice of lemon—it is *rare* to see milk used—the teapot is replenished with a little boiling water on the old leaves continually. This method cannot be carried out with Indian or Ceylon teas as, after the five minutes' "drawing," it begins to cool and it would oe difficult to make it in sufficient quantities for their constant use. Indians and Ceylons are nicer with milk than with lemon. The poor classes drink an immense quantity daily, *very* weak; and they could not get milk.

INDIAN TEA SEASON OF CALCUTTA, 1900.

Messrs. J. Thomas & Co. have published the following review of tea season of 1900:—The season which has just closed may be said to be without a parallel in the annals of the industry. Never within our recollection has the range of prices fallen so suddenly to such an abnormally low ebb, more especially as regards the lower grades; and it would be impossible to depict a more disastrous year for those who are concerned in the welfare of the trade. It would appear that the unfortunate result is more or less to be attributed to over-production or in other words, quantity at the expense of quality; at the same time it must not be overlooked that a considerable increase of area came into bearing, and under somewhat favourable conditions the outturn was greater than was originally estimated. In consequence of the war in South Africa and other unforeseen complications, the Chancellor of the Exchequer found it necessary to impose an increase of duty of 2d per lb. now representing almost 80 per cent. of the *ad valorem* value, which must at once appear to be an unreasonable tax. The result of this burden has seriously affected the position of the industry, inasmuch as the producer has suffered from the enhanced levy, and not the consumer, as presumably predicted by the Imperial Government. We have had during the season to deal with a crop of 187½ million pounds, which shows an increase of 12¾ millions as compared with the figures of the previous year. The market opened on May 18th, somewhat later than usual, owing to unfavourable weather and severe hail in most of the manufacturing districts, which will explain to some extent the poor quality of the early produce. Towards the end of June, an improvement was noticeable and continued until the month of September, when undoubtedly the later arrivals appeared to represent a coarser style of plucking. There was, in consequence of the trouble in China, an increased demand for the commoner grades, which, however, after a few weeks, subsided. The closing sales were marked by a decline in prices for all undesirable classes whereas, anything possessing attractive quality met with ready support. During the past season 587,000 packages have been sold here against 565,874 packages in 1899, and 575,683 in 1888.

With common kinds selling at an almost unprecedentedly low range, every inducement was offered to these markets, and it is gratifying to note that full advantage was taken of the opportunity. It is now evident that Calcutta has become an increasing centre for distribution, and it is to be regretted that further supplies, suitable for the requirements of Outside Ports, were not offered on this market. This would doubtless have relieved the congested state of Mincing Lane, and many shipments would presumably have found a better field. It is a striking feature to find that out of a total of 587,000 chests sold in Calcutta, no less than 294,000 representing 50 per cent, have been exported direct to outside sources, while the remaining 293,000 packages were dealt with for shipment to the United Kingdom.

Colonies.—The result of the trade during the past season shows the satisfactory increase of about 20½ per cent., and it is pleasing to observe that beyond taking a large proportion of ordinary tea, there has been an improved demand for the better descriptions.

America.—It is to be regretted that there has been a small falling off in the shipments to the United states, which may perhaps be accounted for by heavier exports from China.

Bombay.—The trade with this City and Central Asia is still more satisfactory. The figures denote improvement of nearly 50 per cent., as compared with the previous year. Towards the close of the season a considerable expansion took place, and it is a matter of regret that there was a shortage of the classes suitable to fulfil the requirements.

Sundry Ports.—It is a noteworthy feature to find that shipments to these destinations have made the substantial progress of 30 per cent. over last year, which has to some extent been assisted by the Russian demand. The crop was generally below the standard. The early manufacture from Assam did not possess the usual useful characteristic, and it was not until the season had advanced that any marked improvement was apparent. In the Dooars and Terai the outturn was as a rule, poor, owing probably to coarser plucking though a few Dooars' Gardens resorting to a finer system produced some very stand-out invoices, which met with keen attention. Darjeelings compared well with the previous crop, the second flush in many instances produced really fine quality, which was also marked at the close of the season.

Cachar and Sylhet.—The production was generally irregular and dissappointing and a further decline in prices for teas from these districts was only arrested by the substantial support received for Bombay and other local requirements.

Freights to London.—£1-15-0 per ton of 50 cubic feet. To Australia—£2-10-0 per ton of 50 cubic feet. To New York—$\$\frac{1}{2}$ per ton of 40 cubic feet.

It is to be regretted that a more reasonable arrangement as regards freight could not be arrived at for the United States and Canada, more especially the latter, where the trade is hampered by the abnormally high charges.

Local Consumption—Has now become a feature of considerable importance. It has been forciby brought to our notice that the natives of this country are developing a taste for tea, and in this City and neighbourhood many new tea shops have been opened. The Calcutta Indian Tea Association is giving this matter its best attention, a special Sub-Committee has been formed, and every effort will be made to augment local consumption. If the closing

remarks of H. E. the Viceroy, when speaking on the Assam Bill, were carried into effect this would be a practical solution of the present difficulty from which the industry is suffering. With regard to reduction of output they say: It is evidently necessary that some practical method should be adopted to curtail the crop to a certain extent and thus save the critical position of the industry. With the London programme before us, an earnest endeavour should be made by planters generally to enforce if possible a keener and more vigorous supervision in all the different phases of manufacture which, if carefully adhered to, would ensure more satisfactory results, and thereby restore the trade to its hitherto sound position. If these views be carried into effect, the output would, as a natural consequence, be considerably reduced and fall in with the universal feeling of the trade. While the Tea industry is over-burdened with a heavy duty, coffee and cocoa, the two principal beverages competing with tea, are only encumbered to a small extent, the duty being 1½d and 2½d per lb. respectively, the intrinsic value of all three beverages being, we believe, much about the same. About 85 per cent. of the tea imported into the United Kingdom is the produce of British subjects, whereas coffee and cocoa are mostly the produce of Foreign countries. The Tea industry it would appear is made to contribute an eighteenth part of our fiscal income, *i.e.*, nearly £6,000,000 out of £108,000,000 and a fourth part of the whole customs revenue namely, £6,000,000 out of £24,000,000. The result of this is an increased consumption of coffee and cocoa in the United Kingdom at the expense of tea.

We wish to reiterate the following points:—All Pekoes suitable for Bombay and the Gulf should be packed in chests of not less than 90 lbs. each. Dust should be packed in a half-chest of 70 lbs. The only marking necessary on a chest is—(*a*) Garden Mark, (*b*) Grade of Tea, (*c*) Number of Chest, (*d*) Nett Weight.

We would further remark that it is a great convenience in handling tea in Calcutta to have all chests numbered consecutively from the beginning of the season irrespective of grade. The general feeling of the trade here is in favour of the old-fashioned wooden chest, with good lead and corner pieces.

SOME NOTES ON TEA.

The Produce Markets' Review of March 30, 1901, says about Indian teas.—The market continues to show considerable firmness, and there has been a well sustained inquiry for most grades. A much larger proportion of the quantity brought forward has consisted of the better descriptions, from which the trade bought freely, and consequently last week's prices have been well supported. Most of the Assam growths show marked improvement in quality, more so than at any period of the season, and as the market is closed in Calcutta, and in view of a much restricted supply later on, values for these have shown a hardening tendency with a further upward movement in the majority of cases. That there is a good demand for the medium and better class teas is evidenced by the sustained inquiry for them practically throughout the past season, which is a proof that the extra duty imposed and consequent higher retail price has not affected the consumption, which now reaches 6 lbs. per head of the population. The movement on foot by the producers to restrict the output for the coming season, if practicable, would no doubt be beneficial, inasmuch as it would curtail excessive supplies. There is another important matter, *viz.*, the more equal distribution of the different grades by producing a larger percentage of those kinds for which there is the greater demand. It has often occurred that growers have rushed from one extreme to the other, and this stood out conspicuously in the past year. For instance common teas in the previous season were high in price, and very little was then procurable under 6d., while for the year now closed there has been a preponderating quantity of these kinds, resulting in a serious fall in values. To unduly curtail, therefore, the production of the lower kinds by indiscriminately increasing the output of the better teas would be unsound policy, and what is required is that growers should take into consideration the requirements of this market, and this in these days of rapid communication is easily obtainable, and should be acted upon. The public sales comprised 43,381 packages; there was an active demand throughout, and in most cases prices generally favoured sellers.

THE FORMATION OF ALKALOIDS IN CINCHONA TREES.

The objective of the extensive system of cinchona cultivation n prevailing in India, Java, and other tropical countries is the pr duction of cinchona bark containing the largest possible amount alkaloids, since it is to the presence of the latter substances th the bark owes its useful properties. At various times methods increasing the yield of alkaloid have been suggested, such as sha ing the stems of the trees from the direct action of the sun, b these have been, as a rule, based on preconceived motions of t *rôle* played by the alkaloid in the life history of the tree, and we not the result of any real investigation of the conditions und which these bodies are produced by the plant.

This defect has now been remedied by the results obtained Dr. Lotsy, of the Java Cinchona Gardens, in the course of a seri of investigations into the mode of formation and the occurrence alkaloids in two species of cinchona, *viz.*, *succirubra* and *ledgeria* Several papers giving an account of this work have appeared Dutch periodicals, but recently a *résumé* in English has be published in the *Bulletin de l'Institut Botanique de Buitenzorg* (N 3, 1900), from which the following particulars have been taken.

In commencing his work the author subjected each part of t tree in turn to micro-chemical examination for the presence of t characteristic cinchona alkaloids, and, as a result, was able demonstrate the existence of these substances in certain cells every portion of the plant. Thus, in the leaves no alkalo occurs in the epidermal layer of cells, or in the veins, but t fleshy part of the leaf invariably contains in its constitue cells a certain amount of alkaloid. In a similar manner, the ste even in its earliest stages, contains alkaloid, but only in t inner layers, never in the epidermis or in the large wood vesse found in adult trees. In the root a precisely similar con tion of things is found, and so also in the petals and other pa of the flowers. In general it may be stated that the alkaloid occu only in the tissue known to botanists as the *hypoderma*, *i.e.*, in t part of the plant where the building-up and breaking-do processes which constitute plant metabolism are most active. the youngest parts of the plant, such as the tip of the stem a under the root cap, where no differentiation into tissues has beg no alkaloid is found.

These observations afford an explanation of the phenomen that the first bark obtained from a cinchona tree is always rich than that of succeeding crops. This is due to the fact that t bark first formed is produced by the drying up of hypoderm tissue, of which each cell contains alkaloids, while the seconda bark produced by continued activity of the cork cambium contai in addition to hypodermal cells, best fibres which contain alkaloid.

A peculiar feature of the distribution of the alkaloids is th they never occur in the sieve-tubes, which are associated with t conveyance of the albuminous products of the plant.

The second part of the investigation deals with the method formation of the alkaloid. Since the leaves of plants are main concerned in the production of starch and albumen which serve f their nutrition, it was highly probable that here also alkaloids we produced, but the evidence already existing strongly negativ this view. Thus, Howard (*Quinology of the East Indian Plantatio* 1869, p. 14), found that leaves of *Cinchona succirubra* contained on ·11 per cent. of total alkaloid, while Broughton, in 1870, found pe centage varying from ·0041 to ·019. In a specimen of leaves e amined by De Vry in 1896, a larger amount was found, *viz.*, ·162 p cent., but this was amorphous alkaloid only. As pointed out Dr. Lotsy, however, a mere estimation of the amount of alkaloid co tained in the leaves gives no reliable answer to this question, becau it is quite possible that the alkaloid as soon as formed is transport towards the stem; consequently the author adopted a somewh different procedure, of which the following short account may given. A leaf of the tree under investigation was selected and c into two, longitudinally, and on one side of the midrib, while st attached to the tree. The smaller half so removed was examin micro-chemically for its content of alkaloid, while the portion st on the tree was allowed to remain during a day or night, as mig be necessary for the particular experiment then being carried o when it also was removed and its content of alkaloid determined the same manner.

A large number of observations carried out in this way showed at, under normal climatic conditions, a leaf accumulated alkaloid ring the day and emptied itself during the night by allowing the kaloid to be transported towards the stem. It was also observed, wever, that this normal removal of the alkaloid from the leaves es not occur under adverse conditions, such as are found in exemely cold or foggy weather. These climatic influences also have nsiderable effect on the amount of alkaloid formed during the y. That the alkaloids are transported from the leaves to the stem the plant was clearly proved by keeping cut leaves both in the ght and in the dark, when it was found that the amount of alkaloid mained unchanged, even after a month. It was also found that npty cut leaves were capable of producing alkaloid when placed stimulating liquids such as dilute solution of ammonia. The thor concludes the report of the results of his long-continued instigations with some interesting remarks on the probable methods synthesis employed by the plant in the formation of the cinchona kaloids, but these are too technical for reproduction in the present stract Attention may, however, be drawn to the bearing which ese results ought to have upon cinchona cultivation In the first ace it should be noted that since the useful alkaloids are formed the leaves of the plant, then in the selection of varieties for cultiation care should be taken to obtain those having a good foliage, oth with regard to quantity and size of leaves formed. The author ates that this plan has been generally adopted in recent years in e Java cinchona plantations, with excellent results. Further, it ould follow that any method of cultivation which tends to inease the hypodermal tissue in the plant should yield bark conining an increased amount of alkaloids, and so one would expect etter yields from *pollarding* than from ordinary growth.

COFFEE PLANTING IN BRAZIL.

We extract the following notes from a letter to the *Ceylon bserver* from the pen of Mr. Henry Cottam. Indian Coffeelanters will certainly be interested in reading what a Ceylon an has to tell them about the greatest coffee-producing ountry in the world. Mr. Cottam says, *inter alia* :—

Four and a half years ago the group of Coffee Estates known as ne Dumont Company changed hands and the French proprietor sold ut to the London Company who paid the enormous sum of *one illion eight hundred thousand pounds* for the property. It was ne general

OPINION IN BRAZIL

hat Dumont sold out for a good price and that it would take the ew Company all their time to work the estates to pay, as they were aken over in bad order and during the past four years required a beral expenditure to keep down the heavy weeds and grasses (*for Brazil grows weeds*) and labour is very expensive. Chiefly Italian nd Spanish families engage themselves as "Colonials," working by ontract if married and possessing a family. The single men work s daily labourers called in Brazil "Comarádos"; their pay is from ·50 to 3 milreis (a mil means one thousand, therefore the milreis vould be 1,000 nickel coins). Paper money is used in Brazil and

EXCHANGE

s always rising and falling; three years ago the milreis were down o 5d. English money and last August went up to a shilling. One f our contractors who planted and cultivated eighty thousand rees was recently paid of and doubled his money by the rise in Exchange. On the other hand the officers of the company, who are aid in gold, stand to lose money in Brazil as the purchasing power n stores of the milreis never changes; and one Officer or Superinendent of a section had his pay raised fifty pounds, yet he had to raw on private money to meet expenses. This was brought to the otice of the company in England and they refused to increase the alaries of the Administrators or Superintendents. The consequence s they are all very much dissatisfied. The necessaries of life are much

DEARER IN BRAZIL THAN IN CEYLON,

nd not of such good quality; beans, rice, and corn are the chief rticles of food used by the labour.

It is an old time custom in Brazil to allow the Italian and Spanish Colonials to grow their own crops of rice, beans, corn, manioc, obacco, arrowroot, and sweet potatoes between the rows of coffee; the result of this is impoverished soil, short crops of coffee and a large percentage of dead trees.

However, there is no remedy against this evil; for the European labourers and their wives and children must live; and, in addition to growing food stuffs in the coffee, they keep an immense number of goats, pigs, cows, and horses.

Hard-working families make money and save sufficient to return to Italy and Spain. Others, who fall sick and get into debt, have an exceedingly rough time of it on the coffee estates of Brazil.

ON THE GREAT DUMONT ESTATE

there were about 5,000 (five thousand) people, including women and children; of the above 5,000 perhaps 1,000 men would be obtained as contractors and daily labourers. There are 13,000 (thirteen thousand) acres of coffee under "cultivation," that would be about 13 acres to one man to keep in order and harvest the coffee crop. This

BARBAROUS SYSTEM OF STRIPPING THE TREES

with the crop in all stages of ripeness, wasting the green coffee, because scarcity of labour prohibits more than one round of picking, is the ruin of Brazil; and much of the crop is trodden into the ground by men and horses. Another "eyesore" in Brazil is the old crop hanging on when the new crop sets its blossoms.

The trees suffer fearfully from over-bearing. The crop ripens in April, May, June, and July. The gathering is hardly begun and the estates must be cleared of grass and weeds. The weeds are ploughed into the ground with a considerable quantity of coffee dropping off the trees with every shower of rain.

Thousands of pounds worth of coffee are lost every year in Brazil through estates not being ready to secure their coffee crops before the heavy rains set in. The planting of food crops throws everything into arrears and the fields must be cleaned up before the stripping commences; no wonder the prices of Brazilian Coffee are always so low in the London market when the green coffee is mixed with the matured.

THE PRUNING, TOO, IS BARBAROUS,

five or six trees in a hole, some of them ruthlessly chopped down with an axe, trusting to the judgment of an Italian farm labourer as to which should be taken and the others left. I have seen fine trees killed and four or five long fishing rods left for next year's crop. One of the most ghastly sights to be seen is a "*pruned*" field of coffee in Brazil.

There is little or no chance of any improvement being made in the "*cultivation*" of coffee in Brazil, for practical experience is at a considerable discount. "*Nigger driving*" from daylight till dark, the old slave-bells only ringing for meals in the field and work from sun-rise to sun-set and such a long trudge back to the Colonial barracks. *Slavery is supposed to be abolished!* But in Brazil there are *white slaves*. I have known them work 18 hours out of 24 and in some cases hoe the coffee by moonlight to keep clear of debt and get out of Brazil and return to Italy. And what is it all for? To enrich a few individuals, non-resident.

BRAZIL WILL ALWAYS BE A HARD COUNTRY TO LIVE IN.

There is no enjoyment of life there for an Englishman and only men who have led a hard life could endure life in Brazil.

The Dumont Company has not got a practical coffee-planter in their employ; some of them had never seen a coffee bush until they went to Dumont.

The Dumont Company get their goods from the Army and Navy co-operative stores and their "Amazame" does a good business with the employees. Another great advantage on Dumont is the

THIRTY-FIVE MILES OF RAILWAY

promptly despatching stores to the different sections of the estate and to the Colonials.

The making of the railway has much improved the value of the property since it was purchased from Dumont. Accidents have occurred through the sparks from the engines falling on rubbish-heaps and coffee has been burnt as well as buildings. A great fire took place shortly after the completion of the new factory. All the newly-put-up machinery for pulping and curing coffee with a considerable quantity of coffee undergoing the process of curing was burnt with the buildings in one night—a very bad thing for the shareholders of the company in the second or third year from the starting of the company. The coffee crops have steadily increased

during the past three years. Thirty-two thousand cwt. from 13,000 acres only works out 3 *cwt. per acre*—a mere maiden crop in the palmy days of coffee-planting in Ceylon. The twenty or thirty per cent. of vacancies were supplied, and now the young trees three and four years' old are cropping heavily, particularly on "Aqua Vermilia" (red water) and "Moreira" the section on which the writer was employed.

If the weather and other circumstances are favourable.

THE CROP THIS YEAR

will be a very large one, but the young trees, unless relieved of their heavy crop of berries, will die out or take a rest from bearing for two or three years. Prices are likely to go down, owing the Brazilian crop expected being unusually large this year, fifteen thousand hundredweights being spoken of as under the estimate. Labour will be very short indeed, through the rise in the value of the milreis. The Italians drew their money (Brazilian) and turned it into gold and as they are obliged to give notice to leave the estates before being paid off, many will remain in Italy. The Government of Brazil had lately discontinued giving passages to intending imigrants; consequently the Dumont Company were obliged to send an officer from Dumont to recruit Italian labour.

There are

TWENTY THOUSAND ACRES OF FOREST LAND AVAILABLE FOR COFFEE

planting belonging to the Dumont Company, but the *five millions* of coffee trees now under "cultivation" will take them all their time to manage with labour daily getting scarcer and dearer. There are some "*smart*" Directors in the company, particularly the one who visited Brazil and reports occasionally on Dumont. He ought to go there again and try and give the anxious shareholders a dividend; they have waited very patiently for the past five years and ought to get a fat one this year. I should take a small gang of practical coffee-planters from Ceylon with good digestions and not afraid of ghiggars, ticks, and Bèrne-flies—to say nothing of the dear little mosquito (the writer had extracted during four years in Brazil *no less than* 200 ghiggars from underneath every toe-nail of both feet.) The Portuguese. Brazillans, Italians, and Spaniards called it a recreation on Sunday to dig them out of each others' feet. Of all the vile insects on earth, the Bèrne-fly is the worst. She

LAYS HER EGGS INSIDE YOUR FLESH

and hatches three very ugly insects an inch long with three rings of bristles round the body and sharp nippers. They take about six weeks to develop under your skin; then commence to turn somersaults just when you want to go to sleep after a hard day's work in the sun.

The natives of Brazil adopt a novel way of extracting the brute when full-grown; they tie on a piece of raw pork and the Bèrne come sout of your skin and takes a header into the piece of pig skin.

Eighteen took up their lodgings in the plumpest parts and it was very interesting to stick a little nicotine from an old pipe into their nest, then out they would jump; but some were so fat they had to be screwed out and great was the relief.

Ticks were very plentiful in the grazing grounds and we often got covered with them when out at night, fighting with the bush fires on our boundaries and trying to save our fences and gates from destruction.

I had a

VARIED EXPERIENCE WITH SPECIMENS OF BRAZILIAN ENTOMOLOGY

and I have brought back as a trophy the nine rattles of a large rattlesnake I killed in my coffee. His chum came to look for him next day and was duly killed—snakes are very numerous and the ones most frequently found in the coffee were the rattlesnake and the black and red-coral snake.

"There are snakes in the grass" in human form of every nationality and an Englishman little knows what is in store of him in that nigger country. The more polite the people are, the greater the injury they are likely to inflict. There is much to write about Brazil after four years in the coffee districts of São Paulo. My first Estate was called "Vista Alegre" (cheerful view). Mr. W. the proprietor took me round to see some of the large Coffee Fazendas. This district between San Carlos de Pinhal and Colonia was much cooler than the district of Reberu eu Prato (Black River) where the Dumont Estate is located.

CEYLON TEA MEMORANDA FOR 1900.

Messrs. Wilson Smithett & Co. write :—

Two principal causes have conduced to render the season u review a disappointing and unsatisfactory one to producers g rally. In the first place the conviction which prevailed at the c mencement of 1900 that the Government would include tea in articles selected for extra taxation in their War Budget, caused unwonted amount of speculative duty payment, which not severely taxed the financial resources of the London dealers paralysed trade to a great extent during the Spring and Sum months, but also gave an artificial character to their earlier tran tions, and rendered it very difficult to gauge the extent development of the *bonâ fide* trade demand, on account of the la invisible stock which had been thus created. In addition to abnormal state of affairs, a heavy flushing season in the ea months of the year, and later on the belief that the effect of the crease in the duty would be to augment the demand for the cheap tea, resulted in a decided over-production of common leaf both Ceylon and India; although the supplies from Ceylon shewed c siderable diminution for a short while during the Autumn, heavy imports of tea from India, chiefly of markedly inferior quali which eventually resulted in a crop of that leaf, shewing a furth substantial increase over that of the previous year, contributed t serious accumulation of a class of leaf too poor to satisfy the dema —always large—for an acceptable standard of "good common" t

The average price for all Ceylon tea sold on garden account 1900 was 7·25d. against 8d. in 1899, and 7·78 in 1898.

Although the fear entertained in our "Memoranda" of last ye that we were once more in danger of over-production, has unfortu ately proved too well grounded, we would on the present occasi deprecate too gloomy and pessimistic views with regard to t future. The over-supply, under which we have laboured during t past year, does not appear to be attributable so much to the fa that too large an acreage is at present under cultivation in Ceyl and India—although it is hoped that the present state of affairs w check extensions in the latter country—as to the various caus which have led producers to rely upon the apparently exhaustle demand for common tea. The competition of distributors at ho had culminated some years ago in the establishment of what popularly known as the "shilling canister," with the result th there was an almost constant demand for "tea for price;" this, unnaturally led planters generally to consider that quantity rath than quality was the object to aim at—a policy well in accord wi the necessity for economic reforms engendered by a few seasons less remunerative working, and which led to a considerable redu tion in the cost of plucking. It was, also, generally expected this market last year, and the idea probably extended to produce that the effect of the increase in the Tea Duty would be to still fu ther increase the demand for the cheapest tea. The largest blende however, who for long had had good reason to be dissatisfied with t small margin of profit accruing from the "shilling canister," saw favourable opportunity of abandoning it as far as possible, and at the increased price of 1s 2d it would not be likely to hold out t same attraction to the householder as at the round figure of "o shilling," they agreed to discontinue active advertisement of th blend, and to concentrate their energies on pushing a rather bett class blend at 1s 4d per lb. We cannot profess to regret the d appearance of a packet which was of little benefit to anybody, a can only hope that the current low rates for common tea will n result in its reinstitution.

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, oth have no effect, and none do good. Sugar and water, or a little glycerine, gi relief when the throat is inclined to be dry; this applies to persons whose thro are affected by the weather. About a third of a teaspoonful of Condy's Fluid a tumbler of water, if used as a gargle every morning, will clear the throat a brace up the uvula, which, in some singers, is so long that it interrupts the pu emission of the voice, and introduces a grating undertone, while it also tends make a tremolo on the upper notes."—*The Idler*, February, 1900.

When producers realise that the staple demand is no longer ntered in the poorest leaf for "price," we may reasonably expect at extreme economy in plucking may give place to a policy more accord with the ability to take the flush at a younger and suffiently mature stage, and that a stop will be put to the export of a ass of tea which can only be compared to that common China, the te of which, whilst facilitating and accelerating the development the Ceylon tea industry, was at the same time a warning to ritish producers.

Whilst earnestly endorsing any measures that may conduce to this sult, we would not lose sight of the demand for an adequate pply of "good common" black leaf with useful liquors, such as e low country districts are so well able to supply, and which may e in some danger of being overlooked in the reaction that will oubtless set in.

At the commencement of the current year the critical position of e Indian and Ceylon tea industries compelled the serious attention producers, and meetings were convened to consider the pressing roblem of supply, on the solution of which not merely the prosrity but the very existence of these industries depends. The dian and Ceylon Associations proposed remedies of a somewhat rastic nature, remedies which did not fail to provoke criticism om those growers whose manufacture during the past year had en of such a character as to, perhaps, benefit rather than suffer the over-supply of too common leaf. The amended scheme ecently submitted, for the acceptance of producers at large, seems owever to disarm to a great extent, if not entirely, the not unatural criticism to which the initial proposals gave rise. For if ose producers, who have so much reason to be dissatisfied with st year's working, resolve not merely to limit their plucking area is year, but also to pluck a smaller quantity and a better quality leaf per acre, there will, in the ensuing season be a considerable rger proportion of good tea, which will enter into competition ith that class which constituted the good tea of last year. For is reason it will be to the advantage of those, who had the field ore or less to themselves, last year in this respect, to pluck still ner and produce a class of tea beyond the competition of the improved quality which should ensue from more careful manufacture the classes below. In short it appears to be not only desirable ut essential, that in the coming season manufacture, from the west to the highest classes, should be raised to a higher level of uality in the leaf plucked. The prices obtained last Autumn for ally fine tea, which for a few weeks then found so ready a market, roved the capacity of the home trade to pay good prices for the st tea, and we believe that, were it not for the almost unconscious ut steadily increasing tendency to pluck the leaf at an older and ss succulent stage, many of the former "crack" marks would still realising prices more on a par with those prevailing in the rlier years of the industry when Ceylon found its way to the ont by its well earned reputation for quality.

The imports of Ceylon Tea into the U. K. during 1900 were 3,600,000 lbs. in excess of those of the previous year, and amounted the heavy total of 115,323,000 lbs., against 101,701,000 lbs. 1899.

The deliveries did not mark the same ratio of increase, but home nsumption shewed the satisfactory expansion of 7,300,000 lbs.—2,470,000 lbs. having paid duty, against 85,138,000lbs. in the revious year.

The re-exports to all parts, except to the United States of America, arked a normal development, the total amounting to 13,755,000 lbs. gainst 12,144,000 lbs. in 1899.

The direct exports from Colombo to other countries than the nited Kingdom shewed a remarkable expansion during 1900, aving reached 34,340,000 lbs., against 25,946,000 lbs. in 1899 and 3,930,000 lbs. in 1898.

Green Tea.—The enterprise and resource of Ceylon planters have cently been engaged in the endeavour to counteract the results over-production by an effort to compete with the demand for pan green teas in America and Canada. While fully sharing e belief that a satisfactory equivalent to Japan green teas in leaf d liquor may meet with a gradually expanding measure of suc-ss, we cannot but express the opinion that the experiment should of a tentative character only, and that if the manufacture of reen tea in Ceylon and India should assume the proportions hich have been suggested, the new departure will fail in its ject. It has been very evident lately that the demand for Ceylon ack tea in America has been gaining ground, and for several years past the efforts of planters to push their black teas in the West have met with considerable success; whether it is desirable to manufacture to an important extent a class of tea which has a most limited outlet in any other market, and which will undoubtedly experience considerable difficulty, in competing at anything like remunerative rates, if the present bounty should be withdrawn, with the distinctive Japan greens which for so long have found favour in America and Canada, remains to be proved. The majority of the green teas from Ceylon which have lately come under our notice have been too yellowish a green in leaf, and of too pale a lemon colour in liquor; the leaf should be of as black a green as possible, and the liquor a fairly deep canary yellow in tone if the aim is to supersede Japans.

In a few cases the averages were either maintained or increased, but the quantities auctioned this year were considerably less; this, however, may be due to part of the crops having been disposed of locally, *e.g.*:—

	1900. Abt. lbs.	Av. price per lb.	1899. Abt. lbs.	Av. price per lb.
Diyanilakelle ...	119,000	10⅜d	128,000	10¼d
Duusinane ...	365,500	9½d	403,000	8⅝d
Excelsior ...	141,000	10¾d	155,000	9¾d
Glenlyon ...	202,000	9⅜d	272,000	9¼d
Ingestre ...	188,500	10d	193,000	9¾d
North Cove ...	89,500	9½d	92,500	9⅜d
Park ...	123,000	10⅝d	175,000	10⅜d
Sutton ...	78,500	11¾d	142,000	9½d
Troup ...	136,500	9⅜d	160,500	8⅞d

Turning to the results in the different districts, we observe that the greatest falling off in values realised has, on the whole, occurred in the medium elevations where the teas were not remarkable for any very distinctive characteristics. It is noteworthy that the Kelani Valley with an increase of 2,000,000 lbs. shews only ½d per lb. decline in the average value realised, the same as Dimbula with an increase of 1,250,000 lbs. The low-lying district of KALUTARA, however, has suffered the most; with no increase in yield the average shews a decline of 1·15d.

While an examination of the results we have summarized this year unfortunately reveals a marked decline in values generally, there are numerous instances to shew that where quality was well sustained and "stand-out" teas produced, the average price realised was maintained and in many cases increased, and that not infrequently with a substantial increase in the out-put. The very first mark on our list—Diyagama—the only estate which has turned out over 1,000,000 lbs. of tea, furnishes a remarkable example of the success attending a careful maintenance of a satisfactory standard of quality. As other instances may prove of interest, we have selected, as under, some of the most noticeable whose averages have either been well supported or actually increased:—

	1900. Abt. lbs.	Av. price per lb.	1899. Abt. lbs.	Av. price per lb.
Amherst ...	182,000	9⅝d	125,500	9½d
Albion ...	128,000	9d	106,000	9d
Brookside ...	117,000	10½d	104,500	10⅛d
Condegalle ...	144,000	8⅝d	122,500	8¼d
Diyagama ...	1,066,000	9⅞d	973,000	9¼d
Delmar ...	289,000	10d	201,000	9¼d
Ferham ...	89,500	9⅝d	87,000	9⅝d
Glenugie ...	224,500	8⅝d	212,000	8⅝d
Galkandewatte ...	166,000	8⅞d	161,000	7¾d
Goatfell ...	115,000	1/1⅛	108,500	11⅛d
Holmwood ...	147,500	10½d	128,000	10⅛d
Henfold ...	260,500	11d	234,500	11d
Kelliebedde ...	211,500	10⅜d	163,000	10⅜d
Meria Cotta ...	170,000	9½d	115,000	9d
Portmore ...	263,500	10⅜d	234,500	10⅛d
Pita Ratmalie ...	166,500	9d	162,500	8½d
Ragalla ...	384,500	9⅜d	334,500	9½d
Rillamulle ...	110,500	7⅞d	81,500	7⅞d
St. John Del Rey ...	311,500	8⅜d	238,500	8¾d
Sheen ...	211,000	9⅜d	179,000	10d
Sumtravalle ...	133,500	9½d	117,000	9½d
Talawakelle ...	402,500	11⅛d	374,000	10⅝d
Theresia ...	144,000	8⅞d	95,500	8⅞d
Thotulgalla ...	99,000	9¼d	78,500	8½d
Uda Radella ...	211,500	9¼d	191,000	8¼d
Wanarajao ...	383,000	9⅞d	319,500	9¾d
Waverley ...	401,500	10d	358,000	10d
Waldemar ...	172,000	8¾d	163,000	8½d

NOTES ABOUT SPRAYING.

"Spray! Of course I am going to spray, says a writer in the *American Agriculturist*. It is the only insurance policy I carry on my crops." This was the expression of a prominent fruit grower recently at the Ct pomological society's meeting. Never in the histroy of American horticulture was spraying so extensively practised as to-day. Conditions have been changing so radically during the past few years, fruit growers and truckers have found it absolutely necessary to spray regularly for the destruction of insect pests and fungous diseases. As this question is of such prime importance at this time, we give a general outline of the methods for spring treatment. From time to time we will follow this article with seasonable suggestions, so that those interested will be kept posted in advance at all times as to the best methods for spraying and mixing the materials used.

It is necessary first to know specifically for what the spray is applied. After this has been determined the grower should look in advance somewhat so as to enable himself to prepare the proper equipment to meet any emergency that may arise later. There are several prime factors to be considered; one of the most important in which peach growers are interested is that of peach leaf curl and brown rot of the fruit. Spraying in this case should be conducted as soon as possible before the buds begin to open. The first sprayings are applied for the destruction of the dormant spores of fungous diseases and to prevent further infestation.

It is now conceded by the largest peach growers that they can spray to good advantage while the peach trees are dormant to check the spread and dissemination of both the leaf curl and rot. J. H. Hale, the Ct and Ga peach grower, is now spraying his extensive Ga peach orchards, consisting of about 250,000 fruiting trees. This is, without doubt, the largest spraying operation ever undertaken in this country. The experience of many Ga peach growers last year was such that they know it is now necessary to spray regularly to check the brown rot and other diseases. Mr. Samuel Rumph sprayed last year about 120,000 peach trees, the results of which were very encouraging.

WHAT TO SPRAY FOR.

Beginning with the peach, the rot and curl are first to be considered and in such cases the trees should be sprayed first while they are thoroughly dormant, with a 3-8-50, 4-5-50, or 5-5-45 formula. That is, in making bordeaux mixture, 3 lbs. of blue stone and 8 lbs. of good stone lime are used for each 50 gals. of water, or 4 lbs. blue stone, 5 lbs. of lime to 50 gals. of water. The first formula was used last year by Samuel Rumph in his Ga orchards, the second formula given is now being used by Mr. Hale in his orchards, while the last named is generally recommended for the leaf curl. It must be borne in mind, however, that the last two formulæ should not be applied when the tree is in full foliage. The Rumph formula can be used when the trees are in full foliage without injuring them in the least. Mr. Rumph sprayed some of his trees last year five times with this solution and thoroughly kept the rot under subjection.

The first spraying of apple should be made, if possible, before the buds open, using the ordinary 4-6-50 formula. The second spraying should be made shortly after the blossoms fall, with the same solution, adding this time 4 oz. paris green to each 50 gals. of material. Repeat spray seven to ten days later, according to weather conditions. If very rainy, a fourth application may be required. This treatment will destroy both the codling moth and various fungous diseases. The first and last may be omitted during very favorable seasons.

The same general treatment given for apples can be applied to pear orchards, but as a rule it is hardly necessary to spray before the buds are open. In addition to the bordeaux spraying for fungous diseases, the pear psylla must be considered, and a kerosene emulsion diluted with water 15 times is used in the spring about the time the leaves unfold. Plum trees can be sprayed with the same formula used for apple and pear. This spray will have little or no effect upon the so-called plum curculio. This insect is kept in check by shaking or jarring the trees after the fruit is set, at intervals of from three to five days, catching the beetles in sheets or in an apparatus constructed for this purpose, known as the curculio catcher.

Strawberries can be sprayed to very good advantage for checking strawberry leaf blight with the 3-6-50 formula. Cabbage can be best treated for the destruction of cabbage worms with paris g and land plaster, used as a dust and applied with any good a ratus. Mix at the rate of 1 lb. of poison in 100 lbs. land pla The harlequin cabbage bug is not destroyed by this material, the kerosene emulsion or soap solution must be used. It also be concentrated on kale, used as a trap crop, pla in the vicinity of cabbage fields. Hand picking of the p is very effective. Both the blight and insects on potato be controlled by the same spray, using the 4-6-50 formula, and paris green. Plants should be kept well covered with the mixt The dust method can be used for insects; but not for blight.

HOW THE BORDEAUX IS MADE.

Bordeaux mixture is easily made, the amount depending on size of orchards and fields to be sprayed. Ordinarily, two bar are secured, and a stock solution is made and kept on hand. If 4-6-50 formula is used, take 8 lbs. of blue stone and suspend i basket or bag in 50 gals. of water and thoroughly dissolve. T 12 lbs. of good stone lime is thoroughly slaked in a tub and pou into the other barrel containing 50 gals. Both solutions make gals. One barrel of blue stone water and one of lime water of gals. each. This stock solution will keep indefinitely, and wi ready to use, stir each solution thoroughly, and with two pails equal capacity dip same quantity from each barrel and pour th at the same time into a third barrel or tub, or into the sprayi apparatus. The solutions will thoroughly mix as they fall a form a good quality of bordeaux ready for use. They should be mixed and allowed to stand any great length of time bef being used, as the material deteriorates. As a rule it is not nec sary to add the paris green to solutions for spraying dorma trees. In all cases where trees are in foliage, or where small pla are sprayed, the paris green should be added at the rate of 4 oz. each 50 gals. bordeaux In each barrel of the stock solution 4 of paris green should be added. Mix the paris green with enou water to make a thin paste, add more water and pour directly i the materials, thoroughly stirring before using.

It is not necessary at this time to make kerosene emulsi according to the old troublesome formula, as there are upon t market several good mechanical devices for mixing kerosene a water in the proper proportions for ordinary spraying.

APPARATUS NECESSARY.

The appliances necessary will depend entirely upon the conditio and the size of the orchard or field to be sprayed, and each grow must select an equipment for himself to meet his own deman There are so many kinds of good sprayig machines on the mark it is difficult to say that any particular one is better than anoth

TEA, ETC., AT THE PARIS EXHIBITION.

Our present subject appears a little belated, yet the follo ing extracts from Mr. J. A. Renton's report are not witho interest :—

In September and October of 1899 I advertised in the Ceyl papers that space would be reserved for private exhibitors packet and bulk teas. I had been urged to make up my o packet teas and sell them at some depôt in Paris, if t sale was not permitted at the Exhibition. I felt that as neith the Planters' Association nor the Thirty Committee were a tradi body, that though such a course would be perfectly feasible duri the Exhibition, yet after it was over there would be no firm business agency to carry on the sale of my particular brand, t Planters' Association being unable to sell the brand or ma (specially adapted for the Exhibition) to any one particular fir I therefore was in hopes that private individuals or firms wou come forward and establish depôts in Paris, with stands at t Ceylon Court, and run the chance of effecting sales. Only t three firms abovementioned availed themselves of the opportuni Unfortunately, Messrs. Lipton, Ltd., were only prepared at fi to book orders for blends of Ceylon with China. Without expre ing any opinion as to whether or not this was the best means introducing Ceylon tea to the French public, I felt that in an E hibition where Ceylon, and pure Ceylon tea only, was supposed be exhibited, it would not be right to allow blends of Ceylon t

be sold, or orders booked. Messrs. Lipton, Ltd., agreed to with-aw their blends and sell pure Ceylon tea, but it was not until ne that they were able to commence sales. The exhibit made the Co-operative Tea Gardens Co. and the Maravilla Co. was especially attractive and handsome one, and their exhibits, mbined with that of Messrs. Lipton, Ltd., have been the most werful aid (so far as exhibits in the Ceylon Court went) in help-g us to impress the general public with the importance of the ylon Tea Industry. There is, of course, no question that the a House and the sale of tea in cup has been by far and away the ggest factor in bringing Ceylon tea before the notice of the neral public, and that the great success which this institution s had has enabled us to secure a splendid advertisement for ylon tea without the help of any of the exhibits of the Ceylon urt. At the same time, the neat little packets exhibited in a zen different kinds of wrappers by the two first-named companies, ok greatly with the public and were a most efficient factor in troducting Ceylon tea: I felt very grateful that I could refer tending purchasers of Ceylon tea to the depôt established by ese two companies in Paris, in the first instance. In a short ne the sale of Ceylon tea in the Exhibition was commeneed, and ntinued to the close. I feel certain that if the Co-operative Tea ardens Co. and the Maravilla Ceylon Tea Co. had not made this hibit of pure Ceylon tea in packets, Messrs. Lipton, Ltd., uld not have followed suit, but would have stuck to their ends. I should then have been obliged to make up packet teas of y own, for the time being, or else allow intending purchasers to without being able to get Ceylon tea in the Court. I wish it to clearly understood that the sale of Ceylon tea in the Court has ver been sanctioned by the authorities. When these Companies w other articles being openly sold in all the other Courts, and at tea was sold in Japan and Russia, the Co-operative Tea Gardens . commenced selling at their own risk, and Messrs. Lipton, Ltd., llowed suit after a time. On two occasions they have been arned to desist by the British Royal Commission, and on one occa-on by the French authorities, but they have gone on and taken e risk. In addition to their exhibit of fancy tea in tins, Messrs. ipton, Ltd., made a very attractive exhibit of coffee and cacao.

Tea Factory.—Only one of the models was exhibited; the other as placed on the top of the Tea House, there being no room for it the Court.

THE TEA HOUSE.

The completion and furnishing of the Tea House caused a great al of extra work and worry. The contractors had departed from e original design; the terrace or first floor should have been sur-unded by an open balustrade, instead of which a dead high wall d been built. Although a roof was shown on the plan, we had to ovide an awning and blinds at our expense, and, owing to the ight of the wall, the floor had to be raised. Kitchen and counter ace was insufficient, even although two additional rooms were ilt on to the kitchen. The interior of the building was nicely rnished and decorated by Miss Parkinson and Mr. Webster. he walls and pillars were covered with photographs of Ceylon views d scenery. The Tea House has had a success which exceeded all y anticipations. We had to provide two more urns, and in June d July to increase our seating accommodation until it came up 500 from 300.

We served in	May	...	12,955	pots of tea
Do	June	...	22,351	,,
Do	July	...	24,141	,,
Do	August	...	19,312	,,
Do	September	...	25,009	,,
Do	October	...	30,489	,,
	Total	...	134,257	in six months

N.B.—A pot contains two cups of tea.

The above does not include the teas given gratuitously to the embers of the Ceylon Commission or their friends. I attribute his success to the following causes:—*First*, to the goodness of the rticles; the tea was very carefully made and poured (after five inutes' infusion) into an urn, heated by hot water. *Secondly*, to he Sinhalese boys, with their rapid and civil waiting. We had to ngage waitresses in addition to the boys, but there is no doubt hat the boys were a great draw. I want to take this opportunity f expressing my appreciation of their very good and excellent ehaviour during the whole time of their stay in Paris. *Thirdly*, to some lady friends, journalists, and to others, who from the very first have assisted us by advertising both the merits of our tea and the attractions of the Tea House. In the Summer most business was done between 4 and 7 o'clock, but in the Autumn, especially at the end of October, the rush was always between 3-30 and 5 o'clock. The Tea House was kept open till 11 o'clock p.m. till August, after which it was closed at 8 o'clock.

AWARDS.

I acted as British Juror in Section 3 of Class 39: coffee and cacao. I am glad to say I was successful in obtaining an award of some kind for each exhibitor in this class. Although the number of the exhibits sent were few, yet the total quantity was sufficient to occupy three times the space they did, had we been able to obtain more room. I saw a grand prix was given for the best exhibits from other countries in this class, and I made an effort to get one for a Ceylon exhibitor. The jury awarded it to Messrs. Lipton, Ltd., mainly on the ground of the excellence and variety of their Coffee exhibit. The French Official Catalogue for this class contained the names of only three exhibitors—Badulla, Haputale, and Northern District Planters' Association. The jury very kindly, and without hesitation, accepted my amended list of twelve individual exhibitors. At the same time it is a matter of regret that the official English Catalogues, from which the French were made, were not more carefully compiled in the first instance. The omission of individual exhibitors' names occasioned me a great deal of trouble with the juries in Classes 59, 41, and 63 (Tea, Spices, Non-edible Agricultural Products, and Mines). . . . .

Tea and Spices.—I am not quite so satisfied with the awards obtained in this class. The Official Catalogue contained only the names of the various District Associations, no individual estates or companies being included. The jury in this class was not nearly so complaisant as the jury in Class 39, an official application had to be made to the French Administration before the amended list of exhibitors could be accepted. Out of 37 exhibitors in commercial black and green teas, 26 awards were made; but no awards have been given to fancy teas or commercial teas in packets. I am exceedingly sorry the fancy teas shown by the Co-operative Tea Gardens, Messrs. Lipton, Ltd., Kintyre, Pedro, and Hatherleigh estates, did not obtain extra and special awards. I think that the packet tea exhibit of the Co-operative Tea Gardens Co., and the Maravilla Co. should have obtained a very high award. I drew the attention of the jury to the golden tip tea kindly presented by Neboda, Taprobane, Mipitiakande, Deaella, Newton, and Middleton estates for covering the pillars; but as I could not say they were exhibitors in the proper sense of the word (their names not appearing in catalogues) they obtained no recompense. Had I known how awards were given to "collaborateurs," I should certainly have brought their names forward under this category. A grand prix was given to the Planters' Association of Ceylon for the collective exhibit of tea. The jury proposed, in the first instance, to award the grand prix to myself on behalf of the Association. I declined to accept the suggestion, and pointed out that it should be given to the Association only.

I understood from the jury that they would give awards to the cardamom exhibits from the Duckwari, Forest Hill, and Mausakande estates. I was sorry to see when the official list was published that no awards had been made. On an appeal to the Superior Jury a gold and two bronze medals have been obtained for these exhibitors as "collaborateurs," but these cannot be regarded as equivalent to a reward for their exhibit, as their names did not appear in the first official list. In Class 41 I was successful in obtaining a gold and two silver medals for the three cinchona exhibits. I noticed after the Official List of Awards was published that several awards had been given to "collaborateurs" from Ceylon. I much regret that the possibility of obtaining awards in this way was not brought to my notice. Had I been aware of it, I should have applied for special awards for Mr. Webster, Miss Parkinson, and Messrs. Burnham and Dupré. The two former have done much to lay out the tea exhibits and get the Tea House ready. The two latter, who acted as salesmen for Ceylon teas in the Court, are as much entitled to awards as Mr. Hayward's salesman and saleswoman, to whom bronze medals have been awarded. Mr. Davidson has applied for and obtained silver medals for Mr. Webster and myself as "collaborateurs." The application for Miss Parkinson was refused. I am much obliged to Mr. Davidson for interesting himself especially on our behalf, but I have never made any claim for any personal reward for work done in connection with the Exhibition, as I have

all along understood that it was a rule of the Exhibition that members of the Jury were "*hors concours*" even as "collaborateurs."

I may add that I learn that most of the French chocolate manufacturers assert that the Ceylon variety does not suit them; but the leading import houses here think that our cacao has much improved. It was the importations of more than ten years ago that created a bad impression. At any rate, the samples shown at the Exhibition were much admired, and a bigger trade ought to be done At present all the imports are from Guayaquil, Venezeuela, and Trinidad.

India-rubber.—I have had many inquiries for this article. I hope the day will come when it will enter largely into the list of exports from Ceylon.

Cinchona.—Quinine manufacturers would like to have Ceylon bark again, but at cheap rates. There is little hope of this wish being gratified There seems to be every prospect of an improvement in the price of quinine, and we may hope that the cultivation of cinchona will be resumed in Ceylon to a moderate extent.

As regards *tea*, we have made a good beginning, and I am in hopes that Ceylon tea has come to stay. It is not the Exhibition only that has helped us in making it known, but the extensive advertising and personal canvassing of the trade, both wholesale and retail. This report deals only with the Exhibition: my full report on the work in France will follow at the end of the year; but I feel we have done mere than awaken a mere passing interest in Ceylon tea. Those people who have had it in cup like it, and I trust the taste will grow. It must never be forgotten that France is not a tea-drinking country; and even if we oust China teas by degrees, this will only mean a consumption of 1½ million lbs. What me must seek to aim at is to spread a taste for tea amongst the labouring classes and *bourgeoisie*.

I have omitted to mention that, apart from the Ceylon Court and Tea House, we had our tea on sale in cup in fifty-two restaurants and cafés in the Exhibition. I do not think that, with the exception of Slaters' Restaurant, much tea has been sold at these cafés, but as all these restaurants displayed placards, "Ask for Ceylon Tea," the advertisement was an excellent one.

I ought not to omit to add that all through the Exhibition I have worked cordially and harmoniously with the Indian Tea Representative. We have been of mutual benefit to each other, and though rival, our relations have always been friendly.

EXCESSIVE TEA-DRINKING.

LADY JEUNE WRITES AN EXTREME ARTICLE.

The *Daily Telegraph* of the 9th March contained the following special article by the accomplished Lady Jeune .—

There is a new and sudden terror added to the troubles of housekeepers in these days, one that was unknown to mistresses of long ago, and was not among the catalogue of misfortunes which dogged the footsteps of our mothers and grandmothers. In those days servants may have been stupid, impatient, idle, or careless, but they were strong. They ate, slept, and lived well, and if they suffered from any indisposition it was one which usually could be explained by the fact that they had a generous appetite. Nothing could be healthier or more vigorous than the servant of those days: bright-eyed, rosy-cheeked, and buxom, she was the embodiment of health. Then food was coarse, often insufficient, and their sleeping and living space was wont to fall short of the number of cubic feet of fresh air which in these days of scientific sanitation is considered necessary to maintain a sound constitution. One well remembers what the servants' sleeping accommodation used to be generally a garret in the roof, or a cellar below stairs, frequented by rats and blackbeetles, and a place of horror, calling up a shudder at the very thought. They worked much harder than our domestic helpers of to-day, their outings were fewer and much shorter, and yet in spite of all these drawbacks they were robust and healthy-looking girls.

Now-a-days, alas, few of the young women in domestic service appear to be strong, and they are constantly suffering from weakness and want of blood. This, however, is a very general complaint in all classes, and every girl, high or humble, seems to be compelled to take iron in some form or other. Only after this tonic has been taken for months, or even years, do they appear to regain something of good health and sound appearance. So far as the upper classes are concerned, it is very difficult to say whence t mysterious complaint arises. All girls are liable to it, at any a and in any locality. It might, perchance, be the result of living towns, but that in the country, with the breath of heaven blowi from every quarter, one comes across pale, heavy-eyed, listl girls. There is no explaining reason of bad or unwholesome fo or indifferent nourishment, and to no one cause can one attribu the fact, unless it be that mothers of to-day are not so strong their own parents were. It may be in their case that the ner exhaustion of modern life has tended to enfeeble the constitutio of the women of England, and thus the deterioration of their ch dren's health may be partially accounted for, but one may puz in vain to probe into the real cause of the widespread anæmia to-day among the higher classes.

In less exalted ranks it is far easier to go to the direct source of t complaint, which is undoubtedly due to the excessive quantities strong tea they consume daily. Nothing has more seriously inju ed the health of women of the working-classes than the cheape ing of tea. I have no hesitation in saying that it is the consta drinking of strong tea which makes the women of our toili masses delicate and their children anæmic, for not only do the latter inherit that weakness from their mothers, but become ev greater sinners in this direction than their parents. It may wondered whether the housekeeper or mistress of an average e tablishment has any idea how often their servants drink tea in t course of the day, or of the strength of what is imbibed. Just in their own homes, they put the teapot on the hob and let it sta there from morning till night the stuff itself being a stewed co coction. They drink tea before breakfast, at breakfast, at elev o'clock, after midday dinner, at tea time, and sometimes ev before going to bed, the tea being so strong as to be almost poiso ous. One of the constituents of tea, as everyone knows, is tanni and that taken in the quantities consumed by our servants is a solute destruction to the digestion, so that none of the wholeson food they take is properly assimilated, with results of ill-nouris ment, bloodlessness, want of breath, and weakness. One after a other in a large house-hold fails, and if one takes the trouble inquire it will be found that they have all been living on strong te

Tea is, of course, a mild sort of stimulant, and for the mome refreshes and pulls them together. They know nothing of t effect it has on their health, nor do they believe the warnings th are constantly sounded in their ears. When China tea was t only description procurable, the quantity that could be imbib was much less. Moreover, it was not nearly so potent as t Ceylon and Indian tea which has taken its place, nor did it conta so much tannin, and, consequently, people could drink it wi greater impunity. In every well-ordered household the quanti of tea per head is regulated, and if that amount were adhered the mischief would be lessened. Nearly every servant, howeve buys tea over and above her allowance, so that there is no check the habit. We take every precaution that our women servan should be sober, and yet we allow what is quite as bad as dra drinking to go on unnoticed. The effect of drinking tea in t quantities and of the strength indulged in by nearly all o domestics is really a very serious matter, and every head of household should make it her business to find out its extent, a stop it as far as she can. One cause of the increase of tea-drinki is the custom of giving beer money, instead of, as formerl allowing a certain quantity of beer per head, and it is a consta occurrence when engaging a servant for her to mention that s does not drink beer. No doubt that is true, but as a substitute s takes tea, which, in the quantity she consumes it, is much mo harmful than beer.

At this moment experienced housekeepers could put their finge on dozens of girls who are unfit to remain in their situations fro this cause, and unless some stand is made against it the numbe will go on increasing. If the strong tea is stopped, the remed works like magic, and strength and colour are soon regaine because food nourishes, and the blood ceases to be impoverishe Inquiries from any doctor practising among servants will bear o these contentions, and it is well that the attention of all mistress should be directed to them. Coffee and cocoa are not only harmle but nourishing, and can always be kept ready. The evil is, perhap even greater in the kitchen than in other departments of the hous owing to the heat in which cooks and scullerymaids have to wor and these beverages are as easily prepared there as tea. It ma seem, perhaps, a small matter in itself, but it deserves attentio

the habit is really undermining the health of our servants all er Great Britain.

A MORAL IN A TEA-POT.

The following "ditty," based on the foregoing article, appeared, signed, in the ensuing issue of *Truth*:—

Thanks! Thanks! Lady Jeune for the warning you give
In your article strong and impressive
'Gainst that drinking of tea
Which has now come to be
In our homes, so you tell us, excessive.
That there's "Death in the (tea) pot" you do not assert,
But at least it contains Death's first cousins,
For anæmia is there,
You are bold to declare,
And dyspeptic disorders in dozens.
Alas! for the cup which the Poet declared
While it cheered would inebriate never!
For it now, to our cost,
Has its innocence lost—
Its good character's blasted for ever!
There is only one chance for us now, so you say,
If we'd hope to hysteria's shock shun:
We must cease to imbibe
What you sternly proscribe
As a tannin-pervaded concoction!
Quite so, Lady Jeune, for this protest of yours
There is but a too adequate reason;
We admit that your plea
Against too much strong tea
Is an apposite word in due reason.
But this isn't all—of a much wider kind
Is the protest that we'd be commending;
We should like to repress
All those sorts of excess
To which we too surely are tending,
For excess, without doubt, is the fault of the age—
In our craze for persistent variety—
Of our doings there's none
That is not overdone—
Moderation's unknown in Society.
At the pace we now live at who stays to recall
The wise maxim derided as olden?
Who's content, as a fact,
Or in word, or in act,
With the "mean" that is aptly called "golden?"
Many things that we do in themselves may be good,
And as harmless we well may compute them
If they're moderately used;
It is when they're abused
That we into sore dangers transmute them.
'Tis excess that imparts such a savour of risk
To "Pekoe-ing" and eke to "Souchong-ing;"
'Tis excess night and day
Makes us fall a weak prey
To the craze of perpetual "Ping-Ponging!"
'Tis excess that amusement to torture can turn—
"Bridge" will serve as an awful example;
Or, recall, if you please,
Those depressing "Book" Teas
As a yet more significant sample.
'Tis excess to a mild little flutter at "Bac.'
Can convey a too scandalous flavour;
'Tis excess can impart
To what's meant to be "smart"
Quite a vulgar and "half-worldish" savour.
What excess can effect at St. Stephen's we know—
All kinds of abuses permitting,
It can turn a fair man
To a blind partisan,
And all night keep the House sadly sitting;
It can zeal misdirect, it can wholly pervert
An innocent aim and intention:
It can Irishmen lead
So to duty exceed
As to bring about wholesale suspension.
All we do, we repeat, in these days is o'erdone:
Artists lay on their colours too thickly;
And so restless are we,
All the doctors agree
That we travel too much and too quickly.
We live at a pace which no leisure allows
For so dreary a duty as thinking;
And the books that we read
Try our nerves (we concede)
Like that tea we're excessively drinking.
And what of those restaurants—known well to fame—
Where the *Gourmet* may dine in his glory?
Ask their managers—eh?
But they'd send you away
With a well-nigh incredible story!
The account of what Midas absorbs at his meals
Would seem to you more like a fable.
You with wonder would gasp,
As your minds sought to grasp
All his pleasures (so-called) of the table.
And the more you inquired—why, the more you would hear
Of profusion in dinners and dresses.
The more you would find,
If to search still inclined,
That o'er all things the trail of excess is.
Aye, it follows the bride as she walks up the aisle
Through a priceless lace veil faintly smiling;
And it walks by the hearse
With an ever-filled purse
Costly wreaths on the dead freely piling.
At dinner it sits by the side of the host,
It spreads too profusely his table;
It o'er does day by day
The persistent display
That he makes in his garden and stable.
Excess is, in short, a disease widely spread,
It's an irksome and wearisome fetter;
Excess is the rage—
The key-note of the age,
And the sooner we change it the better!

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION.

Extracts from Abstract of Proceedings of a Meeting of the General Committee of the Indian Tea Association (Calcutta) held on 16th April, 1901. PRESENT:—Mr. H. S. Ashton (*Chairman*), Mr. A. Tocher (*Vice-Chairman*), and Messrs. H. C. Begg, H. W. Boyd, W. Holder, and R. Magor.

Considered a letter, dated 29th March, from the Honorary Secretary, Kangra Valley Planters' Association, respecting the proposal to despatch a caravan of 32,000 lbs. of tea to Persia, which was referred to in the Proceedings of the Committee meeting held on the 12th March. In this letter it was stated that the date of despatch had been changed from June or July to September, as it was understood that the former months were unsuitable for travel and trade in Persia. It was added that contributors of tea would be required to subscribe a sum equal to 4 annas per pound on the quantity sent, to cover the expenses which would be incurred. The latter would include the salary of an Agent who would travel with the caravan and who would be expected to sell the tea to the best advantage, and to establish agencies at different places.

An enquiry was also made in the letter as to whether the General Committee could afford any help in the way of advancing the funds necessary to cover the expenses which would be incurred in connection with the caravan. As security for the loan the control of the tea would be put into the hands of the General Committee.

After discussion the Committee decided to inform the members of the Association of the alteration in the date of despatch of the caravan; and also of the terms and conditions under which tea could be contributed. They regretted, however, that they were unable to comply with the request for financial assistance owing to

the limited nature of their funds. The Kangra Valley Planters' Association was to be informed accordingly.

Considered a letter, dated 26th March, from Mr. H. Percival Hodgson, Chairman of the United Planters' Association of Southern India, respecting the possibility of sending Indian tea into Russia by the overland route. Mr. Hodgson stated that he understood there was a strong prejudice in Russia in favour of land-borne teas; and that such teas realised higher prices than sea-borne teas. Major Chenevix Trench, H. B. M. Consul at Seistan, had learned from the Russian Vice-Consul at that place that Indian teas sold in Calcutta at 14 annas per lb. compared favourably with China teas sold in St. Petersburg at 4 roubles per lb. It was further the opinion of the Russian Vice-Consul that if such Indian teas could be sent overland to Russia they would soon take the place of China teas in the market. In view of these statements Mr. Hodgson suggested that the General Committee should make enquiries as to (1) the route by which Indian tea could be carried to Russia; (2) the time the journey would probably take; (3) the probable expenditure—duties, &c; (4) the name of a reliable Russian firm to whom tea could be consigned; (5) the style of packing which would be most attractive; and (6) the best time for the tea to arrive in Russia.

The Committee had forwarded a copy of the letter to Mr. E. G. Foley, their Agent, travelling on the Persian frontier, and has asked him to make the necessary enquiries. They now decided also to send a copy of the letter to Colonal Yate, C.S.I., C. M. G., the Agent to His Excellency the Governor-General in Baluchistan, and to ask if he could give the Association any information and assistance in the matter.

Considered a letter, dated 30th March, from Mr. J. M. Korb of Kalimpong respecting the proposed introduction of Indian tea into Tibet. In the Proceedings of the last Committee meeting it was stated that Mr. Korb had ascertain that the Tibetan wool-traders, whom he had asked to carry tea into Tibet, had declined to do so. They had stated as the reason for their refusal that they feared punishment at the hands of Llamas. The Committee had asked Mr. Korb for further particulars; and he now replied that the merchants were forbidden by the Llamas and officials to take Indian tea into Tibet. They feared they might be fined or beaten if they disregarded the order.

The suggestion that the tea should be made over to the wool-traders had originally been made by the Government of Bengal; and the Committee now decided to inform that Government of the result of their attempt to act upon it. An enquiry was also to be made as to what assistance Government could afford in the way of opening out the trade.

A draft circular, to all members of the Association, containing the rules in accordance with which the bounty on green teas would, if offered, be allotted during the coming season, was approved. The circular was not, however, to be issued until the decision of the industry respecting the proposal to restrict production was made known.

NATURE AT HER BEST.

We love Nature! Our regard for her, with her sweet and varying moods, is undying, and our love such that it is beyond the art of man to quench. The promise of Spring is one great message of Hope. The fragrant breath of Summer whispers "Paradise"; the mellow touch of Autumn's hand ripens recollection; and crisp, biting Winter brings merry, ringing laughter, and rosy cheeks.

But of all, Summer is most dear.

It was in Summer that Tennyson found Rose, the gardener's daughter, "standing in a porch of roses." "Who had not heard of Rose, the gardener's daughter?" asks the poet.

Why did he not also find a gardener's wife, of rosy cheeks, whose buxom figure might tread with us down the ages as a picture of what a gardener's wife might be—not a woman "languid and weary," whose plaintive cry is that "every little duty is a trouble, and takes all the joy out of life."

Such women there are, even "gardener's wives," like, let us say, Mrs. Martha Herriott, whose very words we have written above. Who continues thus: "Morning, noon, and night, my head was racked with pain; often for days together I scarcely got a moment's freedom from it. Sometimes, when the attacks were very severe, my left eyeball became quite shrunken and small, and my head would swell right across the top. The pain I suffered then was intense; I cannot properly describe it, but shall never forget it as long as I live. I consulted the doctor and tried all kinds of medicine recommended by my friends, but, until I commenced taking Mother Seigel's Syrup, got no real benefit from anything.

A happy illustration is given us now of Nature quickly changing from decay to health, "for" continues Mrs. Herriott, whose address is, 24, John Street, London Road, Sheffield, "after taking it a short time, I felt much better, and the improvement continued until I was *free* from pain. Mother Seigel's Syrup completely cured me.

"When I am tired and worn out, after a hard day's work, nothing so soon revives me as Seigel's Syrup. It seems to strengthen every part of the body, and is, indeed, a splendid tonic."

That was in the summer of 1900. And *now* Nature is herself again! Life is gladness indeed

We love Nature as she is portrayed in the fields and flowers, but we ourselves, who are part of Nature, must be in perfect health to be in harmony with the countless beauties around us.

The keynote of contentment is good digestion, and Seigel's Syrup awakens into life, by its nutritive and medicinal properties those dormant digestive organs of the dyspeptic.

He or she can then say, "Nature is at her best."

MARKET REPORT.

[*Per Mail advices of 5th April* 1901.]

COFFEE.

The London Commercial Record says:—There is no improvement to report; where any change has taken place it has been in favour of the buyers, with the exception of colory small East India which sold readily at higher prices. The public market closed yesterday for the Easter holidays and will not re-open till Thursday, the 11th April. No important alterations have occurred in "future" but the tone is quiet at the close and prices are slightly easier; yesterday May delivery sold at 32s, September at 33s December at 33s 6d, and March at 34s per cwt. No auctions to-day.

London ...	... Santos ...	May delivery	... 32s 0d.
New York	... No. 7 Rio...	,,	... 5·60 cents
Hamburg...	... Santos ...	,,	... 31¾ pf.
Havre ...	... Santos ...	,,	... 39 francs

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900
Tons ...	16,771	15,027	13,254	11,12
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900
Tons ...	5,796	5,255	5,668	5,59

The preceding figures exhibit—

In the Imports an increase this year of ...	... 2,12
Home Consumption an increase of ...	... 54
Export an increase of ...	... 7
Stock an increase of	 1,74

Auctions have passed off as under:—

East India.—2,232 bags partly sold as follows:—*Mysore*, smalls 44s to 55s, low middling to middling 46s 6d to 57s 6d, good middling 59s 6d to 64s, bold 62s to 73s 6d, peaberry 50s to 75s. *Coorg* smalls 40s to 44s 6d, low middling to middling 47s to 54s, bold 62s to 72s, peaberry 58s to 86s 6d. *Neilgherry*, smalls 39s to 40s, middling 46s, peaberry 53s. *Wynaad*, smalls 37s 6d, low middling 42s. *Pulneys*, smalls 44s, middling 45s 6d, bold 52s6d, peaberry 50s.

Jamaica.—1 cask 50 barrels 81 bags partly sold, good to fine fine ordinary brownish 32s to 42s, low middling brownish 45s 6d.

Trinidad.—2 bags sold at 27s.

Costa Rica.—3,942 bags partly sold, smalls, blue 34s to 43s 6d, good to fine ordinary greenish 39s to 41s 6d, low middling 43s to 47s, middling 47s 6d to 52s, good middling 53s to 61s 6d, bold 60s to 66s, good to fine bold 69s to 77s 6d, very fine hard blue 81s 6d to 85s 6d, peaberry 44s to 68s 6d.

Guatemala.—Of 1,564 bags offered 1,330 bags sold, smalls 36s to 37s, low middling to middling 42s to 50s 6d, bold 53s 6d to 68s 6d, peaberry 47s to 57s 6d.

Salvador.—Of 986 bags offered 700 bags sold, smalls 33s to 37s, low middling to middling 41s 6d to 48s, good middling 50s to 55s 6d, fine bold 73s to 77s, peaberry 42s 6d to 58s.

NICARAGUA.—189 bags, mostly sold, smalls 28s, low middling to ddling 44s to 46s, bold 60s, peaberry 54s to 60s.

MEXICAN.—Of 724 bags offered 450 bags sold, smalls 29s 6d, low ddling 42s to 44s 6d, bold 50s to 54s. peaberry 50s.

COLOMBIAN.—250 bags mostly sold, smalls 25s 6d to 35s 6d, low ddling to middling 44s 6d to 46s 6d, bold 53s to 54s 6d, peaberry s 6d to 49s.

BRAZIL.—Of 145 bags washed Santos 9 bags peaberry sold at 45s.

Receipts in Rio and Santos.

	1900-1.	1899-1900.	1898-99.	1897-98.
nce July 1	Bags.	Bags.	Bags.	Bags.
Rio ...	2,339,000	2,943,000	2,663,000	3,689,000
Santos ...	7,055,000	5,304,000	4,898,000	5,529,000
Total...	9,394,000	8,247,000	7,561,000	9,218,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 1s $1\frac{1}{32}$d, previous day 1s $1\frac{1}{16}$d.

HAVRE, *April* 3.—Good average Santos April opened steady $38\frac{3}{4}$f. and closed steady at $38\frac{3}{4}$f., May opened at 39f. and closed 39f., September opened at $39\frac{3}{4}$f. and closed at $39\frac{3}{4}$f., Decemer opened at $40\frac{1}{4}$f. and closed at $40\frac{1}{4}$f.

HAMBURG, *April* 3.—Good average Santos March opened steady $31\frac{3}{4}$pf. and closed steady $31\frac{1}{2}$pf., May opened at 32pf. and osed at $31\frac{3}{4}$pf., September opened at 33pf. and closed at 33pf., ecember opened at $33\frac{1}{2}$pf. and closed at $33\frac{1}{2}$pf.

NEW YORK, *April* 3.—Closing prices of No. 7 Rio were as follow:—

	Mar.	April.	May.	June.	July.
pril 3...	5·55	5·60	5·65	5·75	5·80
pril 2...	5·55	5·60	5·65	5·75	5·80

TEA.

INDIAN.—The quantity brought forward was lighter amounting 35,800 packages compared with 43,200 packages in the week efore, and 35,100 packages a year ago.

There was again a good demand for all descriptions except low ommon, particularly those with brownish and reddish leaf which emained somewhat neglected. Prices on the whole shewed little hange, but the tendency was upwards for attractive parcels. everal desirable invoices from well known Assam Gardens elicited risk competition.

For 29,500 packages on estate account $6\frac{3}{4}$d per lb. was obtained ontrasted with 8d per lb. for 30,600 packages in the preceding eason.

Deliveries in March were 12,926,000 lbs., which following after early $31\frac{1}{2}$ million lbs. in February may be considered satisfactory, ut the statistical position has been so interfered with by the Budget scares in both this and last year that statistics are isleading.

CEYLON.—Auctions were on a similar scale to that of the Tuesay before, *viz.*: 24,600 packages *versus* 24,000 packages and 28,000 ackages twelve months since.

An improved enquiry prevailed for useful kinds, both Leafy and Broken, from 4d to 7d per lb, and for many of the lots which ossessed better flavour an advance of from $\frac{1}{4}$d to $\frac{1}{2}$d per lb. was ecorded. Pekoes and Orange Pekoes over the above were also ell supported, but medium to fine Broken Pekoes and Broken Orange Pekoes passed very irregularly, some being withdrawn, as ffers were below limits. Choicest parcels as a rule fetched ull rates.

The average is $7\frac{3}{8}$d per lb. On the 28th ultimo it stood at rather more than 7d per lb., and $7\frac{1}{2}$d per lb. in 1900.

JAVA.—In the absence of public sales there is nothing to report.

Deliveries.—The clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 31st March, 1901 ... ... 17,363,058 lbs.
Do. do. 1900 ... ... 32,666,399 ,,

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	28,719	7,102	35,821
Ceylon	22,799	1,814	24,613
Java	—	—	—
Total ..	51,518	8,916	60,434

Also 589 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated April 4th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1900-1901	1,538,872	1,116,852	52,038
1899-1900	1,534,248	1,035,841	50,559

36,790 *pkgs.* INDIAN
25,479 ,, CEYLON
— ,, JAVA
} Total 62,269 packages were offered in public auction this week.

Deliveries of Teas from London warehouses are still misleading owing to the large quantity cleared in anticipation of an addition to the Duty.

The market closed for Indian Tea on the 1st, and Ceylon Tea on the 2nd inst. The next sales will be held respectively on the 15th and 16th instant.

INDIAN.—Anything possessing quality continued to sell with strong competition, all useful liquoring Teas being readily disposed of at firm rates. On the other hand where liquors were indifferent, the market showed some slight irregularity. Closing invoices are now being freely sold, 137 having been brought forward to date against 147 during the same period last year. The official telegram gives exports to the United Kingdom for the second half of March as 209,000 lbs. against 100,000 lbs. during the same period last year, making the total from 1st April to end of March 162,022,000 lbs. against 148,792,000 last year.

Week's average of Tea sold on Garden Account 1901, 29,287 pkgs., av. 6·57d. 1900, 30,859 pkgs., av. 7·93d.

Total Tea sold on Garden Account 1st June, 1900, to date, 1,273,671 pkgs., av. 7·30d. 1900, 1,211,452 pkgs., av. 8·30d.

CEYLON.—With a comparatively light sale demand was good for all descriptions, useful liquoring Teas occasionally being a trifle dearer, although some of the better Broken Pekoes showed no actual advance, taking into consideration the improved quality noticeable. The official wire gives exports to the United Kingdom for March as 8,000,000 lbs. against 10,500,000 lbs. in the same month last year; making a total from 1st January to the end of March 29,000,000 lbs.; it also estimates the quantity for the current month at from $8\frac{1}{2}$ to 9 million lbs.

Average for week 7·35d, against 7·43d, in 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 356,379 pkgs., av. 6·58d. 1900, 330,954 pkgs., av. 7·56d.

JAVA.—Javas were not represented; the first sale after Easter will be on the 18th instant.

Bank Rate 4 per cent. Exchange on London three months' sight:—Calcutta $1/4\frac{3}{16}$. Colombo $1/4\frac{7}{32}$.

COCOA.

There is no material change in market conditions. Auctions on the 2nd instant presented 7,310 bags, of which about 3,250 bags sold, the only movement in prices being in the case of fine Grenada which was rather dearer. Of 1,807 bags Trinidad catalogued 580 bags sold at 67s to 69s for middling to good, being valuations. Of 2,525 bags Grenada, 2,070 bags were placed at 64s 6d to 66s for fine red, 63s to 64s for fair to good and 61s 6d to 62s 6d for very common to common, which rates show a slight appreciation in the fine grades but unchanged for others. 27 bags Dominica realised 61s to 64s 6d for common to fine. 49 bags Colombian brought 71s to 75s 6d. Of 219 bags Samana only one lot sold at 56s. Ceylon is still pressed for sale but without much result, demand being very poor; 1,048 bags were catalogued and about 400 bags found buyers, superior bold red 100s, fine bold and medium 90s 6d to 93s 6d, fair to good ditto 77s 6d to 85s 6d, good to fine small 66s to 70s 6d, common to ordinary medium 58s to 64s 6d, pickings 53s to 56s per cwt. Privately 6d to 1s decline accepted for Trinidad, about 500 bags selling, including fine at 70s 6d. 175 bags Bahia sold at 65s, and 1,000 bags Guayaquil—grey to reddish Caraquez 63s to 64s 6d, winter Arriba 68s to 70s, and summer at 80s per cwt.

PEPPER.

BLACK.—There is very little business passing on the spot, but prices are firm at 6d per lb, for fair Singapore. For arrival more activity stimulated by the very small shipments, and rather higher prices paid—March-May (s.) $6\frac{1}{8}$d to $6\frac{5}{32}$d, May-July $6\frac{1}{8}$d, and June-August $6\frac{3}{16}$d.

Nothing offered at auction on Wednesday.

To-day 25 tons Tellicherry sold for arrival at 54s c.i.f., and 25 tons at 53s 9d c.i.f. April-May shipment London.

A fair quantity of Singapore sold at 5 3/32d for fair.

The shipments of Black Pepper for the month of March, compare as follows:—

	1st-half.				2nd-half.			
	1901.		1900.		1901.		1900.	
	Tons.		Tons.		Tons.		Tons.	
U.K.—Sing. ...	70	80	120	240	*nil*	*nil*	60	280
„ Penang ...	10		120		*nil*		220	
Continent ...	170		190		60		160	
United States ...	*nil*		330		140		170	
Total ...	250		760		200		610	

White.—Cheaper for Penang. Moderate sales of fair to good fair Singapore on the spot at 9d to 9 1/16d, and dullish to fair Penang 8 1/4d to 8 5/16d per lb. To arrive nothing reported done.

No offerings were made at the auctions on the 3rd instant. *To-day* sales of White of fair Singapore at 8 7/8d, and Penang at 8 5/16d.

The shipments of White Pepper for the month of March, compare as follows:—

	1st-half.				2nd-half.			
	1901.		1900.		1901.		1900.	
	Tons.		Tons.		Tons.		Tons.	
U.K.—Sing. ...	*nil*	30	20	150	*nil*	*nil*	50	70
„ Penang ...	30		130		*nil*		20	
Continent ...	70		*nil*		*nil*		30	
United States ...	—		—		40		—	
Total ...	100		150		40		100	

Cayenne.—4 crates yellow Nepaul bought in at 1s per lb.

GINGER.

Cochin.—Considerable expansion has taken place in the volume of business this past week, and values have risen; short crop reports and the Continental demand are the cause. Medium and small washed rough sold privately at 36s 6d to 37s 6d, small native cut at 45s to 46s 6d, small cut and trimmed 48s, medium native cut 50s. Under the hammer 56 cases 500 l were offered of which 20 cases 20 bags sold—small and med cut at 47s 6d, small and medium very rough dark, slightly li 35s per cwt.

Jamaica.—Continues in good demand at a further advance o per cwt. 744 barrels were offered and all sold, as follows:—fai good bright washed 50s to 61s 6d, low middling to middling 43 to 49s, common to good common 39s 6d to 42s, Rhatoon 35 38s per cwt.

CINCHONA.

The Amsterdam correspondent of the *Chemist and Druggist* wri on April 1, that the N. V. Nederlandsche Veem cinchona-bark partment estimate the shipments from Java to Europe dur March, 1901, at 875,000 Amsterdam lbs., against 650,000 Amsterd lbs. and 977,000 Amsterdam lbs. for the corresponding period 1900 and 1899. The total shipments from January to Ma have been:—

	Amsterdam lbs.		Amsterd lbs.
1901 ...	2,623,000	1897 ...	1,350,0
1900 ...	1,906,000	1896 ...	2,073,0
1899 ...	2,025,800	1895 ...	1,862,0
1898 ...	2,356,000	1894 ...	1,873,0

QUININE.

A good speculative business was done last Thursday and Frida after the Amsterdam bark sale, and the receipt of news of sma shipments from Java for March. The transactions included sp at 1s 3 1/4d to 1s 3 3/4d; May at 1s 3 5/8d to 1s 3 7/8d, and August 1s 4d 1s 4 3/8d per oz. This week, however, practically no business ha been done in secondhands, and prices are easier, with sellers June delivery at 1s 3 3/4d, and August at 1s 4d. At the auction quinine in Java to-day the bulk of the offering was disposed of a an advance of 11 per cent., the average price paid being 22 3/4f against 20 1/2fl. at the previous auction. The American brand (P. W.) was advanced to 34c. last week, but other makers still quot 32c. German sulphate from makers is unchanged at 1s 4 1/2d.

(Average for all India 6·57d., April 4th.)

Garden.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price.
Travancore ...	290	4·86												
Kan Dev H Co A ...	66	4 1/2	...	...	36	4 3/4	...	...	30	4	...	...	...	...
„ Munaar ...	984 p	5 1/4	35	5 1/2	59	5	56 1/2c	7	34	4	...	...	...	...
Riviera ...	40 p	3 1/2	...	...	28	3 1/4	10	4 3/4	...	...	...	...	2 1/4c	2 1/2
Wynaad ...														
Kanambyle & Cher	55	5 3/4	...	...	21	5 1/2	34	5 3/4	...	...	...	...	...	...

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PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 10th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Coorg.

Polli Betta, 30*th April*.—*Weather*—Rain almost every day during the past week. Pleasantly cool now. Coffee is freshened up and is putting on good growth. *Works*—Manuring and borer. *Crop*—The last blossom had favourable setting weather, but unfortunately there was not much of it. *Labour*—plentiful. *Health*—Fair.

THE DATE-PALM.

Bye-products have been freely brought to the notice of tea and coffee planters in Southern India, but if any one of the many that have been named has been cultivated successfully, the reaper of the benefit has kept his success decidedly dark. On the whole, there has probably been more hard cash spent in the acquirement of experience than profit earned as the result of enterprise. Yet this is by no means a good reason why such enterprise should cease. One of the chief difficulties is that gentlemen who advocate the claims of particular products do not state sufficiently clearly the habitat and the requirements of such plants, the conditions under which they chiefly flourish, and many other details essential to the making of a correct estimate of prospects. As a rule, some scientific or quasi-scientific individual draws up a recommendation intended for people in the district in which he is working or writing. They, knowing the local conditions, etc., are able to form a sound judgment as to his suggestions. Some newspaper scribe afar off gets hold of these, and without knowing these conditions calmly reiterates the suggestions with respect to a district or a country wherein climate, temperature, labour conditions, etc., are widely different. The result—temporary *kudos* to the scribe,

expensive experience to the experimenter who acts upon his suggestions. And then, the man who thinks he has a grievance *howls*. If there be one who has really benefited by the advice given him, he, nine times out of ten, lies low, for fear lest any manifestation of content on his part might stimulate his brother-planters to follow his example, thus increasing competition with the natural result of increasing the risk of prices declining.

For instance, the Conservator of Forests, South Australia, has warmly advocated the claims of the date-palm to the favourable notice of agriculturist on the interior of that colony. It does not follow that the date-palm would thrive in India, nor are sufficient details regarding atmospheric conditions given to enable us to assert that there is a strong probability that this palm would do well in particular parts of India. Still, there are sufficient indications in this country that the cultivation of the date-palm deserves consideration, and while several of the planting districts in Southern India offer no inducement there are a few where the date-palm would probably repay the planter's care. It is described as "an example of extraordinary fruitfulness." We are informed that "next to the cocoanut it is unquestionably the most interesting and useful of the palm tribe." It can draw nourishment from the scorching sand, and scarcely less burning airs of heaven, and the brackish waters beneath the soil, which are fatal to all other kinds of vegetation ; it retains its verdure fresh in the glare of a pitiless sun ; it provides the grower with beams and coverings for his huts ; cordage for the harness of his horses and mules ; fruit to satisfy his hunger. The Italian relies on his vine, the Polynesian on his cocoanut, the Arab on his date-palm. The habitat of the date is North Africa, Arabia, Persia, Egypt, Nubia, Syria, and it does not go farther east than the mouth of the Indus. It is indigenous in the ' anary Isles ; wanting in the south of Senegal, and it no longer appears in oasis of Darfur, between the 13th degree and 15th degree of latitude. The Zone in which it grows well in general is that between 35 degrees and 19 degrees north. According to LINK, it flowers freely in the south of Europe, as in Sicily, the Morea, and the south of Spain ; and also bears fruit there, though this is not sweet. In Sicily it still grows at 1,700 feet—namely, at Aderno and Trecastagne on Etna, but it probably does not bear fruit on this island. It needs 5,100 degrees Fahr. of heat accumulated during eight months for the date to ripen its fruit perfectly. If the sum of the heat be less the fruits set, but they do not grow to their full dimensions ; they also remain bitter to the taste, and lack much of the sugar and albumen, to which they owe their nutritive properties. The mean temperature of the year in the Sahara averages from 68 degrees to 76 degrees, according to the locality. The heat commences in April, and does not cease till October. KEITH JOHNSTON's "Physical Atlas" gives the temperature in Summer and Winter as—July, 81 degrees to 86 degrees ; January, 52 degrees to 61 degrees ; mean temperature (annual), 68 degrees to 76 degrees. Biskra, the celebrated date-growing district in North Africa, is in latitude 34 degrees 51 minutes, altitude 410 feet ; it faces towards the hot tropical south, and is protected by mountains on the north side. It has an annual mean temperature of 68·5 degrees. (January 50·2 degrees, July 89·8 degrees.) The thermometer seldom sinks in the cold season more than 2 degrees below freezing point, and the date can endure 6 degrees of frost. The neighbourhood of the sea is unfavourable to the production of good da The general altitude of the central districts of North Afr where it thrives, is 600 feet to 2,000 feet ; the date p also grows in some Egyptian oases from sea-level to 600 f The lower portions of the rivers Euphrates and Tigris Turkey are from sea-level to 600 feet. The amount of ann rainfall requisite for the best dates is from 5 inches to inches ; for those of inferior qualities, from 10 inches 25 inches.

It may be thought that all this does not lend m encouragement to the idea that the date-palm can be succ fully grown in India, but the fact remains that it is gro in some parts. Although the date requires a hot, climate, yet its roots must have access to moisture. A though it is essentially a tree belonging to desert regio yet it is confined to the oases in these deserts where wa is found. It flourishes in rainless countries, but only wh there is moisture in the soil, either naturally or produced irrigation. MEYEN, in his "Geography of Plants," sta that a sandy soil suits the date best ; and SONNINI, saw growing in the sands in Egypt as well as in the more fer parts. It will luxuriate even in saltish soil, and the wa for its irrigation may be slightly brackish. Brigade-Surge BONAVIA says that, on the whole, it thrives best in san granitic, schistic, and calcareous soils. The northern half Arabia, which is an important centre for date culture, granitic. As to the virtue of dates:—They contain m than half their weight in sugar, but there is a fair amou of flesh-forming material present as well dates without stone, contain in 100 parts :—

Water	... 20·8
Albumen	... 6·6
Sugar	... 54
Pectose and gum	... 12·3
Fat	... 0·2
Cellulose	... 5·5
Mineral matter	... 1·6

The pungent rigidity of the foliage protects the date fr encroachment of pasture animals ; hence it can be left witho fencing or hedging. Professor TRYON, Government En mologist, Queensland, from whose writings we gather t chief facts stated above, considers that conditions in lo Queensland are favourable for date-palm cultivation. Wou it not be worth the while of some planters in India—say, Mysore,—to make an experiment?

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S.

Tea Trade with Persia.

The Secretary of the Indian Tea Association (Calcutta) h issued a copy of a memo. drawn up by the Kangra Vall Planters' Association with regard to the caravan carryi 32,000 lbs. of tea which it is proposed to send through fr Quetta to Meshed. He invites attention to the terms a conditions stated in the memo., in accordance with which t will be received from gardens. The date of despatch of t caravan has been changed from July to September.

CARAVAN OF TEA FOR PERSIA.

At a meeting of the Planters of the Kangra Valley held Palampur on the 15th March, 1901, the following resolutions w passed:—

That a caravan of tea consisting of not less than 32,000 lbs. n

despatched to Persia *viâ* the Nushki route in accordance with H. M.'s Consul suggestion (*vide* H. B. M's Consul for Seistan's rrespondence with the Kangra Valley Planters' Association, ngra Tea Association and others).

Time of Despatch.—The caravan should start early in September 01, an earlier date not being recommended by the Consul, the onsoon being considered unsuitable for transport and trade

Agent and Terms.—Mr. T. J. Greensill of Bunoorie Tea Estate to engaged as travelling agent on a salary of Rs.300 per mensem, d travelling expenses to conduct the caravan of 100 or more mels carrying 32,000 lbs. or more of tea from Quetta *viâ* Nushki, d to sell the consignment to the best advantage in the markets North Persia, also to establish agencies, etc., for future trans- tions. Commission on sales (gross) to be allowed to the Agent at e following rates up to Re.1/ per lb., 2½ per cent., above Re.1/2 Re.1/8 per lb. 3½ per cent., over Re.1/8, 5 per cent.

Tea required and Mode of Contribution.—*Black tea* well twisted un- oken Pekoe leaf with tip; *Green tea* hand-rolled finest, China unpowder style similar to ordinary Kangra Valley make. Samples be obtained from the Honorary Secretary, Kangra Valley anters' Association, shortly on application. Those wishing to nd tea from this district must give notice of the amount they are lling to contribute and send samples of the same at as early a te as possible. The samples will be examined by the Committee the Kangra Valley Planters' Association whose decision as to eir suitability or otherwise must be accepted. A subscription ual to four annas per lb. on the amount contributed will be re- ired from every contributor, this being the estimated requirement cover Agent's salary and expenses for six months. Tea from e Kangra Valley must be sent to a *central factory* before the 1st ptember. It will then be bulked by Mr. Greensill and repacked. he Manager of the Bundla Tea Company has offered his factory r this purpose, charging only actual cost offered and labour sup- ied by him; no charge will be made for use of factory or machin- y. If, in the opinion of the Committee of the Kangra Valley anters' Association, the tea supplied from any Estate be consider- so inferior to the samples previously accepted from that Estate as be detrimental to the remainder if bulked with it, the Committee ay refuse to accept such tea and the same shall be removed by e owners at their own expense, no claim of any description being ssible against the Committee of the Kangra Valley Planters' ssociation. No contribution can be included for which the sub- ription at the rate of four annas per lb. has not been paid to the onorary Secretary, Kangra Valley Planters' Association. The bscription will be returned if the tea be not ultimately despatch- . *Packing:* black tea must be packed in uniformly sized white ood, lead-lined, hooped cases. The exact measurement of the cases hich will contain 80 lbs. nett) will be intimated later by the onorary Secretary, Kangra Valley Planters' Association, to those plying for information. Green tea must be packed in bags and ll be bulked by Mr. Greensill in Palampur.

Teas from other districts should be bulked for each district if ssible, as it would be found inconvenient were the Agent obliged handle a number of different sorts of tea. The same conditions mentioned for Kangra Valley teas must be accepted by outside ntributors subject to such modifications only as may afterwards agreed upon. These teas should be sent direct to Quetta ldressed to Mr. T. Greensill, Agent, Kangra Valley Planters' ssociation, before the 10th September. Other particulars on plication to the Honorary Secretary, Kangra Valley Planters' ssociation, Palampur.

Every contributor binds himself, when sending tea, to the terms this circular.

The Agent will go with the consignment from Quetta *viâ* Nushki Seistan and Meshed, also to other places in North Persia. The onorary Secretary, Kangra Valley Planters' Association, is now communication with bankers in Persia enquiring the facilities r the remittance of money to India. Account will be kept for the aravan's expenses by the Honorary Secretary, Kangra Valley lanters' Association, and deposits on account of the same will be dged with some bank in Lahore. The proceeds from the Kangra alley portion of the consignment (which being posted) will be vided proportionately among the contributors in the Valley, those om outside contributions will be kept separately and remitted to eir different owners which accounts can be closed. Reports of e progress of the caravan will be periodically circulated if possi- e to those concerned.

COFFEE IN DISTANT LANDS.

XXVI.

Jamaica.—Mr. Robt. Thomson, in a letter to the *Times* during last year, quotes paragraphs from his paper published in a Foreign Office Report in 1895 (Misc. Ser. 370, Columbia). He states in his report that coffee cultivation in Columbia yields a larger profit than in Jamaica. He assigns several causes, *viz.*; land at a nominal cost, cheap and abundant labour, exchange in planters' favour, and larger yield per acre. The bulletin of the Botanical Department, Jamaica, says:—All these causes are more than sufficient to account for a large profit. He might have added abundance of land with virgin soil and suitable climate, which would fully account for the larger yield. He, however, appears to think that "one of the chief elements of success must be assigned to the systematic interplanting of shade trees with the coffee." Elsewhere he alleged that another reason for the low price of Jamaica coffee is the want of careful preparation. I under- stand. although he does not make it clear, that he is only referring to the coffee of the peasantry. It is, however, hardly fair to compare without discrimination the coffee industry in the two countries: in Columbia it is carried on by capitalists on large estates, whereas in Jamaica the bulk of the coffee is grown by peasants on small holdings. Mr. Thomson refers to extension of cultivation. In my Annual Report for 1892-93 I dealt with the desirability of the exten- sion of cultivation chiefly by large landowners, and pointed out that the circumstances operating against increase in cultivation were scarcity of labour and want of roads which also enhance the cost of production and putting on the market. At the present time and with the price of coffee so low, it is rather the improvement in cultivation and in the curing of coffee of low altitudes than any extension that is desirable. Mr. Thomson states that in Columbia at an eleva- tion between 5,000 and 6,000 feet, no shade at all, or only light shade is required; and between 3,000 and 5,000 feet he recommends certain leguminous trees, Erythrina and Inga. He is in error in stating that "British colonial coffee planters have in the main ignored the application of shade to the coffee." In Jamaica, as well as in Columbia, the coffee tree at highest elevations does not need any shade, but on the contrary it wants all the sun it can get; and if for some reason, such as the proximity of forest land inducing cloud, there is a deficiency of direct sunlight, the coffee berries do not ripen, and cultivation is a failure. At somewhat lower altitudes a slight shade is necessary, at any rate during the hottest part of the year. Jamaica coffee planters in the Blue Mountains use the West Indian Cedar which is a light shade at a good height above the coffee, the trees being bare of leaves during the winter months. In Manchester at still lower elevations the light shade of the Trumpet tree is made use of, and shade of some kind is quite universal at this and all lower elevations. In fact, so far from shade not being used, I have frequently

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nicholson's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf people, unable to procure the Ear Drums, may have them free.

Address—No. 989 D, THE NICHOLSON INSTITUTE,
Longcott, Gunnersbury,
London.

[w. 26-5-00—26-5-1901.]

pointed out cases where the shade not being used, I have frequently pointed out cases where the shade used is too dense, favouring the growth of fungus pests. There is no need of direct attention to the employment of shade in general, but there is need for careful inspection of the kind used and its effects in different localities, and for directions about the adoption of shade trees more suitable than many of those at present in use. But the proper use of shade is only one item in an immense number of agricultural operations of which the peasant proprietors are completely ignorant, and have no opportunity of learning, unless instructors are sent amongst them, not to lecture, but to demonstrate by actual work in their fields.

Queensland.—The *Queensland Agricultural Journal*, writing about Coffee on the Clarence, remarks :—Many persons who have grown coffee in the South of Queensland have affirmed that it will only prove remunerative in certain favoured localities, such as the Buderim Mountain and parts of the Blackall Range. Others go so far as to say that coffee cannot be profitably grown anywhere south of Mackay. The Clarence River is very far south of Brisbane, yet we learn from the farmer and Grazier that Mr. John Ball, of Chatsworth Island, has been most successful with his coffee crop this year. His last crop returned 1,694 lbs., which sold at 1s. to 1s. 3d. per lb. This year the crop is expected to amount to something like 6,000 lbs. Mr. Ball has mastered the manufacture of coffee of the highest quality, and finds a good demand for it. His trouble is to secure sufficient quantities of beans. In reply to inquiries made of Mr. Holmes, a planter in Fiji, Mr. Ball has been informed that, owing to unsatisfactory prices offering in Sydney for the Fijian bean, the growers there were abandoning coffee-growing. Mr. Holmes forwarded Mr. Ball some seeds of the Liberia coffee, which is a sturdy-growing tree with deep tap root, and which bears a larger berry than the ordinary Arabian variety. In Fiji, even at the extremely low prices (3d. to 5d. per lb.) paid for the beans, this variety returned 4s. 7d. per tree. Mr. Ball finds that he can pay 10d. a lb. for good beans. His harvesting is done by lads, who are able to earn 15s. a week at the work.

Sarawak.—The *Sarawak Gazette*, remarking on a recent visit of H. H. the Rajah to the Matang Coffee Estate, says :—

His Highness the Rajah, accompanied by Mr. R. Shelford, visited this estate during the past month for two days and thoroughly inspected it.

The estate, which is now worthy of the name, occupies a space of about 650 acres and is nearly all planted. The coffee is of different ages, but in three years the whole will be in bearing, except that which will be planted during next year. This will be some 80 acres, and when it is done the estate will have reached its maximum size. A correct survey of the whole estate is now being made by Mr. H. B. Crocker.

The manager reckons on turning out 3,000 pikuls in one year when the estate is in full bearing and this at a moderate computation should give about $60,000. There are now two hundred and fifty coolies at work, costing about $1,500 monthly.

A new store, with washing vats, crushing machine, and oil-engine for working the crusher, will have to be made or ordered within the next eighteen months; the cost of this should not exceed $5,000.

His Highness the Rajah was very satisfied with the state of all the coffee, but especially with the younger plants which are coming on evidently with strong roots. Scar a yellow leaf is visible anywhere. A fair show of coff on the older trees and there is a fair amount in store.

Spain.—The cultivation of coffee for commercial purp is, according to the United States Consul at Malaga, abou be undertaken for the first time in the Province of Mal at the little village of Campanillas, some five miles from capital. Don Quirico Lopez, a rich wine merchant of Mala will begin by setting out from 20,000 to 50,000 coffee pl on his plantations there. As long as Cuba and Porto R were Spanish possessions, the cultivation of coffee in peninsula of Spain was forbidden, but under present co tions the Government interposes no objection. Senor Lo has already made some experiments and is convinced t coffee can be advantageously grown in this province elsewhere in Andalusia. Others who have examined question claim that there is not sufficient humidity in Andalusian climate. Cuba and Porto Rico formerly suppl Spain with nearly all her coffee, paying the Governmen consumption tax of 60 pesetas per 100 kilograms ($9·60 220·46 pounds) on all coffee entering the Peninsula. present the import duty on coffee is 140 pesetas ($22·40) 100 kilograms from all countries except from the Spani island of Fernando Po, and Spain's supply last year ca largely from Valparaiso and other South American por Coffee from Fernando Po pays a duty of 105 pesetas ($16·8 per 100 kilograms.

NOTES.

New Season's Tea. Samples of new season's tea arriving in Calcutta, and are said be of satisfactory quality.

Tea and Coffee. We publish interesting Proceedin of the Central Travancore and South Mysore Planting Associations. Upon these we sh probably comment in our next issue.

Coffee in Nyasaland. On another page we give an int esting account of coffee-planting Nyasaland, by M. Lionel Decle. There are some obvio blunders, but in spite of these what M. Decle says is w worth reading.

Tea in Cochin. There was only one tea plantatio comprising an area of 12 acres, in t Cochin State during 1899-1900. Tea has practically ceased exist on the Nelliampathies, and there was no manufactu during the year.

The British Tea Duty. The resolution re-imposing t Tea Duty has been adopted in t House of Commons by 221 against 130 votes. An amen ment of Mr. Redmond to reduce the duty to 4d. was rejecte Sir Michael Hicks-Beach said that he was aware of the co dition of trade in India, but regretted he was unable to redu the duty this year.

Ceylon cries off. With reference to the moveme to restrict the production of Briti grown tea, the General Committee of the Indian Tea Associ tion have received a telegram from London to the effect th

has been found impossible to obtain the adherence of a fficient number of Ceylon tea concerns to reduce the Ceylon :turn by eight million pounds.

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w and then: a Contrast.

The *Ceylon Observer* remarks :—We have seen the Tea Sales lists of a Ceylon proprietor for February, 1900 d February 1901. In the former his "Pekoe Souchongs" e described as of "poor quality," but they sold for 6d a lb. the presen year (February), the London report is "sweet voury teas," but all the same they realised 3d a lb. !

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e Green Tea Problem.

On the 27th March Mr. Mackenzie despatched the following cablegram om New York—"Green prospects are more favourable." This nouncement was not supported by the experience of the trade Ceylon at the time; but recent issues of the *Canadian rocer* show evidences of increased attention, as many as even wholesale houses offering the new make in a single ue.

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e Nyassaland Coffee Co., Ltd.

A general meeting of this Company was held at Colombo on 27th ultimo and it was resolved: "That in the inion of this meeting the Company should be wound up d liquidators appointed, and the Agents and Secretaries be thorised to issue notices to the shareholders calling meetgs to give effect to the above." Mr. E. R. Waldock conded.

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ffee in Burma.

The *I. P. G.* states the coffee crop of Mr. de Souza's plantation near ıung-nguon, the border of the Karen district, has been mpletely destroyed by blight. There would seem to have en a regular epidemic of plant disease in that corner of ırma in the past season. The Karens raise large quantities the berry, which is garbled and cleaned by the American ocess, finding ready sale locally.

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dustrial Development.

A Company has been formed in England, with the title of India evelopment (Limited), for the purpose of engaging in and omoting various commercial and industrial enterprises in dia, and for the purpose of acquiring, amongst other things, rtain interests in undertakings connected with the growth, anufacture, and refining of sugar, and the manufacture of lling stock and work in connection with railway equipment, c. The share capital is £500,000 in shares of £1 each, the esent issue consisting of 300,000 shares at par.

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ffee in Spain.

The United States Consul at Malaga, Spain, states that Don Quiri- Lopez, a rich wine merchant of Malaga, intends setting t from 20,000 to 50,000 coffee plants on his plantation ere. Señor Lopez has already made some experiments and convinced that coffee can be advantageously grown in this ovince and elsewhere in Andalusia. Others who have amined the question say that there is not sufficient humidity the Andalusion climate. Practical experiments on a large ale will be made, and the result is awaited with great terest.

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the Indian Frontier.

Mr. Foley, who suggests supplying Indian tea on the Kashmir and Punjab Frontiers, the tea being compressed into small bricks, has interviewed General Sir R. C. Hart, who received the suggestion favourably. Mr. Foley thinks a million pounds will thus be consumed. He addressed a letter to the Private Secretary of the Viceroy on the subject and has received a letter from Capt. Webb Ware, urging him not to remain at Quetta but to go on to Meshed, taking Seistan and Birjan *en route*. He carries eight hundred pounds of tea, sorted in tins, and loose samples.

Coffee under Shade.

It is cheering, says the *Ceylon Observer*, to have the following report from a well-known Passara planter :—"If only men had planted coffee under judicious shade, we should not have been bothered in Uva very much by tea over-production. I have coffee growing here as vigorously under shade as it was a quarter of a century ago." Our contemporary remarks :—"This is probably on or near to Mr. C. B. Smith's estate of Mousagalla, the first clearing on which we saw burned off by old Thomas Wood in 1865! The soil and lay of land were all that could be desired. Pity there are no suitable reserves on which to try coffee under judicious shade now.

How "Fine Plucking" works towards Reduction of Output.

A proprietary planter reports to the *Ceylon Observer* his experience of the fine plucking he introduced this year on his estates—medium elevation —thus :—

Crop reduced	30 per cent.	
Cost of tea increased	10 to 15	„
Price got for tea increased	50	„

Our correspondent is, says our contemporary, a believer in and supporter of the "rest" scheme; but surely with a 30 per cent. reduction, "fine plucking" is a more effectual means of reducing output? And the best of its working, is that it pays.

Quinine in Italy.

A copy of a new law regulating the price of quinine in Italy, has just been signed by Victor Emanuel III. The law, No. 505, is dated December 23, 1900, and consists of ten clauses. Clause 2 lays down the price at which quinine shall be sold to the public in gramme-tubes as 40 centesimi (3·8d.) for the hydrochlorid, and 32c. (3d.) for the sulphate or bisulphate. The detailed regulations are not yet issued from the Government printers, but are promised "shortly." The new law is meeting with considerable opposition from the Italian pharmacists, and it may be some time before the public will benefit by the reduced prices. The price at which quinine is at present sold in Rome is $5\frac{3}{4}$d. for a gramme of sulphate, or $9\frac{3}{4}$d. for the hydrochlorid.

Eccentric Taxation.

Sir Howard Vincent lately gave notice that he would ask the Chancellor of the Exchequer "if he is aware that, of the over-sea goods brought into the markets of the United Kingdom, only 6 per cent. are charged a toll or duty on behalf of the public revenue, and that these latter, amounting to 32,000,000*l.* in 1890, paid a duty of 80 per cent., one-half being raised on articles of food not producible in Great Britain and Ireland, and paying $47\frac{1}{2}$ per cent. *ad valorem* duty, and the remainder on tobacco, paying 253 per cent. *ad valorem;* and whether in the coming Budget he will endeavour to readjust this unequality, and to enlarge the area of indirect taxation,

giving a perference to Empire products, and admitting bread, stuffs and raw materials free."

Mr. E. E. Green.

We heartily congratulate the Ceylon Government Entomologist who is the first to be awarded the "Barclay Medal" of the Bengal branch of the Royal Asiatic Society. The late Surgeon-Major Barclay, of the Indian Medical Service, contributed to science some most valuable work on various Fungi. His untimely death at the early age of 39 was a severe loss to science in the East, and it was felt that some suitable memorial should be instituted so that the influence of his example and work should be kept alive. Hence the "Barclay Medal" which is to be presented annually to the investigator in Biology in India and Ceylon who has done the most valuable work. The first award, as we have said, has been made by the Council of the Society to Mr. E. E. Green, F. E. S., Government Entomologist, Ceylon, for his work on the insects of India and Ceylon.

"The Adulteration of Food Products."

This is the title of United States Senate Document No. 141. It is a digest of the testimony taken before the Senate Committee on Manufactures, together with a digest of the laws of the United States and of the several States and Territories relating to food products. Much of the testimony given before the Committee was *ex-parte*. Some notoriety-seeking parties, whose testimony is of little value, posed as experts. Many witnesses were special leaders. In some cases it seemed impossible to get the testimony of experts in the manufacture and handling of food products before the Committee. Thus far, the testimony submitted is far from conclusive and is insufficient to base intelligent legislative action upon. There are many physiological questions connected with food adulteration that ought to be settled before a National pure food law is enacted.

The London Tea Market.

The last special telegram to Colombo from Messrs. Gow, Wilson & Stanton reports that the market generally is weak, and that the market for medium liquoring Pekoes and Broken Pekoes shows a slight decline, while the market for Common Pekoes and Broken Pekoes is also weak. The price of fair liquoring Ceylon Pekoe Souchong is 5½d and the average price of Ceylon tea sold on garden account this week was 6⅞d (three-eighths of a penny down)—as against 6¼d and 7⅜d respectively in the corresponding week last year. Reuter reports that the demand for Ceylon tea is generally poor ; and Broken Pekoes are in buyers' favour. Pekoe Souchongs are quoted at 4¼d (same as last week) and the average for the week at 7d (⅜d down) as against also 7d quoted for Indian tea. 33,000 packages of Ceylon tea were offered for sale, of which 28,000 were disposed of ; while of the 25,000 packages of Indian tea offered, 22,000 found purchasers.

Ceylon Green Tea in Toronto.

The *Canadian Grocer's* Toronto letter, dated 28th March, 1900, says : —The firmness on the price of good flavoury Indian and Ceylon teas with point is still the feature of the market. Advices from abroad say these teas are in demand everywhere. On the local market there are practically none to be had. Low-grade Indian and Ceylon teas are still low in price, but they are not to be had on the same basis as they were a short time ago. During the past w one importing house tried to duplicate an order for a l grade tea, but the holders cabled that they could not ac unless ½d. higher was paid Representatives of shippi houses report that there has been quite an inquiry during past week for Ceylon green teas. Said one broker : "Cey greens in first hands which a month ago were going beggi are now almost exhausted, so great has been the deman late. We have had to rebuy and pay a profit in orde fill wholesalers' orders which came in. There will b distinct shortage until the teas now afloat arrive."

Coffee in the New World.

An interesting statistical report coffee for 1900 compiled by Arn Schramm, of New York, gives the following : Total arriv of coffee at New York during 1900 were 342,274 bags Maracaibo, 41,404 La Guayra, 8,035 Coro, 64,745 Savani 172,301 Mexican, 204,739 Central American, and 20,9 Jamaica. Following differences between average of 19 ye and receipts for 1900: Maracaibo, 31,017 bags more ; Guayra, 75,627 less ; Coro, 540 less ; Savanilla, 33,386 le Mexican, 56,121 more ; Central America, 23,062 less, a Jamaica, 3,191 less. Stocks on December 31, of follow years, follows : Maracaibo, 1900, 38,354 bags ; 1899, 7,32 1898, 30,488 ; 1897, 37,800 ; 1896, 19,000 ; 1895, 47,2 La Guayra, 1900, 4,039 ; 1899, 187 ; 1898, 4,866 ; 18 400 ; 1896, 1,600 ; 1895, 3,700 ; 1894, 1,001. Coro, 19 3,499 ; 1899, 450 ; 1898, *nil ;* 1897, *nil ;* 1896, 150 ; 18 3,000 ; 1894, 300 bags. Savanilla, 1900, 12,384 ; 18 6,222 ; 1898, 21,885 ; 1897, 20,800 ; 1896, 12,000 ; 18 21,000, and 1894, 3,619 bags. Mexican, 1900, 2,648 ; 18 3,252 ; 1898, 5,749 ; 1897, 17,000 ; 1896, *nil ;* 1895, 4,00 1894, *nil*. Central American, 1900, 3,802 ; 1899, 2,45 1898, 2,871 ; 1897, 5,500 ; 1896, 4,500 ; 1895, 7,000 ; 18 836 bags. Jamaica, 1900, 2,370 ; 1899, 997 ; 1898, 2,38 1897, 700 ; 1896, 1,700 ; 1895, 1,370, and 1894, 2,360 ba

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Lime as a Fertiliser.

A writer in the *Queensland Agricultural Journal* remarks that ma of the heavy black soils of that colony would be immense benefited by an application of lime. Lime in itself is very little value as a fertiliser or as a direct agent in suppl ing plant food ; still it exercises a beneficial influence up the land by rendering many of the latent fixed plant foo available. It is a mistake to apply a large dressing of lime one time. A little and often is the correct thing. Experimen carefully carried out, and results noted, prove that 25 bush per acre is ample when frequency of applications is observe Like every other ingredient, lime requires to be handled wi judgment. It must be borne in mind that lime sinks in the soil. It is, therefore, unwise and unnecessary to hur it by ploughing it in it should be sprinkled over the surfac and lightly harrowed in. It must also be remembered th lime in its caustic state (quick-lime) exercises a very powerf influence, both physically and chemically, upon the so And it should always be applied in this state, and harrowed in as soon after the application as possible. Lim should always be slaked with water in preference to any oth agent, water being the quickest means of breaking it dow All other methods are too slow, and admit of too much ca bonic acid being absorbed, thus changing the lime back in carbonate, which is practically the form it assumed prior being burned.

GENERAL ARTICLES.

IDENTIFICATION OF VARIETIES OF CACAO.

In answer to "Pod's" enquiry, Mr. Carruthers has been ood enough to supply the following explanation :—

'The identification of the varieties of *Theobroma Cacao L.* is like ie identification of varieties of other cultivated plants, a matter hich varies considerably with the expert who observes them, and Ceylon so much crossing takes place, that it is not possible to lassify" all fruits as "Forastero" or "Criollo."

Many pods contain seeds of the distinctly criollo character, *viz.*, hite cotyledons when cut and roundish in shape as well as other eds with the Forastero purple-coloured cotyledons and longer in ape. It is impossible to give a varietal name to such pods and ey may be produced by a tree having the habit and characters sociated with Forastero or those recognised as Criollo.

In a large number of examinations, weighings, and measurements f pods from trees of both varieties, I have not as yet found the ean weight of seed contained to be distinctly greater in either f the two varieties generally grown in Ceylon. The diagrams—f pods not typical of either variety—were published to show the nwisdom of trusting to external characters, in valuing the fruit, he exact commercial value depending as it does on the quality of he individual seeds, and their preparation for the market. This as not considered; that is another and a most important question

TEA REFORMS.

"J" writes in *Capital* :—

For some time the various economies that might be brought into e in these hard times in tea has been engaging our attention and e intend referring to them in detail. It is no use attempting to mbat such drastic reforms as the abolition of the 1-lb draft when e whole trade was up in arms against it, so that unless there is reater unanimity amongst growers the scope of reform must be mited to such measures as will give the least offence. Lately we eferred to the matter of freight, and in this, we believe, there is reat room for improvement. Then, again, we hear of various tempts to lighten the package and send home tea in place of wood, ut we doubt much the success of attempting to make $\frac{1}{4}$" planks do e duty of $\frac{1}{2}$" planks, not that $\frac{1}{4}$" wood would not carry well enough, ways provided the wood was of first class quality, but all or early all the jats of wood in India are of such short grain that we oubt the feasibility of any thing of this kind, when the wood is ot obtainable. Even the very best jat of timber available are ort in the grain and consequently very brittle, and we say without ar of contradiction that a quarter inch plank will not bear the rain and knocking about that a tea chest undergoes in transit and e loss will not be compensated for by the gain in carrying capacity. t the most the increased capacity would not amount to 5 lbs. per est, so that the amount per ton would be 45 lbs., as 9 chests are ckoned to the ton by the Conference liners. We cannot look, en, to this as a great saving, but whilst dealing with the box, ere is one point which, if insisted on unanimously, might be of reat benefit to the industry, and that is the doing away with the eighment of the empty package, and this, we think, might be ffected by united front. Who benefits by it? So far as we can see nly the *bonded warehouses.* His Majesty's customs can gain othing, as no duty is levied on the empty package but simply on s contents, and there seems no doubt that if a united effort were ade this ancient and antiquated custom might be got rid of. So ar as one can see then, proprietors of the bonded warehouse are he people to attack ; the customs officers have hitherto been redited as the stumbling block, but we consider this is merely a lind to throw the blame off the proper shoulders. Meantime of a ackage of tea weighs 29 lbs. 15 ozs. the duty is payable on 29½ lbs Who gets the 7 ounces, if not the bonded warehouseman? And, if his is added up it comes to a very nice little sum during the 12 onths. The *cutcha* package, as sent out of every factory, has lways from 2 to 4 ozs extra tea put in to prevent short weight, ut the box may shrink, and nearly always does to a certain extent, o that if the shrinkage exceeds 4 ozs. another half pound goes nto the wherehouse coffers. In addition any one who has visited the warehouses can see for himself how carelessly the work is done, and how on a damp, foggy day tea is allowed to lie about exposed to damp, and, at the end of the weighment, a considerable surplus comes out, due to the moisture absorbed by the tea. There would be fewer complaints as to poor quality if tea were bought and sold on the nett weight, and only a few packages turned out to check such. It stands to reason that tea must go off when lying exposed to the cold clammy damp atmosphere at Home. As a contrast think of the time, care and trouble our planters take in packing it in the factories prior to despatch. If such care and pains are necessary on a factory, how can it all be discounted at the London end without injury to a sensitive article of produce like tea. Cheesy and tainted teas have been the cry against certain steamer lines last year. Is it not possible that this taint was contracted otherwise than on boardship? Several of the steamer lines, not formerly mentioned, have during last year been accused of improper stowage, and that the tea had through this carelessness on their part got tainted, but it appears strange that these accusations should have been sprung upon them in a year in which prices were so depressed that every one was glad to shift his responsibility to another man's shoulders. It will no doubt be a lesson to the steamer lines, but we consider such complaints to have a very grave bearing on the industry and one which the Tea Association should thoroughly sift to the bottom, and endeavour, if possible, to find out if these claims are well founded, or they are the emanations of a diseased brain searching for an excuse to shift responsibility. If the case is clearly proved against the steamer companies by all means get them to correct these ways of stowage, but if they are ill founded and untrue, it gives the steamer companies a strong excuse for keeping up tea freight. So far as we can go ourselves every endeavour was made to find out from the captain of the steamer in question all particulars which went to prove that stowage was the same as usual, and no obnoxious cargo in close proximity to the so-called damaged tea, and everything pointed to the claims having been put forward on account of dull market; but this is only surmise and it proves that it is necessary for the Indian Tea Association to watch its own and shipping company's interests and to verify complaints or otherwise on their own behalf and all concerned in tea.

THE VIRTUES OF COFFEE.

We have been critised in some quarters, says the *Spice Mill*, for having printed last month, at considerable length, the opinion of medical men who believe the use of coffee may be attended with a good deal of danger. We certainly did not indorse this particular view of coffee, and our comments in the article in question should have made this clear. We understand perfectly well that the public at large is greatly influenced by any statement about foods, which comes from a reputable physician, and that the mere printing of his statements is likely to hurt traffic in any food condemned by them, no matter with what editorial disclaimer these statements appear. The *Spice Mill*, however, is not for the general public. It aims to interest manufacturers and traders who handle particular lines of food merchandise, and it presents facts and opinions of all sorts about this merchandise without regard to their value as advertising trade talk. Anybody who handles coffee ought to be interested in hearing what is said about coffee at a meeting of the New York County Medical Association, whether the doctors' opinions are such as to make people drink more coffee or less. The dealer needn't be disturbed unless he thinks that the doctors' discussion is only an underhand bit of advertising arranged for by some of the coffee substitute people. If an active, trained physician really thinks he has noticed cases of nervous disorders which are produced, or aggravated, by coffee drinking, it is not only proper for him to say so to his brethren, but it is decidedly interesting to everybody in the coffee business to hear all the honest discussion which results. If the use of coffee is not sometimes abused, if coffee is such a good thing that it can't be abused, it will have to be set apart in a little niche of its own, for none of the other good things in this world are free from danger when their use is not regulated by intelligent temperance.

The coffee merchant wants to see more coffee used, of course; he wants coffee to be preferred to other beverages, but he doesn't urge his friends who are using two cups of coffee a day to increase it to 20. And since, besides being a coffee merchant, he is also an honest

citizen, with the welfare of the whole community at heart, he doesn't want anybody, friend or foe, to drink 20 cups of coffee a day, or any other amount which for that particular individual is excessive. He wants the truth to be known about coffee by all the people, and a proper use of coffee to be indulged in by all the people.

Now, the best of it, for the coffee merchant's business interest, is that coffee is an article which will stand any amount of investigation. The more it is examined, and tested. and used, the more good things people find to say about it. When one doctor starts telling about possible dangers, a dozen answer by telling of positive benefits. No other article used as a beverage has been so well tested by all the people, with such wholesome results, and no dealer need be afraid of any amount of honest talk about the actual effects of coffee on the human system. To enable more people to get really good coffee at a fair price, is a line of business effort which includes as much philanthropy as may go with any mercantile enterprise.

NYASSALAND.

The Daily Telegraph Commissioner, Mr. Lionel Decle, writes:—

This territory of the British Chartered Company owes its importance as a Colony to coffee planting, which is yearly assuming more importance, and Nyassaland coffee is of so superior a quality that it commands the highest price on the London Market, where it has fetched treble the sum paid for Brazil coffee. There are in Nyassaland about 10,000 acres of land

UNDER COFFEE,

all of which is not, however, in bearing; and the last crop is estimated at 1,100 tons, an enormous amount if one considers that the plantations only date from ten years back. The industry traces its origin to Mr. Buchanan, a Scotch gardener attached to the Blantyre Mission, who brought out from Scotland a coffee plant, and it is almost exclusively from this single plant that all the millions of coffee trees planted in the country have come. Land can only be procured now either from private holders or else from the Government. Uncultivated land can be purchased from the former at prices ranging from half-a-crown to 10s per acre, and from the Government at 5s to 7s per acre. Land under coffee ranges from £7 to £20 per acre for estates of 200 acres or more. An estate was recently sold for £6,000. It consisted of 300 acres of land under coffee, with 1,700 acres of forest land, with houses, buildings, and machinery. All the planters with whom I have discussed the subject seem to agree upon the point that a small plantation of 150 acres will pay better if thoroughly cultivated than a plantation of 300 acres or more, on account of the labour conditions and of the difficulty of securing sufficient skilled assistance. Under this heading are included planters, sowers, and pruners, as well as carpenters and bricklayers. Most of the skilled labour is supplied by the Ya and in a smaller proportion by the Atonga tribes. Unskilled labourers consist chiefly of Angoni from districts west of Lake Nyassa, and also of a few Angoni from Portuguese territory near Lake Shirwa and of Atonga, a tribe inhabiting the western shore of Lake Nyassa. This

LABOUR QUESTION

is a difficult one to solve, as the time when workers are chiefly required by planters, from November to March, is the very time when natives are reluctant to leave their homes, where they are wanted to cultivate their own fields. Unskilled labourers are paid at the rate of 3s. to 4s. a month, and skilled men get from 5s. to £1; but while the former come from long distances, the latter usually live in the villages forming part of the estates. Planters calculate that they require an average of two labourers per acre of cultivated land, so that 20,000 men are wanted to do justice to the land now under cultivation. Lack of assistance is the planter's incessant cry, and all of them greatly fear that the high wages paid in Southern Rhodesia may divert there the labourers, and cause a rise in the pay, which would kill the coffee industry. Planters, I think, exaggerated the danger, and I doubt whether the proposed railway from the south will cause a serious exodus of natives towards Southern Rhodesia, provided, however, that the planters treat their people better than they have done so far. Until now, it has been customary to allow the labourers, in addition to their pay, one yard of calico, equivalent to 3d, per week, for their food, but the natives within a radius 200 miles from Blantyre will not sell food for calico. To obt food the plantation labourers have to work on Saturday afterno and on Sundays in the gardens belonging to the natives of villages surrounding the plantations on which they are enga and in exchange for such work they receive a few cobs of c on which they have to subsist for the remainder of the week. their own country such people are accustomed to eat meat, and c of corn are not sufficiently nourishing for them so that the nati who go to work on the plantations usually return to their coun in a state of semi-starvation. Sufficient rations would mean to planters only an extra monthly expenditure of one per head, so long as labour does not cost more than five shillings per mon all told, plantations must pay handsomely. Most of the

PLANTATION LABOURERS HAVE TO WALK FROM FOUR TO SIX HUNDRED MILES

to come from their homes to the coffee-growing districts, and much to return to their country. On the way they usually suf from scarcity of food, and most of them are more or less exhausted the journey, so that they cannot perform the amount of work wh they might otherwise do. If the planters combined together t could easily get their men brought by steamer at a cost of t shillings and sixpence per head, which for four to five months' wo usually supplied by these men would increase their cost by sixpen per month. If this were done the present scarcity of labo would soon cease to exist, and the danger of its being divert south would not arise. At present the people who come to wo for five months in Blantyre are away nine months from th homes, so that none of them return to work two years in succe sion. The high wages paid in Rhodesia do not constitute t attraction one would think to the Nyassaland natives. Mo of those who have been to Salisbury, where they earned fro one pound to thirty shillings a month, have returned witho a penny, and they complained that everything was so expensi that they had been unable to save anything of their wages. must also be noted that these people do not care to go so far aw from their country among other natives, whose language they do not speak and whose habits are quite different from their ow Many planters, led by an irresponsible rag published in Blantyr make a great fuss over the Administration allowing natives leave the Protectorate. They forget that the Administration h no power to prevent individuals from leaving the country. Ever thing legally possible is done to discourage them. For instanc when a man applies for a pass to go outside the Protectorate he mu first show that he has paid his hut-tax, and must satisfy th Collector that he has made provision for the support of his wife, a family during his absence. But more cannot be done. Stringe regulations have been issued prohibiting the engagement by labo agents of natives to work outside the Protectorate, and in order help the planters the Administrator has gone so far as to allow t natives to go and work in Blantyre, the first month's wages bei collected by Government to cover the payment of the year's hut-ta From Central Agoniland alone 9,000 natives went down to Blanty last year on those terms. To close the subject, I can only say th as I have shown, the planters hold the remedy in their own hand to avoid the present scarcity of labour and to prevent the exod they fear, and if they do not adopt it they will only have themselv to blame for the consequences.

FOUR YEARS IS THE TIME REQUIRED

for coffee to bring returns. Trees begin to bear at the end of thr years, but a full crop is only gathered in the fourth year. I ha tried to obtain estimates of the cost of a plantation, but no plante seem to agree as to figures. Some calculate that, until coffee h been brought into bearing, £12 will have been spent on each ac of land under cultivation, about £3 per year, the cost of lan buildings, and machinery, not being included in this calculatio After coffee has begun to bear, the cost per acre is estimated at 2 to £2 per acre, to which must be added the cost of portera and transport to London and the salary of European assistant one man being sufficient to look after 300 acres; but above th amount an extra assistance is required for every further 150 acre The returns vary considerably, according to the quality of the so manuring, and other causes Some gardens only give 1 cwt. p acre. while others have produced as much as 7 cwt. The avera return may be calculated at 2½ cwt. per acre, which, even at t present low price of coffee, ought to pay well. At the price of £ per ton coffee should yield a profit of £40. The cost of portera

om the plantations to the navigable portion of the Shiré River ries from 30s to £2 per ton, according to the distance; and 50s r ton is charged by the transport companies for the carriage by eamer to Chinde at the mouth of the Zambesi, whence the freight London comes to £3 per ton, or a total of about £7 10s. As I ve already said, Nyassa coffee fetches the highest price on the ondon market, where it has been sold for as much as £114 per ton. ne of the difficulties planters have to contend with in this part of e world is the impossibility of borrowing money locally. Want capital and lack of credit would prove fatal to most of them if ey met with two successive unproductive years. Fortunately for em, no leaf disease has yet made its appearance among Nyassa ffee, but there is an insect—a kind of bug, of the ladybird species which causes spotted berries. If, however, they are collected in ne, no great damage is done to the coffee. Early rains are the st for the plants, which require altogether about fifty inches of in. Another difficulty planters have to meet is that of finding itable

EUROPEAN ASSISTANTS.

any of the young men who are sent out here are unsuited to their rk. To be really useful an assistant should possess a good deal practical knowledge; he should be able to show natives how to ke and burn bricks, understand something of carpentering, d have had some experience in the management of animals. oung men having had some practical training on a farm are ually the most useful. It is true that they generally lack the owledge of book-keeping, which is one of the duties they have to rform. Assistants on plantations receive from £150 to £200 a r, with a house. Fifty pounds are sufficient to cover all their penses. But their life is not a pleasant one. They are most of time alone, and even supposing that they should have a neighur within ten to twelve miles, their only means of conveyance is machilla, a hammock carried by natives, a slow and disagreeable de of locomotion. Horses are most expensive and difficult to , £40 being the average price paid for a horse. Natives do not derstand them, and there is the risk of their dying of the dreaded rse sickness, besides the impossibility of taking them to any trict where tsetse fly is found.

There is one thing planters urgently claim, and which I have g advocated as well for Rhodesia as for Nyassaland. This is creation of a

PUBLIC LABORATORY,

which would be attached a public analyst and an experimental m. On such a farm experiments would be carried out in all the ferent cultures under an able specialist, planters being able to d manures and soils to be analysed, and coffee to be tested and ued. They should be able to send their assistants or to go themves to be taught the cultivation and curing of coffee, tobacco, tea, l other products likely to suit the country. From this institui planters should be able to get an expert to examine their ate, to advise them as to the most suitable methods of improving m, and, from time to time, the superintendent of this institution ld publish in the Government *Gazette* any information likely prove of use to the planters. To open such an establishment uld mean an original outlay not exceeding five to six hundred nds, and to keep it going would cost less than £1,000 per num. The greater portion of this expenditure would be covered the fees paid by the planters, and I am sure that none of them uld object to paying six pence per ton on the coffee exported m their estates, if the money were used to cover the cost of intenance. In addition to the plantations, the most important de of British Central Africa is india-rubber, a trade which has en an extraordinary extension within the last few years. While 1897 the exports of india-rubber amounted to £1,000 only, they l reached £10,000 in 1898. Most of it comes from the west coast Lake Nyassa, but unfortunately, the natives gather it in so eless a fashion that unless proper supervision is exercised by the horities all the plants will soon be destroyed. I am told that ps have already been taken to avoid such a result. I will now try sum up in a few words

THE PROGRESS WHICH HAS BEEN ACCOMPLISHED

ce I came here in 1893. Magnificent roads have been built, the st absolute security has been assured throughout the Protector, a regular administration has been established in the remotest tricts, where justice is rendered exclusively by Europeans, very has been completely wiped out, the facilities of communiion have increased in a remarkable way, and their cost has considerably decreased. Coffee-planting has passed from the experimental to the practical stage, and the cost has been greatly reduced. Last, but not least, the whole Protectorate has been put in direct telegraphic communication with the Cape and Europe, a result entirely due to Mr. Rhodes, without the cost of a single penny to the British Central Africa Administration. I have absolute faith in the future of the country, and I do not share the views expressed by many people as to the precarious state of the coffee industry. The railway from Lake Nyassa to the coast, a thing of the near future, will give a fresh impulse to coffee-planting, and reduce the cost of transport; and if it causes a small exodus of local labour this will be fully compensated by the increase of facilities it will give the natives to come and work on the plantations. It will also relieve the strain now existing on the local resources of labour, so much of which is absorbed by the transport of goods to and from the Shiré River. The Tanganyika Railway will give a fresh impulse to the opening up of Northern Rhodesia, and when the federation of South Africa is an accomplished fact, Northern Rhodesia and the British Central Africa Protectorate will naturally be included in that great movement. The Protectorate will soon be as ripe for self-government as Southern Rhodesia, so long as it does not stand isolated as it now does, but as part of a system, and its only hope for such a result lies in the prospect of becoming a portion of the Great Federation of the South. This ought to give fresh and increased vitality to the country, and fittingly crown the great work so brilliantly inaugurated by Sir Harry Johnston and continued by Mr. Sharpe, who has successfully performed the most difficult of tasks in showing himself able to carry the weight of the heavy legacy left to him by his distinguished predecessor.

THE TEA PROSPECTS IN ASSAM.

A Dibrugarh correspondent writes to the *Indian Daily News*:—

So far as we have gone up here, "the season" has been what may be conveniently designated as completely upside down. January and February were dull and sunless throughout. March on the contrary was dry, mild and exceptionally warm. So warm and foreign was the sun towards the end of the month, that all vegetation was rudely awakened from its Autumn repose and brought forward at a rapid rate. Scarcely any rain fell throughout the month, and what little did fall was rendered useless by the strong evaporating power of the sun's rays. Strong cold north winds, accompanied with slight showers of chirely rain, was the predominating feature of the weather during the first part of the present month. Since then we have been having fierce thunder storms nightly, followed on by cold sunless days. On the night of the 18th we experienced a regular hurricane, accompained with a deluge of water, while the noise of Heaven's artillery overhead was rather more than alarming. On the whole, it was a night not to be forgotten in a hurry. The dawn of day showed up the havoc which the hurricane had done in its wild fury in the vicinity of the lines, or thatched houses of any kind; the ground was strewn with sungrasos to the depth of some inches, and woe befall any line which had been weighed in the balance, and found wanting in the way of thorough repairs—over they went crash and the luckless owners had to seek shelter elsewhere from the cold pelting rain and merciless hurricane.

A few of the monarchs of the forest, whose heads were too heavy for their lower extremities to support against such a violent onslaught, were rudley torn from the support afforded them by mother earth, and hurled headlong crashing on to the bosom of their great supporter; others that were found with the canker worm gnawing at their hearts were snapped clean across. Broken branches green shoots, tattered and damaged leaves bestrewed the ground for a considerable distance in the near neghbourhood of large forest trees.

The tea-bushes suffered little from the fury of the gale, owing no doubt to the fact that they are not what we may term heavily clothed yet, but if they did not suffer from the wildness of the weather they have certainly done so from the check which they received from the mildness of it. The prolonged drought and excessive mild warm weather, experienced throughout the month of March, stimulated the bushes to such a state of rapid activity

which could only have been maintained by a liberal supply of moisture from above and a continuance of the same mild atmosphere conditions.

That this was not accorded us has already been shown and the result is that the tea-bush is now at a standstill, and its numerous enemies, such as red spider, green fly blights etc., are having a very good innings. Red spider is exceptionally bad on hybrid bushes, and is spreading rapidly on the indigenous variety, and the worst of this pest is that if it gets a strong footing at the commencement of the season it clings with tenacious persistency to the ground, thus gained right throughout the season.

Our only hope is in a prolonged spell of mild forcing weather combined with an evenly distributed and copious rainfall. The recent heavy drenchings which the bushes have been exposed to ought to have washed a tremendous lot of them off, but their multiplying powers are so strong that there is no getting away from them.

Much was expected in the way, of cures for pests and blights, from the scientific expert who was pottering about for a considerable time up here last year, but "œ's me for Prince Charlie," I am afraid we are going to, be allowed to go on expecting to no purpose, all that I have ever seen from his pen—and I read most of the planting periodicals—was the description of one of our cures for thread blight, a cure which has been applied to that particular blight by some of our leading planters for years. Thread blight is a disease with which we are quite capable of coping without the assistance of an expert. Why "even I myself" (and under the correction of bragging be it spoken) succeeded in completely eradicating this blight from a plot of land on which over 25 per cent. of the bushes were effected. How I managed to wipe it off the slate would, however, be "far too long a tale to tell" in this article; I may, however, hark back to it on some future occasion.

It is an ill wind that blows nobody good, and possibly the pests and blights of Assam, combined with the abnormal drought which planters have been experiencing down south, may go a long way in helping to solve the vexed question of over-production.

We have all got a touch of selfishness located somewhere in us. although we do not exactly care to air our selfish views in print; still if something natural, although not exactly usual—in the form of a mixture of pests and blight or a prolonged drought were to step in now and settle the question of over-production without the aid of man—the few I am sure who escaped unscathed would be inclined to look upon the phenomenon as an interposition of Providence to save the occasion and solve the problem.

RUBBER IN MEXICO.

The following description is given of a method of preparing rubber in vogue among the Mexican Indians:—"On taking over charge of this (Hacienda) last August, I found scattered through the coffee fields some 25 or 30 rubber trees (*castilloa elastica*) of different ages and sizes and all much the worse for barbarous tapping in years past. Some Indians asked me if they might tap the trees on shares, and considering them of no value I allowed them to do so. They proceeded leisurely to work and in a few days brought me to the house three old kerosine oil cans of rubber milk and an armful of a jungle creeper called by them '*Amole bejuco*' but which I have since had identified at Kew as *Ypomœa (colonyclion) Bonanox L.* They asked for an old soap box and proceeded to pound the creeper with a stone, putting about double handfuls of the crushed creepers into five gallons water, they then poured some five gallons rubber milk into the box and two gallons or so of the water, stirred it for a moment or two and in less than 10 minutes took from the box a slab of white rubber 34 by 16 by 6 inches, poured away the water left and proceeded as before until they had four large slabs of rubber. These they split in two and hung in the sun, and in a day or two it turned black. The nett result of rubber was 53 lbs., which sold in Vera Cruz for 95 cents. (say two shillings) per lb. or $50 35.100. Had I employed my own peons to do the work at 62½ cents. per day, the cost of producing the rubber would have been about $6-25 silver. In a regular rubber plantation of course it would have cost a little less, as these trees were scattered about.

FRUIT-GROWING EXPERIMENTS IN QUEENSLAND.

A very valuable and interesting report has been forwarded the Secretary for Agriculture in Queensland by Mr. S. C. Vol Assistant Instructor in Fruit Culture, Department of Agricult The following extracts will doubtless interest many of our reader

You will doubtless remember that the late frosts of last Spr did very serious damage to all of our fruits, as some of th occurred just at the blossoming time, and others when the fruit setting or had actually done so.

Of course against a trouble of this kind we are practically pow less, especially in the Downs country, where most of the land considerably exposed.

However, in spite of this drawback, we had a sufficient setting fruit to give us a decent idea of the capabilities of the place also of the district; and I think I am not going too far when claim for the Westbrook Orchard that it has shown itself capa of producing as fine a quality in many lines of fruit as can be produ in any part of Australia. This being so (and I think it is corre we surely have something on which to congratulate ourselves.

Before dealing with the later fruits, I desire to give a sh account of the apricots, nearly all of which were of splendid s and quality. I give date of ripening, as showing what of constitutes special value for catching an early and comparativ bare market. This is a very significant point in our work, wh we remember what, indeed, must never be lost sight of, *viz.*, value of our experimental work to the growers throughout country who are intended to profit by such operations. I wo also like to say here that it is a matter for strong regret that few of those who are engaged in fruit culture ever take the trou to visit our State Orchards with a view of getting what may pr very valuable information to them. I do not remember to h ever met one of the local men at the Westbrook Orchard. Stil consider that it is only a question of a little time when they feel obliged, in their own interest, to pay attention to our doing

APRICOTS.

Red Masculine.—Ripe 15th November, size small; quality fair, incli tos plit, crop prolific. The defects of small size and tendency to s were due mainly to the facts. (1*st*) that the rain came too late to al any real benefit to such early fruit, the best rain only coming in Novemb and (2*nd*) that when the rain did come a sudden rush of sap occurred, wh was more than the hitherto stunted fruit could stand. Under be conditions this fruit should improve.

Sardinian.—Ripe 15th November, small to medium, very pale s white flesh; quality very fair, ripened sound.

Royal.—Heavy crop, first picking 30th November; size not quite up mark, being too early to benefit fully by rain; split a good deal when r came, later fruit improved considerably in size. Yielded fifty cases off row of twenty-eight trees.

Oullin's Early Peach Apricot.—Ripe 30th November, size good, flav very good; a good cropper, but ripens a little too much on one side fi making it a trifle awkward for packing unless picked at a certain stage

Luizet.—Ripe middle December; size medium, quality moderate.

St. Ambroise.—Ripe same as last; size medium, quality splendid.

Mansfield's Seedling.—Ripe Christmas, size good; fruit solid and of g quality.

Large Early.—Ripe Christmas; only a few fruit, quality good averag

Alsace—Ripe Christmas, a good cropper so far; size, general quali and flavour all good

Angoumois Hative.—Ripe Christmas, good cropper; fruit strong bulky, and apparently a good packer; quality good.

Warwick.—Ripe Christmas, medium size, quality good; fruit strong firm.

Royal George.—Ripe Christmas, early; a large, flat, and somew lopsided fruit; very free on stone, and of delicious flavour.

Campbellsfield's Seedling.—Ripe Christmas, early; a large flat cot, on stone; a good dryer; flavour very good indeed.

Kaisha.—Ripe Christmas, a few very large showy fruit; strong an good quality.

Moorpark.—Ripe well before Christmas and up to New Year; a fair c but would have been better in a good season; nearly all great fruit of g quality, a pleasure to handle, and took well in market; a lot of these w fancy-wrapped.

Hemskerke. Same as Moorpark.

Blenheim.- Ditto.

Our marketing was mainly in Royals, Moorparks, Blenheims, Hemskerks, as we have full rows of them. The others, with the except of the Alsace, of which we have a row coming on, are all in pairs or

ly of each variety, for the purpose of proving their suitability for the ace and district and their general qualities. We have a few others, which ve yet to come into fruit.

Peaches.—A limited list of these have come into fruit this season but that list there is something which I consider of the highest value.

China Flats.—Experimental only; ripe New Year; moderate fruiting ly; fair size and quality for the sort, but I do not place a high value on ese.

Governor Garland.—Ripe 1st December; a beautiful peach; medium size, t rare good quality.

Alexander.—Ripe 4th December; like last.

Foster.—Ripe early in January; a great peach of high commercial value; ze splendid; quality splendid; a good packer.

Lady Palmerston.—Ripe early in January; one of the very best; size od; quality really superb.

Globe.—Ripens on through January; a vigorous grower; good cropper; ze really extraordinary; quality fine; a great marketing peach.

Muir.—Ripens same as above; great peach; finest dry peach in the world; llow outside, and in quality good; also a good marketing fruit.

Shanghai.—Ripens about with the last, perhaps a little later; great ze; good useful peach for either cooking or dessert; quality good; a good opper.

Robert Stewart.—A seedling from the last peach apparently, evidently of ne same type, ripens a little later, not quite so big, but a very pretty fruit f fine quality, and very good flavour; prolific. Next season this list hould be very much increased, and I hope them to bring under your notice ther valuable varieties.

The enormous advantage gained by wrapping and packing as we ave done can be at once seen by comparing, as I did, our own fruit fter its journey with other fruit sent and packed in ordinary cases. Every peach in our lot would open out fresh and firm, with no ruises; the others were often so much bruised as to be unfit for sale.

FRUIT FLY EXPERIMENTS.

Last year, at Westbrook, we only had an odd fly or two; this year ve have had, altogether, through the season, a good many. Next ear we will probably have more, for the simple reason that no ufficient check is put on its increase by the numbers of people in he surrounding district who grow fruit, either for their own use r for sale.

We must, therefore, defend ourselves against the carelessness f the general run of growers; more especially the man who calls imself a farmer, and grows wheat, or milks cows, or keeps sheep or a living, but at the same time keeps a small lot of fruit-trees o bear their annual crop untended and unchecked, and breed their nnual brood of fly at the same time. However, in self-defence, and or the benefit of the growers as well, we have carried out experiments this season, to a certain extent only, with netting on the rees as a preventive for the fruit fly. Our experiments come short f what could be wished, for the simple reason that we had not a ull crop of fruit on any of the trees covered, and on many of them ery little.

My original purpose was to cover the tree, and, in the event of ts proving a success, to report on (1*st*) the cost of the netting and ther material used, and (2*nd*) the value of the crop thus kept ree from fly.

It would then be a simple matter to say whether it would pay r not.

Not having the full crop of fruit, I cannot give the exact information needed, but I can go a long way towards it.

I can state here that which I am pleased to be able to state, *viz.*, hat the netting does keep the fly out, and so saves the fruit.

Out of quite a number of peaches which I covered, I failed to ind a single maggotty fruit. The fruit under the nets was allowed to stop on the trees until some of it went rotten ripe, fell off into the net, and gradually dried up, but there was no sign of maggots or of the rot which always accompanies them.

First of all, fruit-growers should bear in mind the quality of the fruit we have already produced, and note that that quality will command the highest prices. Our sales this year show from 10d. to 1s. per dozen for these peaches; they should consider also the fact that it does not matter what quality or quantity of fruit they may grow if the fruit-fly gets properly at it; they will go down in the market, supposing they get there at all. In other words is means getting the best for a little outlay on the one hand, against getting nothing practically on the other.

Now, at Westbrook I covered, at a cost of 3s. 6d. to 4s., treet capable of bearing comfortably three cases of fruit, which is to-day worth 5s. per case. That gives 15s. less, say 4s., or 11s. worth of fruit, which is quite satisfactory. Next season, if the crop is a full one, I hope to get at the exact value.

In the case of some of the plums I covered, I am satisfied it will pay, as 10 to 12 yards of netting cover a tree capable of bearing quite a case of fruit worth 2s. 6d to 3s., the netting costing 10d. to 1s.

The beauty of this is that it enables a grower to guarantee his stuff, and you have none of the sickening loss which occurs where the fly gets a free hand. Nothing in the world could have been prettier or better than the peaches I gathered under the nets at Westbrook; and when I sent them away to one of our buyers, a wire came back asking for more.

Still, in carrying out these experiments I found the thing had its drawbacks, and that difficulties cropped unexpectedly oftentimes. In some points I have changed from the original method followed, and I think, effected some improvements which make the whole thing so much cheaper.

It was at first intended to try covering the trees by means of a light timber frame made from pine battens run down to small sizes, over which the net was to be stretched and tacked on.

The very first attempt over decent-sized peach-tree convinced me that this process would just about cost double what one could afford, and I dropped it. The next step was to consider putting the nets over the trees without any other support. We did this without any difficulty so far as putting it on was concerned, but we were bothered next by details such as fastening and closing the nets. The material is in 6-feet widths, and it takes a little cutting to prevent too much waste.

I followed up the plan adopted in South Africa of fastening and closing the nets with safety-pins; I also tried joining two widths for larger trees by sewing together with a machine. I tried these first with a tape on each side to give a grip, and then successfully with only one tape. This answered very well so far as it went, but we still had the sides to fix with safety-pins. A little exposure to wind seemed to unsettle the nets and make them gape between the pins, and foliage used to poke out here and there, although in pinning we double-folded the two edges together. As a little time went on we got more wind, often very strong, for at Westbrook it is nearly always blowing hard, and this had the effect of making the nets gape still more. We had to keep going round re-pinning and fixing, until I began to think it would not do one wanted something better still. I got over the difficulty by using bagging twine and pack needles not only for repairs or refixing, but also for joining lengths together at first.

I used to stretch two double-widths together right along the veranda, draw them tight, and sew together with the twine in half hitches about 6 inches long A man can get over this very fast. Then I rolled the stuff up, carried it out to the trees, and cut off as required.

After drawing the prepared piece of net over the middle of the tree it is generally easy to fix the sides by stitching down, and the beauty of the stitching is that it hardly gives a bit. The net is gathered at the bottom, and tied round the trunk. Although this netting is so thin and weak in appearance, it is wonderful what it has stood at Westbrook. Weather conditions have included everything from a gentle breeze to a violent gale, with rain and hail, and yet the nets have nearly all stood it out. A few of the first put on frayed out in the tops; one or two tore away a little, but nothing to speak of; and I reckon trees can be covered by the stitching process so that they will stand nearly anything. A more severe test will surely never be needed than what occurred at the Hermitage on 2nd January, when trees were uprooted and buildings blown away. Yet the nets I had put on the apple-trees stood the test, with exception of two, and they did more, they saved the fruit underneath from the hail so that there was hardly a mark on it.

On the Downs one of the greatest troubles is putting on the nets, because you rarely get a time when the wind is not blowing strongly, and it makes the netting fly all over the place. In districts where calmer conditions prevail, trees could be covered at a rapid rate. On the downs it is a slow process.

The nets have more or less of a rasping effect on any fruit which is on the outside of the tree, but I do not think the loss would be very serious from that cause.

Only in the case of our young apple-trees am I afraid of the fruit rubbing off, or damaging; and with them the trouble is that some hang on the ends of limbs, often two and three together, and when the heavy winds blow they simply get hanged about, and there is no escape.

DISTRICT ASSOCIATIONS.

SOUTH MYSORE.

The Annual General Meeting of the above Association was held in the Munzerabad Club, Saklaspur, on the 29th March, 1901.

The following gentlemen were present :—

Messrs. J. G. H. Crawford (*President*), G. Anderson, F. Norton, T. Hunt, W. Galiff, C. Cherry, J. Woods, H. Sladden, J. H. Robinson, W. L. Crawford, A. R. Park, R. Taylor, G. Harris, Capt. Fostor, and J. Aird (*Honorary Secretary*).

Messrs. Scott, Fowke, and Pittoch were present as visitors.

The Honorary Secretary read the following Annual Report, which, on the motion of Mr. Harris, seconded by Mr. Hunt, was passed and adopted :—

Gentlemen,—The past year has again been a most critical one in the history of our industry and I am sorry to say that the improvement which took place in prices last year has not been maintained. The prices so far advised from London for this season's crop have shown a very depressed market and limited demand except for coffee of the finest quality. Crops have however been generally good, and this, along with the decreased expenditure instituted on most estates, will help to tide us over the present critical time, and until things mend, as we are informed they must by those most competent to form an opinion on the subject. Our labour requirements have, as a rule, been fully met, and the decrease in coolies' wages instituted during the year on most Estates has been accepted by our maistries and coolies without demur—they apparently recognising that they must share in the bad times along with the employer. Prices of food stuffs in the local bazaars at one time during the year touched almost famine prices, but even then we found that the cooly was earning considerably more than a living wage and happily rates have again fallen to almost their normal level.

Agricultural Chemist.—Dr. Lehmann, the Agricultural Chemist with the Government of Mysore, made a tour through this part of the District in October last and delivered an instructive lecture at the Munzerabad Club on "Experimental cultivation." Dr. Lehmann's work has, I believe, been much retarded by the want of a suitable laboratory, but I understand that this has now been provided and I have no doubt that he will shortly be in a position to furnish us with scientific information of the utmost importance to our industry.

U. P. A. S. I.—Our Association was ably represented by Mr. J. A. Harris, who, at considerably personal inconvenience and at very short notice, agreed to attend the meeting at Bangalore in August last. I refer you to the published report for further information as to the subjects discussed.

New Labour Act.—I have no information as to when the proposed Act may be passed and come into force.

Roads and Communications—*Arsikere-Mangalore Railway.*—Sanction for the construction of the railway has so far as I am aware not yet been obtained, but I am informed on reliable authority that the re-survey instituted last year has shown the project to be much more feasible than the former and original survey promised and I hope that we may shortly hear of the project having been duly sanctioned.

Anjur Ferry.—No steps have as yet been taken to provide a bridge at this important crossing and during last monsoon the antiquated ferry arrangements were still in force and continued as a source of the greatest danger to the lives and property of the travelling public, which I am sure must appeal to the sympathies of the Government of Mysore which has otherwise done so m for the communications of our District, more especially after t lamentable accident which happened in Coorg last year.

Ossoor-Gonebide Road.—I am informed that sanction for the c pletion of this road (2nd section) at an estimated cost of Rs.54,(has been granted, but that no special allotment is to be made Government on account of the work. This it is proposed to proc with *gradually* and with such sums as the District Fund Bo may annually be able to provide. I am also informed that t grant for this year is Rs.2,000, a sum which is of course utte inadequate to meet the requirements of the case, as at the pres rate of progress we cannot hope to see the completion of t important project within the next 25 years.

Post Office.—At the request of several members I have ma complaints as to delay and non-delivery of telegrams, lette papers, and registered articles, but cannot say that I have obtain more than the stereotyped reply to the effect that the matter w be enquired into. A serious breakdown in the arrangemer took place during the past monsoon—the mails from Hass arriving on many occasions hours after the scheduled time.

Harbour on West Coast.—This important project is now receivi the consideration of the Government of Madras. Our Associati would like to see the harbour constructed at Mangalore so as tap the proposed Arsikere Mangalore Railway.

Marriage of H. H. the Maharajah of Mysore.—An address of congratulatory nature was presented by our Association to H Highness the Maharajah of Mysore on the occasion of his marriag and the thanks of the Association are due to Mr. W. L. Crawfo who, assisted by Mr. Graham Anderson, so ably represented us the interesting occasion.

Visit of His Excellency the Viceroy to Mysore.—As the U. P. A. S. could not see its way to adopt our suggestion that an address fro that body as representing all planting interests in Southe India should be presented to H. E. the Viceroy on the occasi of his recent visit, our Association, acting in conjunction with th of North Mysore, resolved to present one, but it was then fou that owing to the delay necessitated in obtaining the decision the U P. A. S. I the time remaining to His Excellency and t important nature of our proposed address did not permit of H Excellency the Viceroy receiving same, as to give an adequa reply would have necessitated much reference to official co respondence. The address has however been enclosed in a silv casket and forwarded through the British Resident for priva submission to His Excellency and not for the favour of a rep but to show our appreciation of the honour done to the Provin of Mysore by its having been included in His Excellency's tour Southern India.

Closer Union of North and South Mysore Planters' Association. At our last extraordinary General Meeting, as you are aware, resolution approving of a closer union between the North Myso Planters' Association and ours was passed, and the resolution has, am glad to say, obtained the approval of the northern body, and is proposed by that Association that a meeting of the Executives both should be held at an early date at Chickmaglur to discu matters of mutual interest.

Coffee-stealing.—I have heard of one or two cases occurri during the past season in the District and where detected the have been suitably punished.

New Markets for East Indian Coffee.—This subject has engage the earnest attention of all planting Associations in Southe India and, as you are aware, it was resolved by this Association its last extraordinary General Meeting to give its best considerati to any scheme which might be evolved at the next meeting of t U. P. A. S. I. and I sincerely hope that some such scheme, whi would meet the requirements of the case and have the support of least the great majority of coffee planters in Southern India, m shortly be forthcoming.

Retirement of Sir K. Sheshadri Iyer.—It is with the most extre regret that I note the announcement of the retirement of Sir Sheshadri Iyer from the Dewanship of the Province. The gre advance made in the general prosperity of the State and t development of its resources will stand as lasting memorials of h remarkable ability, enterprise, and Statesmanlike qualities. I a sure you will all join with me in wishing him in his retireme that peaceful and unclouded happiness which he has so well earne

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THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throat are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

he accounts are laid on the table and show a balance cash in d of Rs.365-10-9.

have to place my resignation in your hands and would beg to nk the President and members of Committee for the assistance y have accorded me in carrying on the work of the Association ing the past year. My especial thanks are also due to Mr. ham Anderson for the many occasions on which he has placed benefit of his valuable advice and long experience so readily at disposal.

n conclusion, I would beg to congratulate all holders of land in sore on the termination of the suit instituted against Mr E. M. yfair for the possession of his Huldi Estate. The decision of the er Court struck a blow at the law of Registration which we ked upon with the greatest consternation, and now that this ision has been reversed on appeal our most sincere sympathy till due to Mr. Playfair for the long, trying, and expensive litigation ch he has gone through.

I am, Gentlemen,
Your most obedient Servant,
J. AIRD.
Honorary Secretary, S. M. P. A.

Election of Office-bearers.—Mr. G. H. Crawford was re-elected esident and Mr. F. Norton, Honorary Secretary, with the follow- Committee:—Messrs. Graham Anderson, A. R. Park, G. Harris, L Crawford, and T. Hunt, and Messrs. Aird and Playfair in iting—and it was decided that representatives to Dusserah and P. A. S. I. be left to the above Committee by selection.

Business.

Ir. G. Anderson read the address presented to H. E. the eroy referred to in the Annual Report. A discussion took ce regarding the position of a harbour on the West Coast, which . Harris thought should be left to the experts—but it was pointed by Mr. Anderson, that if the claims of Mangalore for a harbour e not pushed, the chance of the construction of the Mangalore ikere Railway line would be adversely affected.

rench Tariffs.—The President suggested that a letter be written the U. P. A. S. I. asking the home authorities to again approach French Government on the subject of Tariffs; this was em- ied in a resolution by Mr. Harris, seconded by Mr. G. Anderson gave a *resumé* of what had been done by France, and carried. Ir. W. L. Crawford speaking in support of it.

ew Markets for E. I. Coffee.—Mr. Harris said that in connection h this subject, he thought the scheme proposed by Mr. Langdale uired clearing up. He would like to know if Mr. Langdale was ng to buy in the open markets, and would planters share in en- ced rates obtained by retail prices. He also thought that Mr. gdale's commission of 10/ a cwt was a high one, but pointed that until further information was forthcoming it would be in- isable to say no benefits would accrue from the scheme. He ught a coffee shop in Paris to push the sale of E. I. Coffee would oubtably do good, and suggested that a traveller might be ointed. He urged upon all present to support the following olution, which was seconded by Mr. Norton:

"That members be asked to subscribe to a Fund for the blishment of new markets for coffee, at the rate of four annas each cultivated acre of coffee, and that they commit their inter- into the hands of a Sub Committee consisting of four members e chosen to-day, who shall draw up a memorandum of their views, shall elect one of their number to act on a select Committee of the planters of S. I. should such be appointed."

nswering a question from Mr. Hunt, Mr Harris said that about 70,000 per annum could be collected if all supported the resolu- . Mr. Anderson pointed out that the Wynaad Association ned to find some objections, and that Government objected to ect an assessment of this nature—he suggested that the Merchant nces of Madras be invited to attend a meeting called to discuss the ter, and to give the benefit of their advice.

he meeting went into Committee for a free discussion on the ject, in which Mr. Woods gave some interesting information as ards warehousing, stocks, rent, etc.—and the matter remained *in u quo*.

oads.—Mr. W. L. Crawford proposed:—

"That this Association urge the Hassan District Fund Board epresent to Government the difficulty they have in finding funds for the upkeep of the District Fund roads, and would suggest that the Government come to the aid of the District Fund Board, with money from the Provincial Fund to enable it to complete several urgent works, one of which it should especially draw attention to, *viz.*: the Archudy-Chickanhully Road."

This was seconded by Mr. Sladden and carried unanimously. The President made some remarks on the suitability of Hassan for the permanent location of the Sessions Court, and the meeting unanimously resolved:—

"That this Association emphatically endorses the remarks made by the President, relative to the permanent location of the Sessions Court at Hassan, a station eminently well suited to the convenience and well-being of his Honor the Judge and the general public, by its geographical position outside the malarial rainy zone."

Rates of Coolies' pay.—Mr. Norton suggested that rates should be fixed for the whole District, and Mr. Park thought it should be left to groups of estates.

Game Preservation.—Mr. Hunt spoke to the meeting on this subject, and said that the Association had for many years agitated for a "Game Act," and with a view to preserving game, pending a Game Act, a meeting had been held on the 21st March, at which various resolutions were passed (which he read) and he now asked all present to support the new "Mysore Game Association." This was agreed to *nem. con.*

Mr. Harris proposed a vote of thanks to the retiring Honorary Secretary for the able and complete way he had carried out his duties.

This terminated the meeting.

CENTRAL TRAVANCORE.

Extracts from Proceedings of the Quarterly General Meeting of the above was held at "Glen Mary" Bungalow on Saturday, the 13th April, 1901. PRESENT:—Hon'ble Mr. G. L. Acworth (*Chairman*), Messrs. R. S. Imray (*Vice-Chairman*), H. D. Deane, Buxton Laurie, F. Bissett, H. J. Blandford, E. Latter, D. McArthur, E. W. Williams, G. A. Rutter, and W. H. G. Leahy (*Honorary Secretary*). *Visitor.*—Mr. A. J. Ferguson (*Assistant Superintendent, Travancore Police*).

Honorary Secretary having read notice calling the meeting, the minutes of last meeting were taken as read. The Chairman then addressed the meeting as follows:—

GENTLEMEN,—I am sure you will expect me in opening this meeting to allude to the great calamity that has befallen the Empire, since we last met together, in the death of our beloved Queen. How great that loss is, we have even yet hardly had time to realize. No words of mine could do justice to the exalted character, the high sense of duty, the splendid example to prince and peasant alike of our late Queen. These have been better spoken elsewhere and far more eloquently than I am capable of, but you will agree with me, that not merely the British Empire, but the whole world is the poorer for our loss.

Gentlemen,—The thing that occupies our minds for the moment to the exclusion of almost everything else is the present crisis in the Tea Industry, and I fear it is a subject that is likely to give us cause for reflection for some considerable time to come. Various schemes have been brought forward to alleviate the depression, the most notable being the Rutherford-Rosling scheme, *i.e.*, the abandoning of 10 per cent. of our acreage for two years. This your Committee has uncompromisingly rejected, and I do not doubt you will endorse their action. To my mind there are several sound reasons against so backward a policy, but I will only enumerate one or two of them. The principal reason is, that it is utterly wrong from an economic point of view, and would merely lead to a temporary and artificial inflation of prices. This would mean the re-introduction of teas from the Far East and the giving up by ourselves of such foothold as we have acquired in foreign markets. Again, the scheme is manifestly unjust. Tea estates are not philanthropic or charitable

institutions, and there is no reason and can be no reason, why a concern paying 10 per cent. at present prices should forego this advantage to bolster up a weaker neighbour, who is making a proportionate loss. A further reason is, that the scheme would set free 10 per cent. of labour on every Estate and would enable the remaining 90 per cent. of each Estate to be so highly cultivated as to more than counterbalance the loss in yield from the abandoned portion, so that our last state would be worse than the first. I could go on multiplying instances, but should merely weary you. There are four methods in my opinion of overcoming the present critical state of affairs They are (1) the compulsory cess, (2) which hinges on the first, the opening of new markets and more particularly the fostering of a taste for good cheap teas among the natives of India, (3) the reduction of the British Import Duty and an equalisation of taxation on tea, coffee and cocoa, all great rivals to each other, (4) the cessation of the idiotic manufacture of rubbish, which can remunerate nobody and merely damns our reputation in the eyes of the world. But first and foremost is the compulsory cess and to attain this no effort should be spared. South India, barring I believe 115 acres in the Nilgiris, has gone solid for the cess, and let us pray that the North will do the same. In so gigantic a country as India, where the distance between the most Southern and the most Northern Tea Districts is as great as that between Naples and St. Petersburg, voluntary combination is almost an impossibility, and it is only by the assistance of Government that adequate funds can be raised. I am at a loss to understand the argument of the Lieutenant-Governor of Bengal, that assistance from Government would be so unusual as to be out of the question, unless planters are unanimous or practically so. Is it not a law for the welfare of all communities, that the less must give way to the greater? Again, are we to go on working always on the same lines? Are the wheels of Government never to move out of one old groove? The fixing of the Rupee at 1/4 was a most unusual, I may say a most unprecedented piece of legislation, but it was done. The Government of Bengal is now subsidising the Indigo planters and actually providing them with funds out of its own pocket. I do not say the Government is wrong, quite the contrary: I am delighted to see Government recognising a great industry in difficulties, but subsidies from the British point of view are unusual. I hold that, if seventy-five per cent. of the planting community are in favor of the compulsory cess, considering it necessary for the salvation of the greatest British Industry in the East, that cess should be imposed, and with so enlightened and sympathetic a Viceroy as Lord Curzon, I feel almost confident we shall get it. Lord Curzon has shown his appreciation of our difficulties in his attitude as regards the Assam Labour Bill, and if this cess question is brought to his notice, I cannot but believe he will stretch out a hand to us. We do not ask for one pie from Government, we only ask the aid of Government to enable us to tax ourselves as a means of helping ourselves in our misfortunes. Once having the cess we should agitate for the reduction of the British Import Duty, and by placing the matter fairly before the electorate, I am convinced we should ultimately secure redress. Eighty-four per cent. of tea consumed in Great Britain is British grown: ninety-four per cent. of sugar consumed is foreign grown and bounty fed, but tea is now taxed cent. per cent. of its value, whilst sugar goes free. Is there any country in the world except Great Britain that would act in so unjustifiable a manner? The injustice is really startling, and it is quite extraordinary how long it has been complacently submitted to. Once secure a reduction in the Duty, and you will see an enormous increase in consumption in the British Isles. There is no reason why it should not rise to 7 lbs. per head, as in Australia, and, were this so, the cry of over-production would cease. But we must not forget our local markets, and it is our duty to do all we can to exploit them. Your Committee has suggested that we lay aside ten per cent. of our teas for this purpose in the coming season, and I hope you here in General Meeting will confirm this. The method of exploitation is a matter for future discussion, but Mr. Deane's suggestion in his letter to *Indian Gardening and Planting* is in my opinion the best yet evolved. No doubt the Indian Tea Association will assist us, if it has the funds, and with a compulsory cess there would be no difficulty in that respect. Gentlemen, I have held you long enough on this subject, though I feel much has been left unsaid. I should also much like to criticise some of the arguments for the ten per cent. reduction scheme brought forward at the recent General Meeting of the Ceylon Planters' Association, but neither time nor your patience will admit of this. I am, however, very sorry to see from the accounts of that meeting in the Press, that the planters have voted for the retention of the Ceylon Im Duty. For my part I consider they do not know their own inter Nothing could be of greater benefit to planters and merchants in Ceylon than a great central Eastern Market at Colombo. port would probably become one of the greatest distributing cen in the world. It is idle to talk of the shutting out of rubbish, Ceylon has shown that she can equal even China in the produc thereof. To turn to our own local matters, cart rates and ro the latter as always, are our two burning questions. The cart st has happily ceased and a most foolish strike it was. The rate are now offering are as a matter of fact more favourable on the w than the old ones, and though Estates near the Ghaut are pa rather less than heretofore, those at a distance are paying consider higher: in fact, taking it all round, the carters are rather bette than heretofore. As regards roads, I most sincerely trust, that, that we have a new Chief Engineer, we shall see something of also that he will give us an occasional visit in the rains, when th are at their worst. We have suffered much in the past, no much from want of money being spent on our roads as from foolish and unprofitable way in which that money has been sp Gentlemen, I must apologise for detaining you so long, but urgency of our case is my excuse, and I am of opinion that as m publicity as possible should be given to the fact, that we are bur with eagerness to help ourselves, if only Government will len its countenance.

Import duty on foreign grown teas.—Proposed by Mr. H. D. De and seconded by Mr. R. S. Imray: "That this Association do on the Government of India the immediate necessity of puttin Import duty on foreign teas." Carried *nem. con.*

Mr. Deane in an able speech pointed out that his resolution intended to protect our local markets in India, which were fast b captured by Ceylon, who in 1899 sent ½ million lbs. of tea (mostly marked by Estate's name), and in 1900, 1½ million lbs., selling s at very low prices, which was prejudicial alike to India's and Ceyl interests. It was very unfair that Ceylon teas were admitted free India, whereas India had to pay 4 annas per lb. for the same privi of selling her teas in Ceylon. A certain section of Ceylon plan supported India in its claim for reciprocity. Mr. Deane remarked that as an alternative to his resolution, India would be satisfie Ceylon removed her Import Duty.

Cart Licence.—Proposed by Mr. H. D. Deane, seconded by Buxton Laurie: "That the Dewan be again asked to sanction a licence of a nominal value to enable all cart owners to be traced and also as a means of estimating traffic more correctly than is at sent possible." Mr. Deane reminded members that this conces was asked for before, but that greater importance was attache granting of same now, as the traffic was increasing by leaps and bou and had a cart licence ordinance existed, the District would not been put to the inconvenience of a cart-strike, to which it had recently subjected. Carried *nem. con.*

Plucking Tea.—Proposed by Mr. R. S. Imray and seconded by Buxton Laurie: "That this District adopts the suggestions of Committee with regard to plucking." Carried *nem. con.*

Local sales Tea.—Proposed by Mr. R. S. Imray and seconded Mr. H. D. Deane: "That this District do exploit India (especi Madras Presidency) with ten per cent. of its yield, or dispose of sam some other means than sending to London Market, and that a Commi be appointed to discuss details." Carried *nem. con.* The exis Committee and Messrs. Deane, Latter, and McArthur were appoin

With a vote of thanks to the Chairman, the meeting termina

MARKET REPORT.

[*Per Mail advices of 12th April* 1901.]

COFFEE.

The London Commercial Record says:—Public business, suspe ed during the Easter recess, was resumed yesterday, when supp to a fair extent were offered. The tone of the market gener was flat, and of the East India catalogued about two-thirds were posed of at decline of 2s per cwt., the remainder meeting with adequate offers. The moderate quantity of Costa Rica and Cen American was chiefly disposed of at easier rates. The market "futures" has been dull and prices are rather lowest; yester May delivery Santos sold at 31s 3d to 31s 4½d, September at 32 to 32s 4½d, and December at 32s 9d per cwt. Auctions to-

ffered 3,166 bags East India, 10 barrels 19 bags Jamaica, 1,143 ags Costa Rica, 61 bags Salvador, and 695 bags Guatemala. A ull market and a good deal bought in (especially East Indian) in ne absence of demand. Costa Rica steady. East Indian in favor f buyers. We quote:—

ondon ...	Santos ...	May delivery	... 31s 3d.
ew York	No. 7 Rio...	,,	... 5·45 cents.
amburg...	Santos ...	,,	... 31¼ pf.
avre ...	Santos ...	,,	... 38¼ francs.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ..	17,488	16,319	14,941	13,087
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	6,094	5,593	6,340	5,918

The preceding figures exhibit— Tons.

In the Imports an increase this year of ...	1,854
Home Consumption an increase of	901
Export an increase of	422
Stock an increase of	1,168

The results of yesterday's auctions are given below:—

East India.—4,264 bags partly sold as follows: *Mysore*, smalls 0s 6d to 52s, low middling to middling 44s 6d to 52s, good mid-ling 59s to 60s, good to fine blue 78s to 86s 6d, peaberry 54s 6d to 9s. *Coorg*, smalls 42s 6d to 50s 6d, middling 47s to 49s, good iddling 57s to 64s 6d, bold 72s to 87s, peaberry 63s to 81s 6d. *Vynaad*, smalls 40s to 42s 6d, low middling 42s 6d to 44s 6d, ommon bold 51s.

Costa Rica.—1,211 bags mostly sold, smalls 33s 6d to 44s, good o fine ordinary greenish 38s to 40s 6d, low middling to middling 5s 6d to 50s, good middling blue 57s to 61s, bold 61s 6d to 64s, ood to fine blue bold 67s to 85s, beaberry 55s to 69s.

Guatemala.—150 bags sold, smalls 33s 6d to 35s, low middling to iddling 44s 6d to 47s 6d, bold 56s 6d, peaberry 53s to 54s.

Salvador.—437 bags sold, good ordinary foxy greenish 36s, fine rdinary to low middling 39s to 43s 6d, middling 45s 6d to 46s 6d, old 54s, peaberry 46s 6d to 52s.

Receipts in Rio and Santos.

ince July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	2,383,000	2,966,000	2,705,000	3,745,000
Santos ...	7,133,000	5,344,000	4,960,000	5,621,000
Total...	9,516,000	8,310,000	7,665,000	9,366,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 1s $0\frac{5}{32}$d, previous day 1s $0\frac{1}{32}$d.

Havre, *April* 11.—Good average Santos April opened steady t 38f. and closed steady at 38f., May opened at 38¼f. and closed at 38¼f., September opened at 39f. and closed at 39f., Decem-ber opened at 39½f. and closed at 39½f.

Hamburg, *April* 11.—Good average Santos April opened steady at 31¼pf. and closed steady 31pf., May opened at 31½pf. and closed at 31¼pf., September opened at 32½pf. and closed at 32¼pf., December opened at 33pf. and closed at 33pf.

New York, *April* 11.—Closing prices of No. 7 Rio were as follow:—

		April.	May.	June.	July.	Aug.
April	11...	5·45	5·50	5·55	5·65	5·70
April	10...	5·45	5·50	5·55	5·65	5·70

TEA.

The public market is closed, and private sales have not been of great importance. The quantities of Ceylon and Indian so far advertised for auction next week are very small.

COCOA.

No auctions have been held this week, but a fair quantity will be brought to the hammer on Tuesday next. Privately little or nothing done, the few sales reported including Trinidad at 68s, Caraquez Guayaquil at 64s, and Winter Arriba at 67s per cwt.

PEPPER.

Black.—For arrival buyers are more anxious to operate in Singapore than of late and some 150 tons have been sold, at a slight enhancement—near at 6½d, March-May 6⅛d to $6\frac{5}{32}$d, April-June $6\frac{5}{32}$d, May-July at $6\frac{3}{16}$d, June-August $6\frac{3}{16}$d, and July-September at $6\frac{7}{32}$d, whilst on the spot fair has realised 6d per lb. Penang is neglected.

White.—Towards the close some animation has been observable and about 100 tons sold on the spot—Singapore at $8\frac{15}{16}$d to $9\frac{1}{16}$d for fair and Penang at $8\frac{5}{16}$d per lb. To arrive 40 tons Ponang sold at higher prices—June-August shipment at 8½d to $8\frac{7}{32}$d; Singapore, April-June has buyers at 9d, and June-August at 9⅛d per lb.

To-day prices are dearer. Of white 60 tons Penang June-August sold at 8⅝. Of Black sales on the spot at $\frac{1}{16}$d for fair Singapore; 50 tons sold for arrival at 6¼d April-June, and $\frac{1}{32}$d over for May-July.

GINGER.

Cochin.—The advance recently established is well maintained, but, naturally, the volume of trade passing this week has not been great. Medium sized Native cut has sold at 50s, small cut at 46s 6d, rough Calicut Sorts at 38s, and medium and small washed rough Cochin at 37s 6d per cwt.

QUININE.

There is no business to report in the second-hand market this week, and prices are nominal at 1s 3½d per oz, for spot, 1s 4d for August delivery. At the Java quinine-auctions on April 3, the result of which was reported in last week's issue, 3,600 kilos, were offered, of which 3,100 kilos. were sold. The next auction to be held there will be on May 15.

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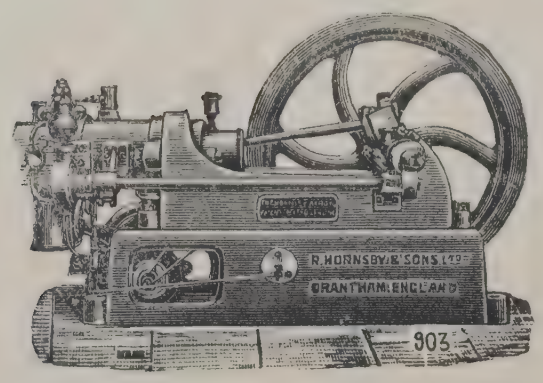

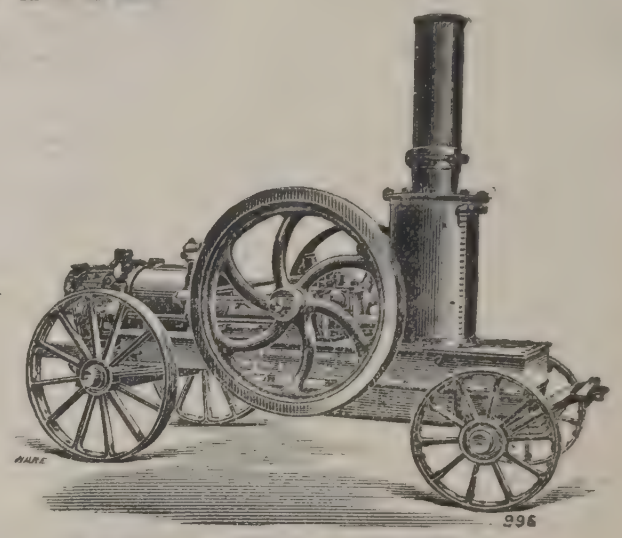

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Extra for Standard connections to Water Vessel ...		35	40	45	50	53	55	60	100	100	150	200	240	300	360
Extra for Foundation Bolts		7	8	12	15	15	17	17	40	50	60	60	70	80	100
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[Fy.—12-5-1900—t.f.o.]

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

OL. VI.] MADRAS, SATURDAY, MAY 11, 1901. [No. 19.

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, Planting Opinion," 106, Armenian Street, Madras.

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TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 17th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

TEA AND COFFEE.

It is good to see that both tea and coffee planters in Southern India are alive to the needs of their respective industries. At the quarterly meeting of the Central Travancore Planters' Association on the 13th ultimo the Hon'ble Mr. G. L. Acworth, who presided, delivered a stirring speech, mainly in support of the suggestion that a compulsory tea-cess should be levied for the purpose of raising funds to push Indian tea. Central Travancore shares, we are glad to say, our views as to the proposed cessation of output; it advocates improvement of quality, and the abolition of "rubbish." Mr. Acworth expressed the opinion that there were four methods of overcoming the present critical state of affairs, *viz.* (1) the compulsory cess, (2) which hinges on the first, the opening of new markets and more particularly the fostering of a taste for good cheap teas among the natives of India, (3) the reduction of the British Import Duty and an equalisation of taxation on tea, coffee, and cocoa, all great rivals to each other, (4) the cessation of the idiotic manufacture of rubbish, which can remunerate nobody and merely damns our reputation in the eyes of the world. He added:—"But first and foremost is the compulsory cess, and to attain this no effort should be spared. South India, barring I believe 115 acres in the Nilgiris, has gone solid for the cess, and let us pray that the North will do the same." The time is ripe for pressing this matter. The Government of India—for that matter, even the British Government—is actuated less now-a-day by a belief in economic theories than in the practical, the practicable, and the expedient. The Government of India has shown by the "countervailing" sugar duties how far it is prepared to wander from the paths of the Free Trade theory. The Government of Bengal is actually subsidising the Indigo industry. These facts justify strong pressure in regard to

the proposed tea-cess, always provided that a very strong majority of tea-planters concur in representing to the Government that such a cess is a necessity.

As regards Coffee, a similar cess has been suggested, and the project appears to be gaining favour. The Shevaroy Planters' Association has gone "baldheaded" into this matter. The South Mysore Association hesitates and discusses, but will, we trust, eventually vote "Aye" and carry the North Mysore Association along with it in a united representation as to the advisability of the scheme suggested in the resolution moved at the Annual General Meeting on 29th March last :—"That members be asked to subscribe to a Fund for the establishment of new markets for coffee, at the rate of four annas for each cultivated acre of coffee, and that they commit their interests into the hands of a Sub-Committee consisting of four members to be chosen to-day, who shall draw up a memorandum of their views, and shall elect one of their number to act on a Select Committee of all the planters of S. I. should such be appointed" There was a savour of "sarkusm" in Mr. Anderson's suggestion that "the Merchant Princes of Madras" be invited to attend the meeting called to discuss the matter, and to give the benefit of their advice ; but we are convinced that nothing sarcastic was intended. It is years since Madras nurtured in its bosom a Europeon Merchant Prince, but doubtless the merchants of Madras could, and would, help planters to take steps to resuscitate their arsenic industry. It is useless, however, to discuss methods or schemes unless funds are to be forthcoming. No scheme for the development of Home or Foreign markets can possibly be worked without expense. Hence the need of a coffee cess, whereby the necessary sinews of war may be provided.

It is a great misfortune that the necessity for what we may fairly term "special advertisement" is always most keenly felt in times of depression, when the means requisite are most restricted. This applies to the tea and the coffee industries alike. When there is a "boom" planters take their profits thankfully and spend them, generally, right royally. The reaction comes and finds them all unprepared to provide funds even for the admirable purpose of developing the industries upon which they rely. In this and some other respects a parallel may be drawn between the two industries under reference ; but in many ways their conditions are widely different, and the course of treatment to be adopted in the one case would be by no means suitable in the other. What appears to us to be most needed is cheap capital. In the coffee industry more especially men cannot for the most part rely entirely on their own capital ; in the tea industry few can do so beyond time of shipment. They may raise their own crops with their own money, they may even manufacture and pack and place at port of export ; but they cannot finance the supplies until time of sale and receipt of proceeds in India. Hence to a large extent they are dependent upon their Coast agents, and while this lasts they cannot be regarded as quite free to push their goods in any market that may appear to them promising. They need something after the character of a combination for the purpose of raising capital in England on low terms and joint responsibility. They need complete freedom as to the placing of their goods upon the market, upon any market. It is on this account that no small scheme for the opening up of Foreign markets can hope to succeed ; it is because of this that the 'lions in the path' are formidable.

BOARD OF TRADE RETURNS.
March, 1901.

The following figures are taken from returns issued by the British Board of Trade to show the Imports, Consumption, and Exports of the undermentioned articles for the three months March 31 in the present and two previous years.

Coffee.—There is a very pleasing increase of home consumption, and exports have held their position fairly well, but the rapid expansion of imports has more than balanced this, and stocks on March 31st, 1901, were 20 per cent. higher than at the corresponding date in 1899.

——		1899	1900.	1901.
Import ...	cwts.	279,551	289,049	370,217
Home Consumption	,,	66,696	93,136	102,401
Export	,,	122,874	133,083	131,463
Stock	,,	382,000	362,000	456,000

Cocoa—(Raw). The remarkable way in which cocoa has improved its hold upon the taste of the people is again slow. In spite of a falling off in exports and an increase in imports, stocks are reduced, as home consumption has been much larger.

——		1899.	1900.	1901.
Imported ...	lbs.	15,091,912	18,769,889	16,280,062
Home Consumption	,,	10,082,277	12,371,572	16,795,606
Export	,,	3,439,631	2,585,180	2,292,702
Stock	,,	18,556,000	16,606,000	13,982,000

Cocoa—(prepared). Imports are creeping up but cause no accumulation of stocks, as demand evidently continues steady.

——		1899.	1900.	1901.
Imported ...	lbs.	1,403,302	1,709,122	2,094,562
Home Consumption	,,	1,538,302	1,565,294	2,046,142
Export	,,	274,080	211,147	206,572
Stock	,,	853,000	205,000	170,000

Tea.—Again a much larger supply and a big increase in stocks. The falling off in consumption appears, but the figures relating to this are not very reliable, as March is a month in which deliveries are apt to be largely influenced by dealers' expectations as to the coming budget.

Tea.		1899.	1900.	1901.
Import ...	lbs.	57,864,462	73,110,318	80,437,621
Home Consumption	,,	64,025,830	94,975,574	96,193,060
Export	,,	7,946,691	12,467,454	11,536,340
Stock	,,	82,692,000	76,099,000	94,156,000

TO THE DEAF.

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[w. 26-5-00—26-5-1901.]

RAMIE.

Under the title of "La Ramie, *culture, préparation, utilisation industrielle*," the *Revue des Cultures coloniales* has issued a verbatim report of the International Congress of Ramie, held at Paris in June and October, 1900. It was a meeting of ramie specialists: colonial planters, inventors, manufacturers of decorticators, spinners, weavers, etc., and a great deal of information was collected in regard to various points connected with ramie cultivation, preparation, and manufacture. The discussions that occurred threw light on various details, and the report before us would be of very great utility even if it gave nothing more than the speeches delivered and the discussions conducted at the Congress. It contains more than this, and not the least interesting feature is an introduction by M. Maxime Cornu, the eminent Professor of the Museum of Natural History at Paris. This practically forms a summary of the proceedings of the Congress. The book before us may be regarded as giving just about all the information that is available and is worth having about a product in which a good many people are now interested. The price is 4 francs, and the book can be obtained at the offices of the *Revue des Cultures coloniales*, 44, rue de la Chanssée-d'Antin, Paris.

PLANTING IN GERMAN EAST AFRICA.

In his report for the year 1900 the British Vice-Consul at Dar-es-Salaam says that **Agave.**—Nearly 600 acres have been planted with Mauritius agave hemp (*Fourcroya gigantea*), and a field railway has been constructed. At the present time some 20,000 leaves, producing about 750 lbs. of dry fibre, are cut and cleaned daily. The fibre goes through the process known as breaking and scutching, the woody stem or boon being cracked and broken up by means of a simple rolling machine. After the bruised leaves have been left in soapy water for one night, they are well rinsed in fresh water and then placed in the sun. When dry, as much as possible of the broken wood is shaken out, after which the fibre is beaten by rotating wooden paddles, by which means the remainder is removed. It is then pressed and formed into bales weighing 2½ cwts.

Vanilla.—There are three vanilla plantations near Bagamoyo. Two, Kitopeni and Shambesi, belong to a private company, the third to the Roman Catholic Mission. In the two former are 30,000 vines, each of which bears on an average 20 pods annually. During the drought of 1898 half the vines died. To prevent a recurrence of such a catastrophe the plantations are now irrigated, the water being fetched a distance of about two miles in pipes. The flowers are fertilised artificially, and the vines are not allowed to grow more than 6 or 7 feet in height. The pods are cured by the wet treatment and are dried in an oven, a temperature of 120 Fahr. being maintained. Some are also sun-dried, being wrapped up in woollen cloth. The trees planted for shading purposes are *Pithecolobium saman* and *Albizzia lebbek*, and as a prop *Jatropha curcas*. Labour is cheap, 3d. a day being the price usually paid.

The vines belonging to the Mission are said to be less productive. The price obtained for 1 lb. of vanilla (from 30 to 50 pods) ranges from 1*l*. to 3*l*.

Bread-fruit.—A trial has been made by the Mission with the bread-fruit tree which has answered admirably.

Coffee, etc.—32 estates have been opened by various German planting companies and private persons in the Hinterland of Tanga and Pangani, and in the highlands of Usambara. About 25,000 acres are under cultivation, 7,500 acres having been planted with coffee, a like number with cocoanut-palms, and 3,250 acres with hemp. Experiments are also being made with ramie, vanilla, cardamoms, Ceará rubber, grape vines, sideroxylon trees, cinnamon, cocoa, and tea. Cotton and tobacco have, so far, proved a failure. There are over 5,000,000 coffee shrubs of the Mocha variety (*Coffea Arabica*), one quarter of which are now in bearing. The plantations are situated at an elevation of from 3,500 to 6,000 feet above sea-level. The soil of Usambara appears to be particularly suited to the cultivation of coffee, and the plants come into bearing at two years of age. *Albizzia Lebbek* and *A. Moluccana* are generally used as shade trees, but neither is considered very satisfactory. In some of the estates the shrubs are not shaded at all. Up to the present no signs of sunstroke or canker have been observed.

Hemileia vastatrix broke out in some of the gardens in 1895, and has since made its appearance, on one or two occasions. The planters do not, however, consider it a very serious matter, and after the leaves have been plucked and destroyed, the diseased plants recover. Considerable damage is, at times, done by beetles and field bugs. Very little manure has as yet been used; but the German East Africa Company is following the example of the Guatemala coffee-planters, and a mixture of bone meal, sawdust, rotten coffee husks, and lime has been found a good substitute for animal manure which is wanting.

On several of the estates the berries are pulped by machinery (Walker's or Gordon's). Fermenting vats and drying-houses have also been built. Each tree is said to bear on an average ½ lb. of parchment coffee per annum. The price obtained for the first and second qualities, which are sent to Hamburg, averages 75s. per cwt. Inferior coffee is sold locally or in Zanzibar, and fetches about 28 rupees (37s. 4d.) per cwt. In the following table is shown the total amount of coffee exported from German East Africa since the plants came into bearing:—

Date.	Quantity. Cwts.
January 1 to December 31, 1895	700
Do. do. 1896	500
Do. do. 1897	1,470
Do. do. 1898	2,670
Do. do. 1899	1,020
Do. September 30, 1900	1,220

It is believed that next year's crop will be heavy. About 500,000 Liberian coffee shrubs have been planted. The price obtained at Hamburg is, however, not sufficient to pay for the cost of transport, and the gardens are for the most part being allowed to go to weed.

Vanilla.—Three or four small vanilla plantations have been started. The largest, on the banks of the Mkulumuzi River, was flooded a few months ago, and most of the vines were lost.

Cardamoms.—The cultivation of cardamoms has been taken up by two or three companies. A sample was sent to Germany at the commencement of the year, but the price obtained (56s. per cwt.) was disappointing.

Grape Vines.—10,000 grape vines were planted last year at an altitude of 4,500 feet. They are growing well, but a rust has been noticed on the leaves.

Sideroxylon.—These handsome and useful trees (the

"djohor" of Java) are being planted extensively to mark the garden boundaries.

Cinnamon.—Cinnamon is to be found in many of the estates. A sample which was sold in Zanzibar a few months ago fetched 70 rupees (4*l.* 13s. 4d.) per cwt.

Cocoa.—No soil has yet been discovered suitable for the cultivation of cocoa, but there exist a few trees in several of the coffee plantations.

Tea.—Tea grows well; up to the present, however, it has only been planted in small quantities.

Labour.—A very important factor in the cultivation of coffee, etc. is, from the planter's point of view, the labour question. The natives of the Tanga and Usambara districts are of little use as workmen, and labourers are usually recruited in the towns of Pangani and Bagamoyo, and in a lesser degree, on the banks of the Rufiji River. Wanyamwezi and Wasukuma are preferred. It is customary for the men, who receive from 9 to 14 rupees (12s. to 18s. 8d.) per month without food, to bind themselves for six months. There are probably between 3,000 and 4,000 native workmen on the various estates. Asiatics are no longer employed.

A private company has opened a small plantation at Lindi, and a little Liberian coffee is grown near Mikindani.

COFFEE.

The letter from Messrs. W. H. Crossman & Brother which we publish to-day deserves the closest study on the part of coffee-planters in India. It is not a cheering or a comforting letter. The remarks about Brazilian exchange will come as a surprise to many. As to increase of consumption, there is a clear warning that such increase can only be gradual. Moreover, we are informed that it can only be "proportionate to the increase of population of civilized countries." The one means of working prices up lies in a reduction of Brazilian crops, and Messrs. Crossman evidently do not think that Brazilian planters are likely to take active steps to bring this about. To a certain extent, what purport to be facts are given in support of opinions expressed. Still, a good deal of the letter comprises opinions pure and simple, and opinions that could, generally speaking, only be met by opinions, not upset by a display of facts. That Messrs. Crossman have been often right in the past, is no indication that they are right now. Nevertheless, their remarks, as we have said, deserve very close study.

NOTES.

Hawaiian Coffee. Hawaii exported 345,151 pounds of coffee from July, 1900, to the end of February, 1901.

Brazil's Crops. Brazil coffee producers are too much for speculators, says the *American Grocer*. The present crop is likely to beat all records.

Indian Tea Exports. The April exports of Indian tea for the United Kingdom were 195,555 lbs. For the corresponding month of last year they amounted to 431,993 lbs.

Java Cinchona. The exports of Java bark for the first half of April were 455,000 Amsterdam lbs., against 275,000 Amsterdam lbs. last year, and 585,000 Amsterdam lbs. in 1899.

Digestive Tea. There is a gentleman in London who commends certain tea he offers as "digestive" and,—to give the word more point, perhaps—offers his tea as "sold by chemists only."

Tea in the U. S. Imports of tea in February were 3,405,037 pounds, of which 2,359,162 pounds came from China. Total imports for eight months ending February, 78,794,023 pounds, against 72,634,852 pounds for same time in 1900, and 57,923,252 pounds in 1899.

Tea Exports from Ceylon. Estimated shipments for April, 1901, were 8½ to 9 million lbs.

	lbs.
Total shipments for April, 1901	9,000,000
Do. do. do. 1900	8,924,218
Do. do. do. 1899	8,284,687

[Estimate for May, 1901—9 to 9½ million lbs.]

Warrants. An attempt is to be made to introduce the use of warrants for coffee and other produce deposited in licensed warehouses at the Rio and Santos Customs and at the Central Railway designated for that purpose. They will be issued under direct guarantee by the Government for safeguarding and preservation of the goods.

Java Coffee. Advices, dated 30th March from Batavia state that the Padang auction sale of coffee went off as follows: Interior, 45·73 guilders per picul, against 50·58 guilders on December 31; Mandheling, 75·50 guilders, against 76·50 guilders on December 31; Ankola, 60·50 guilders, against 71·56 guilders on December 31; Ayer Banjies, 59·50 guilders, against 62·50 guilders on December 31; Painan, 40·50 guilders.

A Boer Tea Planter. The *Times of Ceylon* says:—We hear on reliable authority that negociations have been entered into for the purchase of a tea estate in Haputale for a rich Boer, who will prefer to remain in Ceylon for some years after the close of the war to returning to his own country. This, doubtless, is one of the prisoners-of-war whom Reuter mentioned a few days ago as desiring to settle down with his family in Ceylon.

An Earthly Paradise. Mr. J. M. Lobb, who was for many years with the firm of W. G. A. Lambe & Co., Toronto, and who recently entered the employ of Rodewald & Heath, Colombo, Ceylon, writes to The "Salada" Tea Co. from Colombo under date of March 3, as follows: "This country does indeed strike one as an 'earthly paradise,' but it is a trifle warm." In other words there is just a suggestion of "the other place" as well as of paradise!

Reducing the Tea Output. The *Ceylon Observer* writes:—A planter remarking on a London editor writing about the Ceylon men reducing their output, adds:—"They are all doing it; but they won't bind themselves to do it."—Exactly: it is almost a case exemplifying Holy Writ!—"Son, go work to-day in the vineyard.—I will not;—but afterwards, he went." And yet, scarcely that; for, finer plucking and reduction of output has been the order of the day for the past three months.

Brazil. The *Correio*, of S. Carlos do Pinhal, S. Paulo, is seeking to stem the tide of the next crop by declaring that in that municipality it is

estimated at half a crop. It won't do, says the *Rio News*; there is too much testimony on the other side. It is stated that in the district of Jacutinga, Minas Gerges, the coffee crop this year will be extraordinarily large. This is the general situation throughout the coffee region, the rains having contributed immensely to the growth of the berry.

Cinchona.

The Board of Trade Returns of Peruvian Bark for three months of this year, compared with two previous years are as follows:—

	1901.	1900.	1899.
IMPORTS.			
Cwts.	9,729	13,019	6,671
Value	£23,964	£27,934	£13,038
EXPORTS.			
Cwts.	6,237	10,113	8,945
Value	£16,131	£25,500	18,639

Reduction in Output.

The following circular was recently issued by the Secretary of the Indian Tea Association (London):—"I am desired by my Committee to inform you that the adhesions to the above scheme on the part of India exceeded the minimum quantity required, *viz.*, ten million lbs. Some of the local Companies have fixed their meetings to consider the subject for the 18th and 19th instant. The final results for Ceylon cannot be received for a few days yet, but it is expected that the stipulated quantity of 8,000,000 lbs. will be made up."

Coffee in London.

The *Produce Markets' Review* of 13th ultimo says:—Public sales were resumed yesterday after the Easter recess, and the quantity offered was not excessive, consisting principally of East Indian and Costa Rica. Prices were somewhat irregular, fine qualities commanding high prices, and less desirable sorts being occasionally easier; on the whole, however, the market may be described as steady, with values maintained. The receipts in Santos are still considered too heavy for the time of year, and "term" quotations are about 9d lower than a week ago. The Brazilian exchange is fully maintained, and is to-day quoted 12¼.

The Indian Tea Crop.

The following telegram with reference to the tea crop in the various districts has been despatched by the General Committee of the Indian Tea Association here to the Committee of the Association in London, *viz.*—*Assam.*—Owing to generally unfavourable weather leaf is backward. *Cachar.*—Weather throughout the districts is favourable generally. Outturn to end of last month is stated to be 70 per cent. under last year. *Sylhet.*—Rain is much wanted generally. Owing to generally unfavourable weather leaf is backward. *Dooars* and *Terai.*—There is severe drought generally. Outturn last month very poor. *Darjeeling.*—There is severe drought generally.

A Good Coffee Crop in Ceylon.

In these days when coffee is an unknown product in the majority of Ceylon districts—is there a single acre of unbroken coffee between Great Western, Bopatalawa, and Adam's Peak?—It is a pleasure, says the *Ceylon Observer*, to hear of a decent harvest on an old coffee estate. We learn that the Manager of Pallakelle in the Dumbara Valley has harvested considerably over 2,000 bushels of coffee on the old place; but, of course, this is from comparatively young bushes scattered over a large area. It was the policy of Mr. Vollar, when Manager, to plant a clearing of coffee, on the chance of getting a certain number of crops, while the interspersed cacao or rubber was coming on. We do not know if this policy is continued; but anyhow we congratulate the manager and proprietors on getting from 2,000 to 2,500 bushels of coffee.

The London Tea Market.

A further fall in price average 6⅝d. Messrs. Gow, Wilson & Stanton's called report of the 2nd instant to Colombo states that the market generally shows a slight decline, and that fine teas generally are easier; while the market for common Pekoes and broken Pekoes is weak. The price of fair liquoring Ceylon Pekoe Souchong is 5¼d (¼d down) and the average price of Ceylon tea sold on garden account this week was 6⅝d (also ¼d down)—as against 6¼d and 7½d respectively in the corresponding week last year. Reuter reports that medium to fine Ceylon teas are easier. Pekoe Souchongs are quoted at 4¼d (same as last week) and the average for the week at 6⅝d (⅜d down) as against 6½d quoted for Indian tea. 26,000 packages of Ceylon tea were offered for sale, of which 20,000 were disposed of; while of the 23,000 packages of Indian tea offered, 20,000 found purchasers.

Indian Tea in London.

The *Produce Markets' Review* of April 13, 1901, says:—In the absence of public sales and the private market having been practically closed, transactions have been on a moderate scale. The demand, however, has been about the average, and as buying for some time past has not been of a very liberal character, and the stocks held by the trade are but moderate a good business may be looked for on the general resumption of business next week. The quantity catalogued for Monday amounts to 32,717 packages, and there is every prospect of an active inquiry for all kinds, and former prices are likely to be well maintained. During the past few years public sales have only been held on one day a week after Easter until August, but owing to the larger quantity of tea to come forward it will probably be necessary to depart from this rule by holding sales on two days in each week.

The Tea Crop Prospect.

According to the *Ceylon Observer* a shrewd correspondent who has been observing the course of affairs very closely, writes as follows, by way of warning to low-country proprietors and managers:—"There is one precious lesson which producers of tea must have learnt in the late collapse of prices—that they have their own fate in their own hands. If all rigidly adhere to finer plucking and more careful manufacture, all the tea produced will be consumed, and at fair prices. And it is particularly the low-country estates which produce quantity without special flavour that can control prices. It was quite evident that in the struggle for *quantity* they were the losers—their prices fell below cost of production; while the high-grown estates flourished. If the lower estates produce good teas, the high-grown estates *must* also pluck finer to get a full difference in price; and this natural remedy will benefit *all*. It is to be hoped producers will never again be tempted to go in for record yields, etc., for it spells ruin to the industry in the end. I have been much struck with this point of view lately."

The Preservation of Fruit.

An important experiment dealing with a new method of preserving fruit in all its virgin freshness has recently been completed. The patentees are Messrs. Lawton,

and the apparatus consists of an air-tight storage room, in which fruit can be sealed up, the atmospheric air driven out and a sterilised atmosphere made to take its place. The latter is easily and cheaply produced, while the required temperature, it is asserted, is secured with one-fourth the expenditure of power necessitated for the ordinary process of refrigeration. Some weeks ago a quantity of fruit—bananas, pine-apples, and English hot-house grapes, as well as tomatoes—was placed in a chamber fitted at 57b, Hatton-garden, and duly sealed up, and lately the storage room was opened by Mr. Wilkinson, Principal of the Swanley Horticultural College, and Mr. Ashbee, Superintendent of Covent-garden Market, by both of whom the contents were declared to be in the same condition as when placed in the chamber, and of the identical taste and flavour. It is claimed for the invention that fruit can be picked ripe, placed in the chamber and conveyed to this country from any part of the world, and, moreover, it can be stored here in a ripe condition for a length of time. If the idea is really workable and on a large scale, it will be a great boon to our fruit-growers, as when fruit is being given away, as sometimes it is in the height of the season, it would pay to seal up the plums or strawberries and bring them out again, perhaps at Christmas time—or, at any rate, when the "slump" was over.

The Scheme that Failed.

It is asserted that much disappointment is felt in Calcutta at Ceylon's failure to come into line in the reduction scheme. It is believed, however, that the agitation has done good, finer plucking is general, and that a perceptible rise in the standard of quality has occurred. Serious drought in the tea district has already affected the out-turn to the extent of one million lbs. Normal crops are not possible for some time. An outbreak of cholera amongst tea estate coolies is feared. So though there is to be no "rest" for tea, it appears likely to show a decreased output, which after all, is what is wanted. The Secretary of the Planters' Association of Ceylon wrote to the Press on 2nd instant:—

The following cablegram was despatched to London a few days ago:—"Including London figures total 3,500,000 lbs." The above was in reply to the following cablegram received from London in the middle of April:—"Indian 10,000,000 secured, let us know the number Ceylon," followed by a further wire on 22nd April reading "Indians meet to-morrow; give us all the information you have."

The *Times of Ceylon* remarks:—"We finally part with the proposed voluntary abandonment of any small percentage of plucking area on estates throughout the island. We trust we do not pretend to be "wise after the event" when we say that we never regarded it as the proper solution to the problem. As a test, Mr. Rosling's proposal had much to commend it. Our only regrets are that the general desire of the community was not discovered by means of the preliminary plebiscite referred to above; that Indian co-operation has had to put up with prolonged uncertainty here; and that the display of lack of cohesion may be misunderstood to our detriment by opponents at home or elsewhere who will regard the failure of an effort which had the official blessing as showing weakness in the general community. The only sound, legitimate, and effective remedy upon which all are agreed—and quite apart from the doctrine of the 'survival of the fittest'—is the far more attractive gospel of increased demand. It is for India to strain its efforts to the utmost to secure a tea cess, and, with that invaluable weapon, to work with Ceylon to capture and hold all markets."

LETTERS TO THE EDITOR.

COFFEE.

New York, *April 5th*, 1901.

On the many inquiries regarding our views on the present position of Coffee, we cannot do better than recommend to those friends a careful perusal of our general coffee circular of July 6, 1900, as the matters reviewed by us at that time answer almost every question as to production and consumption and also the effect or influence of Brazilian exchange on the values of Coffee. It is known that Brazilian exchange has lately been made the leading issue in Coffee by dealers and speculators, but only because no other question was left open to serve in any way as an argument in favour of higher prices for Coffee. While the civilized world recognizes only the international standard of money, *viz.*, gold, Coffee people try to put special strses upon the question of how many Milreis the farmer receives, ignoring the point as to how much *gold* those Milreis mean. It is quite evident that the illiterate Italian, who in the majority of cases cannot read or write, and is the chief laborer in the raising and handling of Coffee in the State of San Paulo, fully appreciates the value of the Milreis with exchange at 12 pence as compared with exchange at 7 pence. He knows well enough he can buy more Lires or France to send back to Italy with Exchange at 12 pence than at 7 pence, and the higher the value of the Milreis the more certain it is that every bean of coffee will be picked. Can it be possible that this illiterate Italian laborer knows and appreciates the difference between the Milreis at 12 pence and at 7 pence better than the educated Coffee dealer of financial speculator in Coffee in Europe and elsewhere?

Comparative values of Coffee in Milreis only go to show that supply and demand are the ruling factors, and the relative possession of currency and gold prices is entirely of minor importance. Here are some examples of how much the Brazilian planters have received:

Between 1881 and 1883 ...	16 to 20	Milreis	per bag.
In the years 1884-1885 ...	About 22	,,	,, ,,
In the years 1888-1889 (after the abolition of slavery) ...	About 30	,,	,, ,,
In April, 1894 (with exchange at 9 pence)	Over 100	,,	,, ,,
In 1898-1899 (in the period of lowest prices from July to October, 1899) ...	About 36	,,	,, ,,
And this season the average will be at least	36	,,	,, ,,

with a much better rate of excahnge since the commencement of the 1900-1901 crop.

While we have given above the Milreis prices existing before and since the abolition of slavery in Brazil, in 1888, we are of opinion that free and comparatively intelligent labor (compared with slaves) gives much better results than did the slave labor, proof of this being given in the United States as well as in Brazil, and we furthermore think that the average price paid outright for labor actually performed which gave these good results proves lower than the actual cost of slave labor, which it is well known had to be constantly maintained, provided for, housed and watched, and rendered poorer results.

The surest law in the commercial world is the law of averages.

The Brazilian farmers for a long time were receiving excessive prices in Milreis owing to small crops and reduced rates of exchange, and this laid the foundation for the subsequent large crops, which forced lower prices in currency or gold because of over-supplies. No one in any markets expected planters to reduce their Milreis price because it was excessive, as natural laws enabled them to obtain such a price. Therefore, why should the Brazilian planters expect consumers now to pay more money for Coffee than trade conditions actually warrant, in spite of overwhelming "bull" speculation or because there are complaints that while receiving a sufficient price in gold, not enough paper money is received for their merchandise?

Speculation does not reason—in most instances speculation does not desire to reason or look into such details; yet with absolute truth we can say that the losses to consuming markets, owing to over-production of Coffee since 1895, have been more than the total foreign debt of Brazil. We do not blame Brazilians for this, as all misleading information has been welcomed by consuming markets—the real truth was not wanted and Brazilians never took the trouble to find out how much Coffee they could raise, or if they knew, did not wish to tell. It was this sort of thing that led to this current crop being estimated in July last as low as 7,500,000 bags, and the same thing was responsible for the 1897-1898 crop being estimated only 7,500,000 bags in July, 1897, which turned out 10,500,000 bags; and it is patent to everyone who follows the market now that the current 1900-1901 crop promises to break all records.

Notwithstanding that our crop figures have often been considered too high, they have been too low, with the one exception of 1899-1900 crop, which we estimated at 9,500,000 to 10,000,000 bags together with a majority of the Coffee World, but which turned out a little below 9,000,000 bags. With this exception, our own crop figures, while time for time higher than most people wanted to accept, still turned out to be too small. The estimates on the next 1901-1902 crop that we get from most reliable sources, who prefer to to err on the conservative side rather than go over the mark, point to a crop of 11,000,000 to 12,000,000 bags, Rio and Santos together. In the light of this it is impossible for us to follow those arguments which would favor higher values owing to currency or Milreis price received by the Planters, for we will probably commence the new crop with a World's visible 7,250,000 to 7,500,000 bags against 6,200,000 bags 1st July, 1899. *And in the face of a Gold Price which is fully Twenty Per Cent. Higher than that at which the 1899-1900 Crop Commenced.*

It must be remembered that the value in currency or Milreis in Brazil depends upon matters like the stability of the Government, honest administration, peaceful or troublous times and the chances of other political disturbances, whereas the gold price of a staple depends upon production and consumption, *i.e.*, supply and demand, and nowhere in the World would any other claims be made or listened to, except in a market like Coffee, where 95 per cent. of the dealers are on one side and grasping at any straw to afford them relief in their losing position.

If people speculating in coffee do so on the belief that Brazilian exchange should advance, why do they not speculate in the exchange itself, which, at least, is not burdened by heavy charges like freight, storage and insurance, etc., as on Coffee?

If Brazil has control of anyone product more than another, it is Rubber, as the quality of Para Rubber cannot be duplicated anywhere else and manufacturers accustomed to using Pará will not use any other Rubber. Still, with exchange having risen from 7 pence to 12 pence, Para Rubber has declined in price since last April from 98 cents. to about 85 cents., the present figure. No doubt the supply was excessive, compared with requirements and the manner in which the division was made between the Brazil currency price on the gold value, cost and freight, did not concern consuming markets. Although Brazil holds a dominant position in Coffee, it is certainly more so in regard to Rubber, and we point to this example because there is less speculation in Rubber than in Coffee, and therefore the article is less influenced by rumors and stories circulated to influence markets.

Now with respect to consumption.—In our circular of July 6th, 1900, we gave a table of figures which was then disputed in many quarters. How has it turned out? During the Winter of 1899-1900 computations were actively circulated trying to show that consumption was overtaking production, and that the increasing use of Coffee left 9,000,000 bags Rio and Santos, altogether too small, and that 10,000,000 bags were needed thenceforth. The world's deliveries from July, 1900, to April, 1901, decreased 1,200,000 bags! Does this mean a decrease of *consumption*, with declining markets? *Hardly.* It simply means that when markets are advancing the interior trade buys Coffee in excess of its requirements, and while less well-to-do holders are reducing stocks, rich holders are enabled to keep surplus supplies—but probably lose courage to increase, when everything is pointing to lower values. We now frankly state that about 1,000,000 bags Coffee are held here, outside of the visible supply, by a few large roasters and dealers. This has reference to stocks not counted in the American visible, deducted as if delivered, and this Coffee, in most cases, has been accumulating since the beginning of the large crop in 1896-1897, and is never counted in the official American visible.

Now, instead of 9,000,000 or 10,000,000 bags Rio and Santos Coffee being needed, the actual deliveries demonstrate the following facts:

In the crop year 1898-1899 with Rio and Santos yielding 8,871,000 bags,

The World's Visible Supply increased 750,000 bags,

Showing that only 8,000,000 bags Rio and Santos were required.

In the crop year 1899-1900 with Rio and Santos yielding 8,959,000 bags

The World's Visible Supply decreased 360,000 bags,

Showing that a total quantity of 9,319,000 bags Rio and Santos were delivered.

But as deliveries the first nine months of this crop compared with the first nine months of the previous crop are 1,200,000 bags less, it not only proves that last season's deliveries were excessive, but it also proves that the claim the World requires 10,000,000 bags Rio and Santos Coffee has no good foundation; and even with a fair increase of consumption in three years the World's requirements scarcely reach 8,500,000 bags of Rio and Santos Coffee.

We are fully aware that all figures and arguments that do not favor higher prices for Coffee are lost on the majority of the Coffee world.

During the current crop, the most ridiculous events,

rumors or assertions have been conducive to renewed speculation, and among them we may mention the reports of smaller receipts in Santos from 50,000 to 40,000 bags a day —40,000 to 30,000 bags a day—30,000 to 20,000 bags a day —and any cable that would point to falling off perpendicularly or otherwise of receipts, all has been taken as absolutely correct that the crop was finished.

It was also promptly believed and acted upon that the buying of large quantities of Coffee by heavy capitalists not only meant an immediate advance, but that prices would be held up. But in the face of all this, we think that the erratic advance of last year, as well as the heavy speculation in favor of higher prices, will not only prove fatal for the immediate future to consuming countries, but ultimately to producing countries, and all the more because the latter have been imbued with the idea that no matter how large their crops were, it was all wanted.

It cannot be ignored that Europe has large interests in Coffee plantations, Coffee people in Germany, in Holland and also in London being large owners of Coffee plantations and shares in plantation companies, and it must be admitted that this feature has biassed merchants in regard to values of Coffee, these interests in the raising of Coffee being entirely in sympathy with values in producing markets being as high as as possible, and, while it should be that consumers would wish to buy as low as possible time for time, yet we see that consuming markets aim to buy as high as possible in producing markets. The interests of consuming markets in plantations offer the solution.

It has been claimed that Brazil cannot raise Coffee to satisfy options sold in New York at 6 cents. But herein lies an error. The lowest grade of Coffee on the New York Coffee Exchange, *viz.*, No. 9 Type, has not been sold in Brazil during the current crop as low as 6 cents. The fact is, Brazil has not only been favored with large crops, but the quality of same has been exceedingly high, and therefore those who look upon New York options as being low at 6 cents are much misled, as the Coffee which has to be taken up on New York Exchange option contracts necessitates the payment of one and a half to two cents more than the option basis.

The lowest grade of Coffee known on the New York Coffee Exchange, *viz.*, No. 9, has not sold as low as 6 cents during this crop, while the contract grade No. 7, since the 1st of July last, has shown an average considerably above 7 cents. It naturally makes a great deal of difference if producing countries are selling at 6 cents as an average price for the crop or 7½ cents, and every Coffee-man knows that during the present crop Brazil has averaged fully 7½ cents for the average grade.

Whether during the past twenty years Brazil has sold her Coffee at 20 Milreis per bag—or 100 Milreis per bag—or whether Exchange in Brazil has been at 27 or 6 pence, it must be acknowledged that the price of the product has not been dependent upon either the Milreis value or currency price or the rate of exchange. The value of Coffee has been governed exclusively by the size of the crops in Brazil.

In the month of December, 1900, with exchange at 9¾ pence, we bought Coffee in Rio and Santos at identically the same price, cost and freight, as we are now paying, with exchange at 12 pence, and naturally the decline in price has been in the currency adjusting itself to the exchange rate.

Brazil for the present Coffee crop is receiving equal to some £6,000,000 to £7,000,000 Sterling more money than she received for the previous crop, and with a retrenchment at the same time in importations there, an enhancement of the value of the Milreis was a natural consequence.

Referring now to the coming crop season, we are of the opinion that Brazil will not receive as much Sterling for the 1901-1902 crop as she receives for the current crop; the difference may be quite large, so whether there will be a further rise in Exchange when the amount of Gold received for the crop is less instead of more is a problem that we, at this distance, do not attempt to solve.

As we are merchants doing a large export and import business with Brazil, we naturally hope that Brazilian currency will steadily enhance in value, as the higher ratio obtained for Brazilian money denotes confidence in the existing administration and the stability of affairs generally in the country; but the future value of Coffee will not be dependent upon the rate of exchange in Brazil nor upon speculation, no matter how large a scale it is indulged in, but entirely upon the natural influences of production and consumption.

There is no prime staple which should follow or does follow this law more closely than Coffee, as we have often demonstrated. During panicky times in the United States we have seen very high values for Coffee, but we have also seen rapidly declining markets for Coffee when times have been prosperous here, and this ought to carry its own lesson; for while nearly all other staple articles can be diverted into other channels or purposes to help out, such is not the case with Coffee. The consumption of Coffee is confined to one object only, and being the strongest of all natural beverages as a stimulant in its own form, increase of consumption of Coffee must be gradual, proportionate to the increase of population in civilized countries. If Brazil desires a higher price for Coffee it can be obtained only through decreased production, as it is a demonstrated fact, shown by the increase of supplies, that consumption is absolutely unable to keep pace with the rapid increase of production, and all artificial means to increase the value of the article will only bring about great disaster later on when working against natural influences.

W. H. Crossman & Bro.

GENERAL ARTICLES.

THE PHILIPPINE HEMP INDUSTRY.

Among the chief industries in the Philippine Islands is the gathering and export of hemp, *Musa textilis*. Manila hemp is known all the world over for its fine quality and its value for making all kinds of rope, from the biggest hawser down to the finest piece of twine, and it would be very much in order to devote a little of our space to this important feature of Manila's commerce.

"Manila hemp" is the name invariably used by the merchants of England and America to distinguish it from the Russian and Indian hemp, which is much inferior. In the Philippines, however, it is not regarded as a product of Manila and districts, but chiefly of the Southern islands, and it is called "abaca," with the accent on the last syllable.

The hemp trees of the Philippines have been tried to be introduced in Borneo and India, but without much success. The trees grow best on the Pacific slopes of the Southern islands. South Luzon furnishes the best quality and greatest quantity. The roots of the plants cannot exist in damp soil; volcanic soil, where the ground is dry, and plenty of moisture overhead, is essential to getting the best results. Here large plantations are found among the hills with the hemp trees in different stages of growth. They require little cultivation; once a week the native cleaner or gatherer

goes through the plantation and does the little weeding that is necessary while in performance of his duty of cutting and stripping the trees.

The trees are planted from suckers and grow to a height of ten feet, and from five to seven inches in diameter. In appearance they appear to an unpractised eye like the banana tree, and if these trees were allowed to grow five or six years they would develop a fruit something like a plantain; it is said by some that this fruit is poisonous.

When the tree is three years old, then it is the proper time to cut it down and strip it of its fibre. This stripping is a most difficult and important point in the production of hemp and requires great experience. The native cleaner, as he is called, goes up into the hill armed with his bolo and a bag of rice. He enters the plantation and glances to right and left as he walks along. Experience has taught him to tell at a glauce if a tree has reached the age for cutting. One slash with the bolo and the tree is cut down close to the roots. The first thing he does is to plant a cutting or shoot in close proximity to where the tree grew. This is invariably the rule, that when a tree is cut down another is immediately planted in its place, so there are at all times trees in different stages of development. As soon as this is done he strips the plant of its leaves and commences on the long stalk eight or ten feet in length. He strips off the outer skin and then commences the real work. In the centre of the stalk is a stout pith, and around this grow alternate layers of fibre and sappy vegetable matter. These layers of fibre must be carefully stripped off the stock at once for fear of them rotting the fibre. The cleaner in a couple of minutes has cut a small bamboo tree and made a rough bench. With a bamboo strip fastened to his knife and that in turn fastened to his foot, he stoops over to the ground in front and then makes a full backward sweep as far as his arms can reach, stripping a layer of fibre which he throws off to one side. This is repeated until the fibre is all taken off, and after spreading the stripplings on the ground to dry in the sun, he continues to repeat the work in another spot wherever he may find a tree in the proper state of maturity. The work of stripping is heart-breaking and causes many a lame back; even the native who is accustomed to the work finds it no sinecure. A full tree will yield about one pound of fibre and a native can clean fifty pounds in a week. The length of the fibre is from six to eight feet.

The natives are exceedingly independent and work as long as it suits their convenience. When a cleaner has got what he considers enough fibre cut, cleaned and dried, he ties it up and takes it down to market, where he sells it to the middleman and receives in return the market value of the fibre. The plantation owner receives one-half this remuneration and the native keeps the other, and this is the only time the plantation owner figures in the whole transaction, *i.e.*, when he gets his half. He simply watches to see that he gets his share.

In the hemp ports, representatives from the business houses in Manila buy from those middlemen. They are either Spanish, Chinese, or native dealers, who collect the hemp and barter with the native cleaners, using rice as the standard of exchange.

Grades.—Ordinarily, the hemp arrives here classified according to grades by a middleman, but sometimes it is sent here to be classified and the experienced eye of the merchant spots at once all defective or injured fibre. The quality depends a great deal upon the original cleaner and the state of the weather at the time the tree was cut.

To turn out the best grade the cleaner requires to be very careful in his stripping and have the fibre dried at once, whereas, if allowed to stand awhile, the fibre loses its fine colour and some of its strength. Hemp is graded according to fineness or coarseness, colour, length of fibre, and its tensile strength. The latter depends greatly upon the age of the tree. The colour and coarseness show the quality of the hemp and this depends, as mentioned above, wholly upon the cleaner.

Value.—The value of hemp varies. It has been known to be as high as £60 per ton and then again as low as £14 sterling. The price fluctuates continually, owing to the war and the political situation in the Philippines. The average rate per long ton, however, is about £25 or £30 sterling.

There are between 800,000 and 1,000,000 bales of hemp produced and shipped from this island annually. The United States, acting as a centre for South America, Cuba, and Canada, and England as a centre for Europe and Western Asia, take the bulk of the trade in about even quantities.

The bales are packed by both hand and steam pressess, and weigh about 28 pounds each. They are thus conveniently handled. About half-a-dozen of the shipping houses here do the bulk of the export trade and, perhaps, forty steamers are utilized in the carrying of rice to the ports and a return cargo of hemp to Manila. The handling of the business requires years of experience and a long residence in the country, to be successful in coping with the business methods of the wily Asiatics, both Chinese and Filipino.

We all remember how in visiting the owner of an orchard he takes us through his fruit preserves and can tell every grade and variety of apple tree. They appear to the unpractised eye to be all alike. It is the same with the hemp plantation. There are many varieties and the natives showing a visitor through the groves point out the different grades of trees, giving its native name and whether the quality is better or inferior to the ordinary. There are residents here in Manila, foreign as well as native, who, from long experience in handling hemp, can at a glance judge which ports certain bales of hemp have come from. It is indeed a great business and cannot be learned in a day.

From the outer layer of a properly matured tree comes the finest of fibre, and if this is carefully cleaned and dried, it is sometimes used by the natives to weave into cloth. They mix it with silk and make a sort of Indian muslin, in fact it makes the finest of hemp cloth. Some of the natives in the hemp-growing districts make coarse cloth to wear, while others make fishing nets, the fibre being exceptionally good for this purpose, as it is so strong. —*Manila Times.*

FIBRES IN GERMAN EAST AFRICA.

It is expected, says the British Vice-Consul at Dar-es-Salaam, that the cultivation of fibre will be very profitable. There are at present over 800,000 Fourcroya gigantea plants and 750,000 Agave Sisalana. Compared to other products the cultivation of fibre is very simple and inexpensive. The only fear is that owing to over-production the price will fall considerably, and the article will become a drug in the market. Within the last few months Fourcroya hemp has fallen from 33s. to 25s. per cwt. The first Sisal Agave bulbs were introduced by the German East Africa Company in 1891, 46 being brought from Yucatan and planted in the Kikogwe estate. From the original 46 plants over 700,000 have been obtained in nine years. At Kikogwe alone there are 640,000, covering an area of 1,000 acres, whilst 65,000 have been distributed amongst the German East Africa Company's other estates. The Sisal Agave at Kikogwe only lives for five or six years when allowed to go to seed. When the leaves are regularly cut, the life of the plants will probably be considerably longer. The annual produce of each plant is about 40 leaves, or 2 2/3 lbs. of dry fibre. During the year under review a sample of 100 cwts. of fibre was sent out and sold for 50s per cwt.

Ramie.—So far the only experiments carried out with this product are those of Herr Hoffmann on the Makinyumbe estate. A Rhea fibre extractor is shortly to be imported. Ramie (otherwise called nettle fibre or China grass) is largely used in the manufacture of fine yarns, and there are factories in Germany in which large quantities are used Up to the present the raw material has been imported almost exclusively from China.

THE FIRST USE OF COFFEE IN EUROPE.

The first authentic mention made of coffee or its use by a European, is probably that of Rauwolf, a German physician and traveller, upon his return from an extended tour through Syria, in 1573. The first scientific account of the plant being that given by Alpinus; an Italian naturalist, in his "Medicina Egyptorium," published in Venice, in 1591. Its use as a beverage is first referred to by two English Travellers—Biddulph and Finch—the former, in writing of it in 1603, stating "that the Turks have for their most common drink coffee,—a blackish drink made from a kind of pulse-like a pease, and called by them "Coava." In 1607, Finch relates that "the people of the island Socotra have for their best entertainment a China dish called "Cobo," a black, bitterish drink, made of a berry very like a bayberry, brought from Moka, and sipped off hot." Pietro Valla, a Venetian, in a letter written from Constan-

tinople, in 1605, states that upon his return to Venice "he would bring back with him some coffee, which he believed was a thing heretofore unknown in his country," and which he subsequently did. It is also referred to, in 1621, by Burton, in his "Anatomy of Melancholy" as follows: "The Turks have a drink called coffee, so named from a berry, black as soot and as bitter, which they sip up hot, because they find by experience that kind of drink, so used, helpeth digestion and promoteth alacrity." Coffee in a liquid state is said to have been sold in Rome as early as 1625. Some of the prepared beans of coffee were first carried from Turkey to France by De la Haye, as early as 1644: "Not only coffee, but also the proper apparatus for preparing it." In 1657, a small quantity was brought to Paris by Thevenot, its use, however, being confined solely to his own immediate family and a few friends. Up to this period, and for many years after, it had never been seen and scarcely ever heard of by the public at large in that country. In 1650 "several bales of coffee" were shipped from Alexandria to Marseilles, and in 1671 the first coffee house was opened in the latter city near the Exchange, "where the merchants met to smoke, take business and divert themselves with play." It was not until the year 1668 that coffee-drinking became popular in France, though infrequent travellers had brought with them from the East a few pounds of the then curious berry. In that year Solieman Aga was sent as Ambassador from Mahomet IV. to the Court of Louis XIV.; where he soon became a "lion," through the splendid and unique entertainments at which he figured as host. On bended knees the black slaves of the ambassador, arrayed in the most gorgeous oriental customs, presented the choicest Moka, in tiny cups of egg-shell porcelain, hot, strong, and fragrant poured out on saucers of gold and silver, placed on embroidered silk napkins fringed with gold ballion, to the grand dames who fluttered their fans with many grimaces, and bent their piquant faces—berouged, bepowdered and bepatched—over the new and streaming beverage. Such was the half-barbaric occasion by which coffee first became generally known to that nation, which is now so largely dependent upon the "brown berry of Arabia." The Parisians immediately became quite enthusiastic over it, the aristocracy adopting it as the fashionable beverage, it being recorded that the daughters of Louis XIV., had coffee imported expressly for the use of the royal household, at a cost of £5,000 yearly.

THE SALE OF NOXIOUS TEAS.

Mr. Geo. Brownen, F.C.S., writes to the London *Times*:—

Permit me to refer to and protest against the recent refusal of the Government to use the powers they possess to protect the British tea drinkers from the injurious use of spoilt and damaged teas. For some time past most unpleasant rumours from some of our tea-producing countries have warned us that damaged, and, therefore, injurious, teas were being craftily blended and manipulated and sold as genuine or sound commercial articles. For such purposes "the fine art of blending" was being unworthily used, and should be promptly stopped by the Governmental authorities. In the Ceylon newspapers, for instance, quite recently, there is a report of a meeting of planters called to consider a resolution requesting the Government to supervise or impose checks upon the exportation of unwholesome tea. The mover of this resolution stated, and (what is most significant) he was not contradicted, "that it was well known" that "teas known to be unfit for human consumption" had been exported as tea for sale and consumption. In the examination of a number of recent samples of tea obtained in this country I have been struck by the discovery of dried but perfectly rotten leaf tissues, upon which colonies of microbial forms, both adult and in ova, were found, indicative of damaged and objectionable materials for dietetic use.

I will admit that the adult microbial forms may be destroyed in the process of tea infusion, but the ingestion of ova and the products of rotten vegetable matter are neither useful nor invigorating to healthy or invalid. If tea was a production of the British Isles no doubt the Sale of Food and Drugs Act would meet the want and stop the mischie; but, unfortunately, tea is an imported article, and in its dry rolled condition the consumer sees no suspicious signs, and the chances of detection and conviction are in consequence rendered doubtful and remote, and, again, should detection result, the guilt might rest upon the ignorant middleman and the real culprit escape.

Instead of throwing the responsibility upon the British local authorities, as the Government seem disposed to do, it would be perfectly easy and simple for the Government to supervise the imported teas at the London, etc., bonded warehouses. These officials would be in touch with the Governmental experts of the chemical and biological laboratories of Somerset House and South Kensington. In point of fact, such stoppage of "rubbish tea" would be advantageous to the trade and prove beneficial to the consumer. In this case the truth of the old saw may be again seen—prevention is better than cure.

The Adulteration of Food and Drugs Act is a useful instrument for local authorities in local matters, but as regards teas and other imports we possess the immense advantage of port supervision. Let damaged tea, like diseased matter, be stopped there and the mischief is stopped from circulating, for it is probably the cause of the modern dyspeptic or "I can't drink tea" condition to a far greate extent than many are aware or have any idea of.

A CHINESE OFFICIAL PROTECTOR OF THE RUSSIAN TEA ROUTE.

INTERESTING WORK OF SHEN TUN-HO AND HIS POLICE AT KALGAN.

In our issue of the 18th of December last we mentioned that we had seen a letter from Shên Tun-ho, the well-known and much respected victim of the infamous Kang Yi, in which Mr. Shên mentioned that he had done the State some service at Kalgan and had been put in a position of command and trust there. We have now seen another letter, dated Kalgan, the 10th ultimo, in which Mr. Shên mentions that the had been recommended to the Throne for appointment as Chief Director of the Foreign Office at Kalgan and Exterminator of Boxers As soon as Count York's expedition left Kalgan, Mr. Shên enrolled a company of police, armed and drilled like the German drilled troops formerely at Woo-sung, with a small number of cavalry, to protect the trade route which passes through Kalgan, and the Russian tea traffic. With this force Mr. Shên drove away over 2,000 disbanded soldiers. captured three most notorious Boxer leaders, one of whom was a Mongolian official under sentence of decapitation. and recovered 14,000 stolen packages of tea belonging to Russian firms at Kalgan. This newly-drilled police force is turning out very well and giving full protection to both missionaries and traders. In recognition of his success, the Throne has returned to Mr. Shên his rank as a Taotai of this province, his red button, and peacock's feather; and we are sure this news will be received with much satisfaction by Mr. Shên's numerous friends in China and the West—*N. C. Herald*, April 10.

COFFEE IN B. C. AFRICA—HIGH ELEVATIONS.

A correspondent, who signs himself—"Virgin Forest," 3,200 ft. elevation, 12 inches of rain,—writes to the *B. C. African Times*:—

During the last few years coffee in B. C. A. at low elevations has been in rather an unsatisfactory condition, and we continually hear of light bean, thrip, the primaries dying back, bug, and other insect pests with the result that a blossom which should pan out to about a 7-8 cwts. crop per acre has turned out almost a complete failure.

It is a known fact that our pioneer planter, Mr. J. Buchanan, obtained from an acre of coffee about 15-16 cwts. of good and sound bean.

It would be well for the present day planter to ascertain what is wrong, and why he does not obtain the magnificent returns of some of the favoured estates of the early planters. Of course most will answer want of labour. But though this is bad enough, I as a planter of many years standing in this country, and some little experience in Brazil will say that labour is not the cause. If an estate is kept perfectly clean of weeds from the start and brought up to date in every way when labour is plentiful, a very few women and children will be able to get round that estate every six weeks. But let the estate get once out of hand, a nice box during the shortness of labour in the rains the unfortunate planter is in. To prove this, women and children are hand-weeding this plantation of about 400 acres, and do each about 500 trees a day. The cost of these

people is less than 1/6 each per month. Seeing then that it is not so much from shortness of labour coffee is not now in many cases the success it should be, why is it that the coffee returns are not increasing?

1. I should say from low elevation, want of rain and proper virgin forest land. Such combined will wipe out any coffee, and what crop there is obtained will be light, unsound, and punctured by bug; therefore getting a very low price on the home market. In my opinion no coffee should be opened under 3,000 ft. at the very lowest elevation and should be virgin forest land, with a rainfall at the least of 100 inches properly distributed.

2. SEED.—We all know quite well that either vegetables or animals if continually inbred will deteriorate. What is it here? Practically all the coffee planted in this country has been originally obtained from one tree introduced by the Mission years ago, and in some cases sellers of seed sell for 1/ per lb. coffee beans that they don't think good enough to put on the home market.

3. Ignorant and careless managemnt not a careful selection of best plants in the nurseries, and want of proper graded drains to stop the wash away of surface soil during the rains.

The above I think are the principal causes of the poor returns from coffee.

At low elevations we want to introduce Liberian coffee or a Hybrid between the Mozambique and B. C. A. coffee. I have seen about Quelimane (where there is little rain and a scorching sun), Mozambique coffee giving a sound and flourishing crop though the bean is too small to put on the home market, such a hybird I believe at our low elevations would give a most excellent return.

But at elevations of 3,000 ft. and over, where there is virgin forest land, and the rainfall exceeds 100 inches, such land planted with imported seed of Coffee Arabica will give truly good returns. I will guarantee that B. C. A. coffee under the above conditions, will obtain the top prices now commanded by Ceylon.

Any gentleman who wishes a proof of what I say I shall be most happy to see, and show over this estate.

Such products as cocoa, tea, tobacco, with suitable soil, and rainfall will pay well, under expert management, and a progressive Administration.

I am glad to hear that a move in the right direction has been made by the head of the Scientific Department, who is now going round the different districts, to report on, and advise the planters on the suitability of their land for different commercial products.

This sort of thing will do no end of good, but I hope the matter will be carried a little further, and that the administration on the report of the head of the Scientific Department will import what products are advised by him and give them to the planters at cost price. If this is done B. C. A. will hold its own with any planting country in the world.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Coffee.—*S. Paulo.* The *Ribeirão Bonito* states that the local coffee crop may be expected to yield about half what it did last year.

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The *Gazeta* of Sta. Rita do Passo Quatro says that, in the opinion of *fazendeiros* in that neighbourhood, the coffee beans (grãos) will be of unequal size and quality this year, owing to the weather—prolonged and heavy rains alternating with days of intense heat.

During the week ended Friday, March 15th, aggregate entries declined slightly compared with the previous week, but were even so more than 135 % of those for the corresponding week last year. Since 1st March joint entries at Rio and Santos amounted to 475,978 bags as against 243,179 for the corresponding period last year.

Declared sales at Rio and Santos amounted to 148,000 bags and were slightly less than for the previous week and as also for the corresponding week last year. Much importance, however, cannot be attached to these figures as out of a total of 9,400,000 entered or in stock since 1st July only 8,000,000 bags have been reported as sold, leaving nearly 1 1/2 millions entirely unaccounted for.

The Santos markets, were weak declining throughout the week in sympathy with bad news from consuming quarters, but in spite of lower exchange and enormous entries making sales easier, transactions were not large owing to the absence of orders from both the States and Europe. Prices ruled 5$000 to 5$400 for *Superior, Goods* 200 to 300 reis better, *Re ulars* 400 to 600 reis better, and *Primes* 200 to 500 reis above basis.

Finer qualities were in better demand principally for the States, but low grades were neglected as also *Peaberries.* Some sales for European account were reported at 32s. to 33s. 6d. for *Superior* and 7 1/8c to 7 3/8c for No. 5 to the States, but not very much was done for either one or the other. Nothing new is reported regarding the coming crop, the weather continues very wet and, should there be no improvement, may possibly damage the prospects of the coming crop.

Prices on 15th instant reached 4$800 per 10 kilos. at Santos and 8$200 at Rio (latter duty paid) per 15 kilos. the lowest currency quotation since September 1899.

* * *

The Depreciation of Coffee. In a lecture . . . Sr. José Carlos de Carvalho maintained that the depreciation of coffee was due, principally, to the manner in which it was prepared and mixed for foreign markets. In order to produce a uniform grade, No. 7, inferior and almost valueless coffees were mixed with superior kinds, work of separation by the planter being thus undone. Certainly there does seem to be a waste of labour somewhere

A lot of 146 bags of No. 7 N. York type received from S. Paulo was classified as follows:—

Type No. 5	bags	109
Do. 6	„	2
Moka	„	12
Do. similar to No. 6	„	2
Type No. 8	„	19
Escolha	„	2
Bags		146

Another lot of 140 bags also classed as No. 7 was made up as follows:

Type No. 5	bags	110
Do. 6	„	2
Moka of arbitrary value	„	5
Do. small	„	1
Type No. 8	„	20
Escolha	„	2
Bags		140

A lot of 59 bags in cherry weighing 1,550 kilos. from Minas, after allowance of 50 kilos. for bags was classed as follows:—

Moka type No. 5	kilos	300
Do. do. 6	„	950
Do. do. 7, small	„	265
Escolha	„	35
Kilos.		1,550

Sr. Carvalho urged the necessity of coffee being sold according to quality and not by types and that shipments of *escolha* and other rubbish that bring Brazilian coffee into disrepute, should be prohibited.

* * *

The crop of the Dumont Estates, which last season reached 70,000 bags is expected to exceed 100,000 bags this season.

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Coffee Shipments from Central American and Mexican ports are now being experimented to New York and Europe *viâ* San Francisco. *The City of Pará* having received over 1,000 tons at Guatemala, S. Salvador, Nicaragua, and Mexico, of which 950 tons are destined for Europe.

The agents of the Pacific mail must be sanguine indeed to think that with prices falling, as they now are, coffee can stand such handling. If Central America has some advantage in price, we have the pull in freights and ought to be able to beat rivals so handicapped at a canter. Year by year the struggle gets more and more acute, and if we only persevere is sure to end in victory for Brazil—the fittest.

* * *

Reduction of Coffee Freights on the Paulista Railway. Sometime back we announced the intention of the Paulista Company to come to the assistance of planters in the present crisis, and have now the satisfaction of announcing the reduction of the rates for coffee in such a manner that from no point on the line shall the cost per arroba exceed 1$500 for transport to Santos. The reduction is equivalent to 25 to 30 % for the more distant points and is intend-

ed to be permanent and extend to new lines as well as those actually under traffic. The maximum rate for food products has been also reduced to 800 reis per 60 kilos., whatever the distance covered, for delivery at São Paulo or Santos.

* * *

The Price of Coffee. In a leading article *A Imprensa* of the 19th March says:—

"At one time the variations in the rate of exchange served as a kind of barometer for coffee. There was regular relation between these two agents of our economy and finance; low exchange signified high coffee prices and *vice-versâ* whilst planters could always count on so many pounds sterling per bag. since then *sic*, such have been the *financial extravagances of economists concocted a la minute*, the fraudulent presentation of our products in consuming markets and difficulties in shipping even here and at Santos, that coffee is no longer regulated by exchange but its price is fixed as its tutors' fatality and carelessness decide to the sacrifice of the planters and their honest and painful labour."

The italics are ours, certainly, but we cant help wondering if amongst the "(extravagances of improvised financiers)" *A Imprensa* includes the worst of all, the issue of paper-money by Dr. Ruy Barbosa in 1890 to 1891. Perhaps, too, over-production has something to do with it, but that's only a detail.

If prices go down it is always Government's fault, and not because there is too much coffee or too few consumers; every one knows that.

* * *

Exchange.—*16th March*, 1901. Ninety days' bank rate on London opened on Monday, 11th instant at 11 13/16d and closed this evening at 11 11/16d.

The reaction that set in on Wednesday seemed at one time likely to develop into panic and a big slump. A great many operators are said to have covered and, going too far, to have overbought, so that when the rumours of revolution turned out to be but inventions of bearish imagination they commenced selling and sent rates booming again.

To-day they touched 11 3/4d, the Rubicon at which lots of money seems to put in an appearance and stop advances.

Last year 12d brought money out of its thousand hiding places in a wonderful and unexpected manner. Special trains were run on the S. Paulo railways to bring down thrifty Italians, who had been hoarding and waiting for years for the magic 12d; so when it came there was no hesitation, but from North, South, East, and West they came with one accord as if by common agreement to break the rate. . . .

At present the immediate course of exchange seems to depend exclusively on the jobbers whose movements it is impossible to foretell. No two persons agree as to the state of the market, which is represented in some quarters as largely oversold, and in others as over-bought. It is possible that both are right, that is that it is over-bought for the current month and, certainly, heavily over-sold for later dates. So long, however, as they can manage to pass their obligations on and they do not try to push things too far as last year, there is always the probability of covering with coffee bills as soon as shippers begin to sell against new crop. If speculators were wise they would lie low for a bit and take their profits when Santos commences selling in earnest, which with the present terribly low prices is not likely to be the case just yet. In so purely speculatory a market it would be rash to venture an opinion, so we will merely mention that a great deal of rubber is said to be waiting at Manaos for shipment which possibly may not be drawn for already, whilst coffee is going forward in an unprecedented manner for the time of the year, and in spite of low prices, the value of shipments from January to 15th March is £3,390,891 as compared with only £2,977,561 for the corresponding period last year. During the past 15 days the value of coffee shipments was £735,568 as against £331,006 for the corresponding period last year.

Saturday, March 23rd, 1901.—Ninety days' bank rate on London opened on Monday 18th at 11 11/16d, fell to 11 3/8d on Thursday, and closed this evening firm at 11 1/2d to 11 17/32d. The sharp reaction of the last few days is generally attributed to causes of a more or less sentimental character. Rumours of wars in China, of troubles in Africa, and of revolutions at home all served their turn to hurry the timid "bulls" into liquidation and help "bears" to smash the rate for the time. In spite of all, however, the fall was not considerable and, though coming at the tail end of the month, did not exercise half the effect that might have been expected. Indeed the rumours of revolution or revolt had been long discounted, so when the mountain was found to have brought forth only another ridiculous mouse, after all, the effect was practically *nil*. There can be no doubt whatever that even if there had been some serious attempt at disturbance it is far better to have it over and done with than to be hanging everlastingly like some shadowy sword of Damocles threatening to fall, but never falling, on a devoted market! Now it is over and the whole ridiculous farce exploded, the market can go on its own merits again, up or down as the case may be. What that course may be would be rash to prophecy; but we see no particular reason why it should fall unless speculators get some new shock and try to realize too quickly. The fact that it has been driven up to over 11 3/4 and in the face of a big liquidation has only reacted to 11 1/2, seems to show that the local "bull" situation is much more solid than it appeared and, as there seems every prospect of a further rise in May or June, may possibly be maintained or even improved. We, therefore, maintain the opinion that there has been a heavy "bull" speculation on foreign account which the article we translate in our coffee section from the *Correspondance du Havre* confirms. So long as the foreign "bull" account is left open we see no reason to look for any very serious reaction, as if liquidation of local over-sales were alone sufficient to provoke it, no doubt it would have come before now. Of course, whatever the origin of the speculation there must be a settlement some day, but when that day will precisely be, whether now, in April, May, June or July who can tell!

At present everything seems to be going on swimmingly; coffee, certainly, is going down nastily abroad, but there is some comfort in the idea that it cannot do so for for ever and must have nearly touched bottom; but on the other hand, the quantity exported is enormous and more than makes up for lower prices. From the 1st to the 22nd March coffee to the value of £917,233 was shipped as compared with only £529,661 last year, whilst rubber is also plentiful. Meanwhile money is scarce and rumours of loans float again in the financial air.

Altogether the rate seems to have kept astonishingly steady under difficult circumstances, so much so that it was thought in some quarters that the Banco da Republica was holding it for Government account.

Sailings of coffee at Rio and Santos during the week ended March 23 were 107,290 bags of the value of £181,665, the total value of shipments since 1st January being £3,572,556 as compared with £3,176,216 last year.

* * *

Market.—During the week ended the 22nd instant (March) coffee continued to arrive in spite of the rain in the same unprecedented scale, entries at Rio being 1,617 more than for the previous week and at Santos 3,055. Together entries show an increase of 4,672 bags compared with the previous week but an increase of 127,749 or 133 % compared with the corresponding week last year. During the current month entries amounted on the 22nd instant to 699,676 as against 339,128 last year and for the crop to 9,224,371 as against 8,160,979 bags for the previous crop. The Rio market has been weakish throughout the week but closed with a slightly stronger feeling, prices ruling steady from 8$000 to 8$000 per arroba (5$333 to 5$530 per 10 kilos.) for No. 7 as basis.

There was little or no demand from Europe of any grades and only for good colouring kinds for New Orleans. Cost and freight ex-commission were quoted from 6 3/4 to 7 cents basis No. 7. Declared sales amounted to 49,000 bags as against 53,000 the previous week and 45,000 for the corresponding week last year.

Clearances at Rio and Santos amounted to 107,290 bags as compared with 335,137 for the previous week and 97,698 for the corresponding week last year.

At Santos the market was dull and depressed throughout the week until Saturday, when a little improvement was noted consequent on better feeling in Europe. Dealers were meeting buyers and a regular business was done at 4$900 to 5$100 for *superior*, differences for other qualities remaining the same. Enquiries were mostly for *superior*, and during the last few days for finer qualities, low grades being sought mostly for the States, but with the exception of Saturday their demand was never eager.

Europe bought superior at 31/. to 32/. and good average 30/. to 31/. but the greater part of the business done during the week was not closed till Saturday. The States kept almost entirely out of the market, Arbuckles only coming in on Saturday and buying better grades.

TEA, COFFEE, ETC., IN THE U. S.

Writing about the Nation's Drink Bill, the *American Grocer* remarks that it amounts to $1,228,674,925, of which $1,059,563,787 is for alcoholic beverages. Our contemporary gives the following information as to the chief non-alcoholic beverages :—

COFFEE.

Measured by the number of gallons of the beverage consumed, coffee ranks ahead of beer as a popular beverage. The net importations for ten years and per capita consumption has been as follows :

	Net imports.	Average Import cost per pound.	Consumption per capita.
	Pounds.	Cents.	Pounds
1891	511,041,459	*19·0	8·00
1892	629,671,748	*20 0	9 67
1893	531,395,250	14 0	8·31
1894	547,068,994	16·4	8·30
1895	643,234,766	14·7	9 33
1896	572,671,840	14·6	8·11
1897	724,559,536	11·0	10 12
1898	851,691,084	7·4	11·68
1899	801,756,868	6·5	10·79
1900	748,800,771	6·5	9·81

All coffee is imported in the raw bean, and on the average loses 16 per cent. in roasting, allowing for which leaves a net consumption in 1900 of 628,992,648 pounds. The import cost was $48,777,126, or 6·5 cents per pound. Coffee retailed in 1900 from 10 to 35 cents per pound, and averaged not over 20 cents. Assuming that one pound of coffee makes two gallons of infusion, we have a year's consumption of 1,257,985,296 gallons at a cost of $125,798,530.

In 1885 and 1896 coffee cost double per pound on the average what it did in 1899-1900. If the decline in cost at retail had been as marked as at wholesale, a greater gain would appear in consumption.

TEA.

During the past year there was a 11 per cent. gain in the per capita use of tea, but it is still far below what it was from 1869 to and including 1897. The lowest during that period was 1·08 pounds in 1869; the highest 1·54 pounds in 1881. In 1898 it was ·93 pounds, against ·98 pounds in 1899. This irregularity is in part due to the assumption that net imports represent consumption. In 1896 and 1897 there were heavy stocks carried by importers, so that 1·58 pounds in 1897 probably overestimated consumption, as the total included such holdings.

The net imports, assumed to represent consumption, have for ten years past been as follows :—

	Net imports.	Average import cost per pound.	Consumption per capita.
	Pounds.	Cents.	Pounds.
1891	82,395,924	17.0	1·29
1892	89,610,741	16.0	1·38
1893	88,131,088	16.0	1·33
1894	91,801,565	15.1	1·36
1895	96,437,042	13.5	1·40
1896	93,340,248	13.5	1·33
1897	112,907,548	13.1	1·58
1898	67,697,295	14.2	·93
1899	72,834,816	13.1	·98
1900	83,303,177	12.4	1·09

The import cost of the tea consumed in 1900 was, with duty added, $18,656,304. The retail cost was at least double this, or $37,312,608. Charles Ranhofer, late *chef* of Delmonico's, used four gallons of water to one pound of black, and three gallons of water to one pound of green tea. Others estimate 200 cups to the pound, and some only 100. India and Ceylon tea will make fully 50 per cent. more of infusion than can be made from the best China and Japan sorts—in fact, sixteen gallons of proper strength are made from one pound of leaf. It is safe to say that one pound of tea as ordinarily brewed will make five gallons of beverage.

Taking the average annual imports of the past four years as better representing consumption than the unusually light imports of 1898 or 1899, or the exceptionally heavy imports of 1897, we have on the above basis of infusion a total consumption of 420,928,545 gallons, costing the consumer about 10 cents per gallon. If machine-made (India or Ceylon) tea is used, a gallon of good tea will cost nearer 6 cents than 10 cents per gallon.

* Overvalued by reason of depreciation of Brazil's currency.

COCOA, CHOCOLATE, ETC.

The net imports of cocoa (crude and prepared), in 1900, were 39,630,044 pounds, valued at $5,580,385. A large part of the imports is used for confectionery and other purposes than a beverage. It is safe to estimate that the retail cost of the chocolate and cocoa used as a beverage does not exceed $6,000,000.

Next come the following remarks on

THE TOTAL DRINK BILL.

Bringing together into one group the cost at retail of all beverages, we find that the United States consumed in 1900 alcoholic and non-alcoholic stimulants to the value of $1,228,674,925, as follows :—

	Dollars.
Alcoholic drinks	1,059,563,787
Non-alcoholic stimulants—	
Coffee	125,798,530
Tea	37,312,608
Cocoa	6,000,000
Total, 1900	1,228,674,925
Total, 1899...	1,146,897,822
Total, 1898...	1,177,661,366

The above represents a yearly per capita expenditure for beverages of $16·17 for the 76,304,799 inhabitants of the United States, or little less than 4½ cents per day.

The qualities of the four leading beverages consumed for the year ending June 30, 1900, were as follows :—

	Gallons.
Coffee	1,257,985,296
Beer	1,221,500,160
Tea	416,515,885
Spirits and wines	112,675,873

The above proves that coffee and beer are the favorite National beverages, and that coffee holds its supremacy over fermented liquors; that the consumption of alcoholic liquor increases in prosperous times, and that it was larger in 1900 than for any year since 1893. It is less per capita now than ten years ago, in spite of last year's gain.

CEYLON GREEN TEAS IN AMERICA.

Mr. Wm. Mackenzie wrote to Mr. Rosling from London on 12th April, 1901:—

Before leaving New York, I wired to Mr Philip that there was a better demand for our Greens. In fact the supply had run out in America and nearly all known to be afloat were sold. I am more convinced than ever that we have a splendid field in America for our Greens and that we can make them to equal, even to surpass, Japans in liquor. It depends on Ceylon itself, when it can capture the trade. *Business methods.*—A combination of Colombo merchants, to make to standards and regulate prices, would secure much of the business at once. The difficulties now lie with the supply, and the method of supply. Publish again the letter headed "Good Advice" which appeared in the *Observer* last August. It foretells the probable pitfalls and difficulties. Abusing me, because I do not and cannot find purchasers for shipments dumped into Toronto market, will do no good. I can only advertise, which is of little use without other means Many Firms have been buying the Greens and shipping them. I found only one besides Salada, amongst the importers, making any special efforts to sell them. *That one* may get disgusted; cease to blend to standards in large quantities, and intending purchasers in the States especially may turn again to Japans. Any Firm undertaking to do the business properly should have support. The American Firms dealing very largely in Japans said to me the day before I left New York "We are tired of Japans—never want to handle them again. Your Greens are splendid at 15 to 18 cents. But can we get them regularly and to standard in large quantities." I replied, "I cannot say. One Firm has been working on those lines, but I cannot vouch for their continuing to do so. You should try to arrange a contract with them."

"If the planter rushes in, manufactures, consigns, and jams the market with green teas, the jobbers will at once do as they have done this year with blacks. They can get along without our teas, and can therefore wait. We will all begin underselling, and thus playing into their hands. As there is no other market for our greens we must keep them here, and Japan will share our loss, to the profit of the wily American jobber. Unsuitable teas do us more harm than good. They are usually consigned, and those familiar with the trade here would not ship them; as a consequence they are sooner or later sold for what they will fetch, and as they are Ceylon greens in name, the price they fetch is taken as the market quotation for all Ceylon green tea. The consignment and 'sacrificing' business is the accepted feature of the black tea trade from Ceylon and India. But that branch of the business is sufficiently robust to continue in existence on the prospect of the gradual extinction of the possible sources of consignment as firm after firm buys its experience and retires *beaten*. But in the case of green tea it is different, and it would not take very much to break the market while in its infancy. At present the principal buyers of green tea use them for packets, and of course have to advertise and push them. Moreover such firms have special outlets for their goods. As these packets become better known and people are educated up to the appearance of the unadulterated and undyed tea, the demand will extend, and when once the grocer can sell it in bulk, the natural merit of the tea and its similarity to that which consumers are accustomed to will give a great outlet. In the meantime if such green tea is rushed into this market, the price will be run down to below cost; there will be no money in it for planters or for importers, and the trade will get a serious set-back from being rushed too soon. You will observe that I try to make two points. One is, send only suitable tea, and put a limit on its price. The second is, feed and do not choke the market. While pointing out the difficulties, I entirely agree with you that there is a great future for our greens. In due time rubbish and anything will be taken: but wait till the channel is open before turning on a flood. Rely upon merit at first; remember that Japan has only this one outlet, and in the future the competition for it will be exceedingly fierce, and that they can beat us at making cheap trash. Maintain prices, otherwise it will not pay the planters to persevere. I do not think there is any short cut to a great market."

CEYLON TEA IN FRANCE.

Mr. Renton has addressed the following letter to Mr. Rosling, on the subject of Ceylon Tea in France together with the figures *re* importation of Tea into France:

Before returning to Germany I can now give you my impressions of the work in France. I visited the Riviera, the South and thy West, and have now been nearly a month in Paris. I find everer where that owing to the exhibition, even in some of the smallm provincial towns, Ceylon tea has got to be known, alas, I aesorry to say I fear by name only. In the Vaucluse and in Nimes, Montpellier, Avignon, you get tea at all the Café's; it is very poor stuff indeed and invariably served with orangeade. I am also sorry to say that in Marseilles at the Café de France, where our tea is supposed to be for sale, the tea was so bad that I could hardly drink it, and there it was also served with orangeade.

In the Riviera there is a large quantity of tea taken, most of the hotels seem to draw their supplies from London, but good tea is sold in cup at nearly all the afternoon Tea Rooms and Confectioner's shops, in Mentone, Cannes, Nice, Beaulieu, Pau and Biarritz. I was disappointed to find that our Paris friends were not doing as much with pure Ceylon tea as they led me to expect, there is only one small agency at Mentone and Canues and two at Monaco, still I find that they send a lot of tea from Paris direct to private customers in the south. In Marseilles, we seen to have made more progress. I saw Ceylon tea in packets for sale in two grocers' shops, in the principal one the whole of the window was given up to Quaker brand teas in packets, and the tea pots similar to those we had at the exhibition. Ceylon tea is also for sale in one Café and one Restaurant, only they don't make it properly. There is a very nice Tea Room which has been established in Marseilles, in the Rue de Noailles, where coffee and cocoa are served as well, but tea seems as much drunk as anything. I asked the proprietor what tea it was and where it came from? He replied "Ceylon," and that he got it direct as the steamers from Ceylon called there!! I fee inclined, however, to believe that it was not Ceylon but Darjeeling however, it was well made and good tea which is the main thing In addition to these retailers there are two wholesale firms who ar giving Ceylon tea a good deal of attention, the 1st, * * wil not sell more than they can help, but the other * * ar inclined to push it; altogether I am very pleased with the resul in Marseilles.

I found an English firm at Biarritz who have already been im porting tea and who will now give it more attention, they will work all the Basque country and the north of Spain as far as San Sebastian.

In Bordeaux I called on the four principal wholesale houses; the largest, who I thought from their correspondence at the Exhibition seemed inclined to take the matter up in earnest, have now grown very lukewarm, and did not give me much encouragement, but I find since my arrival in Paris they have written to a Broker for samples so that they may prepare an order for the autumn delivery. Two of the other three firms keep it but only for sale when asked for. An enterprising lady who runs a millinery and dress-making shop seems to do the biggest tea business in Bordeaux, she has one room full of chests of tea, but only gets through about 200 lbs. of Ceylon in a year. The grocers in Bordeaux and in the small provincial towns in France do not seem to keep tea, but it is the confectioners and pastry-cooks who have it for sale done up in packets. Everywhere in France I found the so-called Russian tea for sale in packets with the Russian Government bandrole on them this is looked upon by the public as a sure sign that it is genuine Russian tea, hence my reason for thinking that we should do well to have a Customs stamp on all Ceylon tea packeted in Ceylon. An English grocer in Bordeaux keeps the tea for sale and so does an English and American Bar which is a funny place to find tea in.

In Paris no doubt most is being done, our friends of the Exhibition * * are keeping up the interest in the article by advertising, by personal canvassers, and by a vigorous campaign among shops, hotels and restaurants, * * tells me that his trade since 1st January, in tea generally, is more than double what it was last year. The * * * have, as you are aware, gone to the expense of engaging Sinhalese boys and have opened a swell tea room in the Rue Caumartin, they have also been asked to run a tea room at the "Infants' Exhibition" which is to be held in the Petit Palais from the 15th of April to the end of July. This Exhibition is for a charitable purpose and the great world of Paris is taking a great interest in it, only the organisers have exacted very heavy terms for the space. They wanted a rent of 8,000 frs., but in lieu of that the * * * have agreed to give them 20 per cent. of their takings, they will make no money out of this show but it is a capital advertisement. From the letter I sent you last week, you will see what * * * are doing, and intend doing. With the exception of two wholesale houses and another which I may call wholesale, the Compagnie Coloniale, all the importers of tea are buying our tea more or less. I am sorry the Compagnie Coloniale have avowed to me their intention to do all they can to oppose Ceylon tea, last year at this time they agreed to try it. This Company sells a very fine quality of tea, they do a big trade and they charge a fine price.

I enclose you the statistics of importation of tea into France for 1899 as compared with 1898, this gives the countries of origin, the returns for 1900 are not yet out, and I hear I will not get them until September. What is most striking is the vast increase in the importation from Annam (Indo-China), this tea being from a French Colony comes in practically duty free and I hear that in 1900 the imports were 180,000 kilos. This I cannot believe for I do not believe that there is sufficient acreage under tea in Annam to produce this quantity; can you find out what the acreage there is? because it may be possible that tea is brought down from Foochow and Hankow to Annam and shipped from there as that country's tea.

I am not making any war against China tea. I do not think it politic to tell a man that the tea he buys is rubbish; all I do is to tell him that Ceylon tea is better and that he can improve his China tea by adding Ceylon tea if he does not care to drink Ceylon tea alone, because I think that where a taste for tea has been established, it will be much easier to get our Ceylon tea taken into consumption; and I know that amongst retailers a good deal of tea is being sold as Annam which is blended with one half Ceylon. My war is against coffee and alcohol.

I enclose copies of the advertisement programme being made this year in France and Paris by two firms, and our friend * * is to do a good deal in the way of advertising as well. I am also giving * * a subsidy for a traveller and demonstrator who is to go round the provinces within a year and give tea away and also when he can get a grocer willing to take the matter up, he will distribute for a fortnight or a month, say, in front of that grocer's shop, or on the pavement in front of his shop, tea in cup gratis for two or three afternoons in the week. The Ceylon tea house at Versailles is doing very well, and one on a small scale is to be opened on the south side of the river close to the Bon Marche.

I am leaving for Germany: I go to Bremen first and then to Berlin, Magdeburg, and Hamburg. As I shall probably have to go to St. Petersburg in the Autumn to see after the start of the tea room there, I leave the East of Prussia and Poland over for the Autumn and will take Stettin, Konigsburg, Breslau, Lemberg, and Cracow then.—

IMPORTATION OF TEA INTO FRANCE.

From	1899. kilos.	1898. kilos.
England	168,146	175,558
Belgium	1,465	1,734
British India	124,698	174,951
China	523,064	448,930
Other Countries	21,422	13,843
Japan	—	7,400
	838,795	822,416
Indo-China	46,015	12,439
Other Colonies	116	300
	884,926	835,155

Paris, *April 10th*, 1901.

HELOPELTIS.

"WHAT WE KNOW AND WHAT WE WANT TO KNOW ABOUT IT."

The following are extracts from Mr. E. E. Green's circular, Kandy, (No. 21) issued from the Royal Botanic Gardens.

Helopeltis Antonii, the so-called "Mosquito Blight," was described by Dr. Signoret (a French Entomologist) from Ceylon more than forty years ago in 1858. The description published in the Annals of the Entomological Society of France makes no mention of the plant upon which the insect subsisted in those days, before the introduction of cinchona or tea. Cacao—according to Trimen—had been established in Ceylon for some time previous to that date, and it is possible that there was a sufficient number of trees to afford food for the *Helopeltis*.

The recorded food plants of the insect in Ceylon are cacao (*Theobroma cacao*), the several species and hybrids of tea, cinchona, and annatto (*Bixa Orellana*). Besides these economic plants, I have observed *Helopeltis* feeding and breeding upon the "wax apple" (*Eugenia aquea*).

Life-History.—Though we have a knowledge of the different stages of the insect, from the egg to the adult, the full life-history is not accurately known. The eggs are laid either singly or in groups of from two to five, in the rind of the pod (in the case of cacao), and in the young stalks (in the case of tea). In the latter they are almost invariably deposited at some point above the "initial" or "fish" leaf. They are embedded in the tissues of the plant, the only external indication being the presence of a pair of silvery hair-like horns projecting from the extremity of each egg. In ten days' time the egg hatches out into a small reddish insect, with longish legs and antennæ, looking not unlike one of the slender ants that frequent the tea blossoms. This insect grows rapidly in size, without greatly altering in form, until it is nearing the final change, when small rudimentary wings may be observed sprouting from the sides of the body. In the course of its growth it changes its skin some three or more times (the exact number has not yet been determined), and, after the last change, appears in the red, black, and white garb of the adult *Helopeltis*. In all its stages the insect may be readily recognized by the so-called "drum-stick," or erect knobbed horn projecting from the middle of the back (technically, from the part called the scutellum). We do not yet know how many moults occur during the growth of the insect, the duration of these immature stages, or the length of life of the adult insect. The young insects do not thrive in captivity, and I have never been able to rear one up from the egg to the adult.

Nothing is known of the natural enemies of the *Helopeltis*, if it has any. Should any insect or other animal be noticed attacking the *Helopeltis*, I should be greatly obliged if the observer would send me particulars of the fact, and, if possible, specimens of the assailant.

Habits.—The *Helopeltis* insect feeds—in all its stages—upon the sap of the young leaves and shoots (or, in the case of cacao, upon the fruit). The symptoms are almost too well known to require description. Each puncture of the insect is followed by a dark brown or black spot, the tissues of the leaf being actually killed at that spot, partly by the exhaustion of the contents of the cells and partly (probably) by the injection of some irritating fluid, though this has not been actually demonstrated. When the punctures are close together the spots coalesce, and the whole leaf shrivels and dries up. When a young bud is punctured, that bud dies back. When the insects are very numerous, every single bud may be killed back in this way, resulting in a complete cessation of flush.

The insects feed at night and during the early hours of the morning. After 9 a.m. it is often difficult to find a specimen at work. It is still somewhat of a mystery where they conceal themselves. It was thought at one time that the adult insects flew away to the jungle during the heat of the day, or retired into neighbouring shade trees. But this has never been proved, and is extremely doubtful. It is certain that the immature insects cannot remove themselves in this manner, and it has been observed that when disturbed these young insects run down the stems into the heart of the bush. It is most remarkable how, even in fields where they must be swarming, the *Helopeltis*, insects secrete themselves during the heat of the day. I have frequently tried to shake or beat them out of the tea bushes, but is quite exceptional to secure a specimen in this way. A minute examination of the centre of the bush produces no better results, though it is almost certain that they are somewhere there. It was thought possible that the insects might go into hiding under stones and loose earth below the bush. To test this theory, a broad band of sticky substance (jak juice was used) was applied to the stems of a certain number of trees at midday. All punctured leaves were plucked from these marked trees, but fresh punctures—evidently made by immature insects—appeared during the following night, proving that they had been resting somewhere above the sticky zone. Bunches of dry grass were placed in the centre of some bushes to see if the insects would hide in them, but on pulling these to pieces later they were found to be untenanted.

The comparative immunity from attack of certain species or varieties of tea is most marked. Pure Assam indigenous is practically untouched. Of the hybrids, the more the plant partakes of the Indian strain, the greater is its immunity; the nearer the China strain, the more is it open to attack. This fact was most conspicuous on an estate visited by me in Kalutara. Two adjoining blocks, without any intervening boundary, were planted, the one with Assam indigenous plants, the other with a low jat hybrid. It was possible to walk up between the two adjoining rows and see the tea on one side quite healthy, while every bush, on the other hand, was badly blighted. In another field of "indigenous" plants supplies could be at once detected from a distance by their unhealthy blighted appearance.

It is difficult to obtain careful records of attack—noted month by month—extending over several years. But I have one such record from an estate in the Kelani Valley, which gives the numbers of *Helopeltis* insects collected month by month during the last seven years, together with the monthly rainfall throughout that period. From these figures it appears that the worst attack takes place in July and August. After September there is a rapid drop, reaching its lowest level in November, followed by a tendency to gradual (fluctuating) increase up till February or March, when there is another rapid fall. In April and May the pest practically disappears. The recrudescence commences towards the end of June and reaches its height in July or August. There thus appear to be two periods of increase and decrease during the year, a major and a minor period. The major period is represented by the zero point in April and May, followed by the maximum in July and August. The minor period consists of the fall in September, October, and November, followed by the increase up to March. The March attack

never approaches the gigantic proportions of the July-August attack, the figures being approximately as 4 to 9.

The results obtainable from a study of the rainfall are rather conflicting. December, January, February, and March, during which time the pest is on the increase, are comparatively dry months and register the lowest rainfall. April, May, and June are very wet, and there is then scarcely any attack. Studying this period alone, one would be led to the supposition that dry weather favoured the pest, while rain deterred it. But if we examine the second period, we find that July, August, and September are distinctly wet months, and it is during these very months that the pest attains its maximum development. We find, therefore, that the two periods of increase, *viz.*, December to March and June to August, are marked by dry weather in the first case and wet weather in the second. Similarly, the first period of inactivity (in April and May) occurs during heavy rains, and the second period (October and November) during comparatively dry weather. It is noticeable that both the maximum and minimum of attack occur during the wettest months.

It should be observed that these deductions are made from records from a single estate in one district. To be of real value they should result from the comparison of a number of records from many estates in different districts. I would appeal to all those interested in the subject for such particulars as will enable me to formulate more accurate deductions. There are doubtless many records of captures now available. I know that it is the custom to count the number of insects brought in each day, and the figures are entered in the estate books. Even a statement of the number of coolies employed in the work, day by day, will be of considerable value in estimating the rise and fall of the attack.

But the chief problem requiring solution is, "What becomes of the insect during the period or periods when it disappears from the tea?" Does it subsist upon some other plant? Does it lie dormant in some hole or crevice? Or does the insect, towards the end of its period of activity, deposit specialized eggs that remain unhatched for a much longer period than is ordinarily the case?

These questions are of the greatest importance, and can only be answered by very careful and long-continued observation on the spot. I hope to undertake this investigation very shortly by repeated visits to an affected estate at the critical periods.

Until these points have been satisfactorily elucidated I can suggest no other remedial measures than those which are now being carried out on most affected estates, *viz.*, (1) the careful collection and destruction of the insects; (2) plucking to the initial leaf, in badly attacked fields, to ensure the destruction of the eggs.

CRISIS IN TEA-GROWING IN INDIA.

The Canadian Grocer of 5th ultimo writes :—

Mr. H. Lambe, representing Bathgate, Pim & Co., one of the largest tea exporting firms of Calcutta, was in Montreal this week looking up Canadian business, and while there appointed S. H. Ewing & Sons the firm's agents for Montreal, Quebec, and the Maritime Provinces.

In a conversation with Mr. Lambe, *The Canadian Grocer* learned that tea-growing in India is at a crisis at the present moment.

"Out of 36 auctions held in Calcutta this year," said Mr. Lambe, "only 7 were paying to the growers. It costs 5d. at least to grow tea in India, and the London market in many cases went as low as 3¾d. for common mediums and sometimes to 3¼d. One can imagine that the growers did not find the business profitable. The losses sustained by some gardens during the last two years have driven them out of the business entirely."

"Are any remedial measures proposed?"

"Yes, the attempt will be made to curtail exportation at least 10 per cent. during the coming season. Some gardens that grow low-grade teas will not be worked this year, while in all there will be finer pickings. The present state of affairs being unprofitable, must find a cure for itself, and I do not doubt but that we will see things in a better condition soon. That country cannot go on over-producing."

"Are there no more markets for Indian and Ceylon teas to conquer?"

"Well, our teas are going into almost every tea consuming country now, including the British Empire, Russia, Germany, and the United States. We are producing more than they can all consume. Of course, we are going into green teas now to try t recuperate."

"What success are the Ceylon greens meeting with?"

"I believe they are being received very cordially indeed. Londo is taking great quantities of them, and New York has bee favourably impressed. I hear the continent, too, is buying freel already. Of course, they come into contact with Japans, whic have the green tea market pretty well in their grasp, but we ar bound to make things go, and in this case we have the price wit us. The quality also compares favourably."

"Will these Ceylon greens keep as long as the Japans?"

"Well that I will not say, for I do not know. Our firm is no handling them yet. But they draw a good liquor, and I think this with the price, ought to enable them to bore a big hole into th green tea market."

Mr. Lambe is a pleasant young man with a decided Englis accent, and he seems to understand the tea business from th ground up. He remained in Montreal for a few days then proceede west. He will cross the continent and travel homeward throug the celestial countries—a trip one might be pardoned for coveting

UNITED PLANTERS' ASSOCIATION OF SOUTHERN INDIA.

From time to time, remarks *Indian Gardening and Planting*, w have been constrained to express admiration of the methods o business pursued by our planting friends of Southern India. Thi has been drawn from us by partial reports which have reached u from time to time. Our approval of our Southern planters' doing is greatly strengthened, now that we are enabled to read of them as a whole in the volume before us, "Proceedings of the United Planters' Association of Southern India," and we do not hesitate to say that they form a desirable model for Planters' Associations in other districts. The greater part of the Southern districts ar new and the community of planters there have only recently be come a body to be reckoned with, but we are convinced from th evidence contained in this report of their willingness to ac together, and even to make a common stock of the knowledg gained on their respective estates, that the title "United" is n empty phrase, and that the community which acts up to th principle involved in it is destined to go far on the road of success

Now that we have an opportunity of surveying the proceeding as a whole, we are particularly struck with the thoroughnes displayed at the U. P. A. S. I. seventh annual general meeting, hel at Bangalore in the latter half of last year. It was what a meet ing of planters should be, and much more in the nature of a con ference on planting affairs than a formal meeting to pass business which such meetings are too apt to degenerate into. The repor of the meeting indeed forms a very valuable dissertation on agri cultural and planting subjects, and the volume which contains i is worthy of a place in any planter's library. It is of more than local interest.

Five days were devoted to the meeting, which fact in itself is indicative of the thoroughness with which affairs were investigated and is, we are sorry to say, in contrast with the lack of zeal displayed in many districts which have been established for a much greater length of time, and in which planters should, therefore, presumably be in a better position to act together. We may quote a few of the subjects which were brought up in the five days the meeting lasted, and were not dismissed until thoroughly discussed by the planters and professional men present. In tea matters, foreign markets and ways and means for reaching same, duties, roads, and communications, Paris Exhibition, bounties, shipments, and other matters covering nearly the whole ground received attention Coffee was treated in a similarly thorough manner, new markets and a proposed cess for exploiting same, adulteration and remedies against it, were discussed; and Dr. Lehmann, the German expert and scientific officer to the Mysore Government, delivered an elaborate address on agricultural affairs, including various branches, and dealing specially with manure and the mulching of coffee. The discussion which followed this address, with the enquiries for information addressed to the speaker, proved the intense interest taken by the planters present in their subjects. A similarly valuable address by Mr. J. Cameron, Superintendent of the Government Gardens, Bangalore, upon "Industrial Exotics," was received with equal interest. In the course of this address Mr. Cameron gave

much valuable information upon Sisal Hemp, Furcrœa, Rhea, Ban Rhea, Manila Hemp, and other fibre-producers, Rubber plants, and shade trees. Upon other days the meeting discussed Cardamom culture, Lady-birds and Scale pests, and very many other subjects, besides despatching their routine official business. The Agenda paper would certainly have startled any of the Planters' Associations which are accustomed to get through their annual general meeting in the short space of a Winter's day.

We have dwelt thus upon the doings of this Association in the hope of attracting the attention of Northern planters to the serious spirit with which *individuals* approach planting affairs down South, not leaving the onus of carrying on a semblance of business to their office-bearers alone, but taking such share in the work as the exigencies of the time suggest to them. Each delegate was on the spot for the purpose of drawing all information that he could, and willing also to impart all in his power. No fewer than nine Associations were represented by delegates at this central meeting, and in describing the "United" meeting, we are only showing on a larger scale the style of business that is transacted at the meetings of every one of the smaller Associations which deputed these delegates. The whole, we would remark, is essentially a planters' organisation, and as such we trust it will go on increasing in power and continue a model of what such an organisation should be.

THE TEA CRISIS IN CEYLON.

The Times of Ceylon gives the following translation from a Moscow paper :—

A correspondent of the "Cable Correspondence" writes from Colombo on New Year's Day as follows :—What those who know the state of affairs on the plantations as well as in the trade have long been dreading has at length happened. Ceylon is now on the verge of a great crisis in tea which will doubtless ruin numerous planters in the immediate future. The causes of the present state of affairs are very numerous and many of them stretch far back as regards time and place, others are to be found in the tea-producing provinces of China, Japan, and Tonking, and further causes are to be found in the offices of the London wholesale merchants. Now for a brief word about this. The raising of tea in Ceylon, *i.e.*, in its present vast state, is not natural, but the outcome of politics and self-interest, and has been artificially supported from the beginning and during the whole of its development. It is true enough that the climatic and agricultural conditions existing in Ceylon have been very well adapted to tea-growing, and our island could have produced very plentiful crops of excellent tea if the culture had not been too hurriedly taken in hand at first, but carried on carefully with due consideration for the future. This was, however, not reconcilable with the origin and purpose of the Ceylon tea industry. England created the industry and furthered it by all available means, not solely to compete with China, but in order to see the Chinese tea trade crippled and laid at her (England's) feet. Hence the very extensive assistance proffered to all those who started tea plantations in Ceylon; hence the extreme reduction in freight on teas from Ceylon to England to the detriment of China teas; hence the high tariff on China teas on the Canadian Pacific Railway and the steamers from China to Vancouver; hence the steadily growing dread of the competition of the Trans-Siberian Railway (because on its completion China teas can be brought much quicker, and, on account of the overland transport, much better to European markets than Ceylon teas ever could). The artificial rearing of the Ceylon tea industry, however, unfortunately very soon brought two new elements into the country which were to be its misfortune, its curse, and which now have brought on the severe crisis, *viz.*, the large planter and the wholesale merchant. The chief aim of the former has been and is more and more to produce, utterly regardless of quality, the greatest possible quantity at a minimum cost; he does not think of the future, nor of improvement of the leaf, he only employs coolies at a very low rate of pay, even if they know nothing about the growing and preparation of tea. The latter's only object is to get as much profit as possible out of the business, if possible in conjunction with the planter, if not, against him. These two factors running parallel in one direction have lowered the price of tea very considerably both in Europe and America, and advertised Ceylon tea to a great extent (think of the international exhibitions during the last 15 years). But they also have—and that is one of the causes of our misfortune, our crisis—through the sale of all sorts of inferior kinds brought Ceylon tea into bad repute, not only with the general public, but especially with connoisseurs, and through their excessive zeal, their greed for profit, they have brought it upon us that we are suffering from an immense over-production. On all sides we now here clamourings for help; the small planters clamour for Government protection, the large ones for extreme measures in all directions, and the wholesale merchants for the abolition of the English duty on Ceylon tea. Voices are even to be heard proposing that all planters should be compelled to cease cultivating a certain portion of their estates—even as much as one-fifth—for several years in order to force the prices up. None of these methods, not even all combined, could effectually dispose of the tea crisis in Ceylon. To accomplish this successfully there is only one remedy, that is careful growing, treatment, and improvement of the bushes and leaves. To do this, however, it is too late. Sooner or later China tea will carry the day.

POOR OLD COFFEE.

COORG—THE STRAITS—QUEENSLAND—JAVA.

Looking over the latest Administration Report for the Province of Coorg, says the *Ceylon Observer*, we are much struck with the evident symptoms of decay in poor old coffee even in this last stronghold of the Arabian plant in India; and the "Coorgites" (to coin a word) or rather the Anglo-Indian administrator has invented a term to indicate a discontinuance of cultivation. Where we in Ceylon speak of an estate being (in plain Saxon) "abandoned," or in the less disturbing term now adopted in the Directory of "uncultivated," in the Coorg Report before us, we are told of "resignations" among old estates! Thus during 1899-1900, we are informed that one of the best-known and longest-established of Coorg coffee plantations—Fischer's, with an area of 490 acres—"was resigned entirely." In the one year, over 2,000 acres were "resigned," leaving in cultivation :—

In the hands of Europeans...	...	... 31,980 acres.
Do. do. Natives ...	...	... 70,234 ,,
		102,214 ,,

But then, this comparatively large area only gave a total crop of 55,200 cwt. or not much more than ½ cwt. on an average. We suspect that most of the native gardens are more than "semi-resigned," perhaps cropping at ¼ cwt. to the acre, leaving the European estates to average about 1¼ cwt—a miserable enough return only compensated for by rather better prices; but Mr. Meiklejohn estimates that the expenditure on coffee cultivation was, at least, three lakhs less than in the previous year owing to the short crop. This, of course, can only result in further "resignations."

Turning next to Selangor, we have a return published by the local Planters' Association for 1900 which indicate a total of 15,064 acres under cultivation and an estimated coffee crop for 1901 of 25,578 piculs—about 30.000 cwt.—or an average of about 2 cwt. an acre, and this, mainly Liberian coffee which at an average of 20 to 21 silver-dollars per picul—say 42s to 50s a cwt. at the highest—cannot possibly leave much profit.

In Queensland, coffee-growers—of whom Mr. Newport reports some 200 altogether, cultivating from 1 to 75 or 80 acres (the biggest estates) or in all 700 acres—are so far more fortunate. They sell all their coffee for local consumption and get 56s per cwt. for it in parchment or 112s per cwt. clean according to sample. With such a difference, it ought to pay to run a pulper and drying-ground in some of the districts. The oldest coffee is not more than six years old, and the Indian planter who is now Coffee Inspector for the Government is sanguine enough to speak of 10 cwt. an acre *without manure* and a total crop worth £20,000 to £30,000. This would mean £30 to £40 gross return per acre—rather a contrast to say £4 in Coorg and £4 to £5 in Selangor! And moreover Mr. Newport tells us that a good deal of the coffee is Liberian, though chiefly *C. Arabica*. However, we must remember that it is principally garden cultivation in Queensland, and the soil and climate must be splendidly adapted to coffee when we are told :—

On the whole, the condition of the estates as I found them was not encouraging—in some cases the weeds were over the coffee. Where the coffee had been kept clean, the growth and bearing

were remarkable. For amount of crop the Buderim Mountain is noticeable, the quality being also specially good here. On the Daintree River one or two estates that had been kept assiduously free from extraneous growth showed remarkable development, trees of thirteen and fifteen months being topped at 4 feet, having a good spread of secondary growth, and spiking heavily, showing promise of a 5 to 6 cwt. crop that would ripen when the trees were not more than two and a half years old. For all-round good qualities, some of the properties in the vicinity of Cairns, especially on the range about Kuranda, are pre-eminent.

Of course labour is the difficulty: a Ceylon planter with 50, nay 20, good coolies might quickly make his way to fortune; but would he be allowed to import even one cooly to work on the land is a question not likely to be answered in the affirmative from Queensland.

Finally, we are surprised to learn of the great progress made with Liberian coffee—(such a complete failure as it was in Ceylon) —in Java where, for 1901, Liberian is expected to contribute 131,000 piculs against 106,000 in 1900, and this out of a total coffee crop (Government, Private and Liberian) of only 383,000 piculs as against 542,000 piculs in 1900. So that in Java also, coffee is going back as a whole, though the Liberian kind is apparently keeping up. But then all that the Eastern and Austral world can produce of coffee, is but as a very little in comparison with the great and ever-increasing coffee crops of Brazil, Central America, and Mexico.

DISTRICT ASSOCIATIONS.

SOUTH MYSORE.

The Chairman's speech at the Annual General Meeting of the above Association, held in the Munzerabad Club, Saklaspur, on the 29th March, 1901.

Gentlemen,—At a meeting of the European community of the Southern Malnad held at Saklaspur, on the 24th of January, the representatives of this Association joined in giving expression to the universal feeling of profound sorrow which the demise of our beloved Queen had produced.

This is the first opportunity which I have had of addressing you since this great national bereavement occurred. I am absolutely convinced that all here present would desire me to ratify and confirm on behalf of this Association all that was said and done at that meeting and so pay our final tribute of reverence and respect to England's greatest Queen.

I am also perfectly sure that you will join with me in expressing homage, loyalty, and devotion to the throne and persons of their most gracious Majesties the King and Queen-Consort coupled with the earnest prayer that every blessing may rest upon their Majesties through a long and happy reign.

Although during the past season coffee crops have, as a general rule, been extremely good and in many cases bumpers have been picked, the abnormal climatic conditions which have seriously affected the interests of all cultivators in Mysore as well as in other parts of India have not been wanting in their effects on our most sensitive industry.

The long continued drought at the beginning of last year and the sudden transition from extreme dryness to complete saturation of the soil, coupled with the strain of bearing a late and heavy crop with hardly any rain during the N.-E. monsoon, have been anything but favourable for brightening the crop prospects for 1901-2. The general consensus of opinion is that the recent heavy showers have so far as the welfare of the majority of estates is concerned, been beneficial, but coming as they did before bud forming had been properly developed, their effect has injuriously influenced the prospects of the coming crop. In a large district like this the distribution of rainfall varies extremely, but in many localities crop prospects are poor and on some estates the crops promise to be record short ones.

I would venture now to touch on a subject of some importance, I may say of vital importance, to us and which at the last meeting here was I think misunderstood by many, I allude to Mr. J. A. Harris' scheme for pushing the sale of coffee in new markets. When he addressed you I take it that most present were under the impression that he meant to advertise our produce; what he intended to convey was that he wished to encourage the sale of coffee through accredited agents on the Continent, in Australia and elsewhere, and desired to know whether we would submit to a small cess for this purpose. I am entirely with Mr. Harris in this idea and think it should meet with our support and approval. I would direct attention to the prospective increase in the tariff on coffee that may come into force in France in July next and would venture to suggest that the Imperial Government be written to urgently on the subject through the U. P. A. S. I. as if the Act be once put into force it might take years to get it repealed. I need hardly point out that our interests would be seriously affected and also those of the native coffee industry of S. India.

I fully endorse the Honorary Secretary's remarks *re* roads and communications, and beg to call the attention of the Executive Engineer to the state of the Hassan Road from the 136th to the 125th mile-stone and the Barquai Belur Road from the 2nd to the 4th mile.

We are all indebted to Dr. A. Lehmann for his very interesting lecture and for his courtesy and promptness in replying fully to letters on any subject connected with our industry and kindred ones.

We have all noticed with regret that owing to ill-health Sir K. Sheshadri Iyer, our able and popular Dewan, has decided to retire from the post he has filled for nearly the two past decades with such conspicuous ability. In him the Mysore Government will lose a Statesman who has ever had the welfare of the country and people at heart, and who invariably did his utmost to foster and support enterprise of all kinds. The increase of revenue and general prosperity of the Province during his tenure of office in spite of the great difficulties and heavy expenses incidental to combating the plague during the past three or four years, is the best witness to his skill and capability and would point to administrative abilities of the highest order. That Sir K. Sheshadri Iyer will live long and enjoy his well-learned rest is our most sincere wish. His successor, Mr. P. Kristna Murti, C.I.E., is well known and respected throughout the Province as a distinguished officer of the Mysore Government and has our cordial congratulations on the great honour conferred on him by Her Highness the Maharanee Regent, and our confidence that he will do his utmost to maintain the traditions of his ancient house.

I have already written to the Honorary Secretary regarding a petition from the inhabitants of Chickmagalur and Kadur to have the Sessions Court and judge removed to the former place from Hassan. In the interests of the latter town and our District generally the Government of Mysore will, I trust, retain both judge and Court as at present located. While placing my resignation in your hands, I beg to tender my best thanks to the Honorary Secretary for the very capable way he has carried on the business of the Association for the past year, also to the members of the Committee and Mr. Graham Anderson in particular, whose great knowledge, experience, and advice on all matters connected with our welfare have lately on many occasions been asked for and ungrudgingly placed at my disposal.

J. G. H. Crawford.
28*th March*, 1901. *President, S. M. P. A.*

INDIAN TEA ASSOCIATION (LONDON).

The following are extracts from an abstract of the proceedings of two meetings of the Committee held on April 2nd and 16th, 1901, when the following members were present:—Mr. D. Cruickshank (in the chair), and Messrs. A Bryans, J. S. Hulbert, Robert Lyell, C. C. McLeod, F. A. Roberts, J. N. Stuart, and A. G. Stanton.

Sale of Tea in India.—Read telegram, dated March 23rd, asking the Committee to grant Rs.50,000 towards exploiting Indian markets, and resolved to reply by wire that the Commitee agreed to allot the sum of Rs.40,000 towards the above object, provided the Calcutta Committee thoroughly approve of the scheme proposed.

Inferior Tea.—A letter from the Bengal Chamber of Commerce dated March 5th, as to the alleged adulteration of India and Ceylon tea, was laid on the table and also a letter from H. M.'s Customs dated 29th idem.

It was noted that the Secretary subsequently had an interview with the Superintendent of Customs, and the Committee decided that no further action in the matter need be taken.

Samples by Post.—Read letter from the General Post Office, dated March 5th, to which a reply was to be sent that tea samples must be sent home in air-tight tins, and inquiring whether this may be done if transparent cloth is used as suggested by them, and subsequently (on 16th instant) a letter was read from the Postmaster-General (dated April 11th) to which it was resolved to reply asking him to arrange to obtain a revision of the rules in this matter at the earliest possible opportunity, the suggestion made for meeting the difficulty not being considered satisfactory.

Foreign Markets.—Attention was called to the annually increasing quantity of tea purchased in Calcutta for outside markets, and to the complaint that, although Calcutta is the best distributing centre for the countries in question, the market there is insufficiently supplied with teas of the class required. It was suggested that representatives of English Companies, the entire production of whose gardens is now shipped to London, should consider whether some portion of their teas of suitable qualities might not be sold with advantage in Calcutta so as to meet the demand for outside markets which are best served by direct shipments from India. The exports to these markets from Calcutta during last season is reported to have exceeded 25,000,000 lbs. being about double the quantity taken five years ago.

Reduction in Output.—The position was noted and it was decided to reply to Calcutta telegram to the effect that the Indian minimum was complete, the Ceylon results being expected in a few days; also that a circular should be sent to the Home signatories explaining the position.

A letter from Mr. H. Ormerod, Secretary of the United Planters' Association of Southern India, of the 25th ultimo, on this subject was read. It was noted that most estates in Southern India would effect a reduction of output by means of plucking finer and it was believed that by this means, and by placing the lower grades of tea in Indian markets and cultivating a taste for tea among the natives, they would relieve the London market of fully 10 per cent. of their produce.

Tea Cess—It was noted that the United Planters' Association of Southern India was in favour of a compulsory cess to raise funds for exploiting foreign markets. The returns to date were noted, and it was decided that a reminder should be issued on this subject to members, asking for replies to the Association's circular of January 19th.

The Secretary laid upon the table Mr. E. H. Skrine's letter to the *Times*, dated 16th ultimo, and one from Mr. G. Brownen of the 9th instant, to the same paper, and it was decided that no notice be taken of these communications.

THAT "LITTLE DISH."

How we do like a little dish of something nice, served up hot!

Charles Lamb would have sold his shirt for a tender suckling pig done to a turn. Doctor Johnson used to say that a dish of tea was the most fragrant of life's beverages. "Why, what am I a-thinking of, I shall forget my own name next," said Toby Veck, "It's tripe—the best tripe ever stewed." And his daughter Meg smilingly gave him the basket, in which reposed a hot steaming dish of his favourite meat.

"My wife prepared nice, dainty little dishes to tempt my appetite," said Mr. Henry White, of that beautiful Devon town, Torquay, "but somehow I seemed to have lost all inclination for food, and after sitting at the table trying to swallow a little, I used to say to her:—

"It's no use. I can't eat it. You may as well take it away." This sort of thing soon told a tale, for one can't go without food for long without losing strength. Seeing my condition, a friend strongly advised me to try Seigel's Syrup. He said it had cured him, and might do me good.

"My appetite no longer needed coaxing. I could eat well-nigh everything that was put before me. Each dose seemed to give me life and vigour. To-day, no matter what ails me, Seigel's Syrup puts me right."

That "little dish," in fact, is once again the favourite.

"Some three months ago my wife got thoroughly run down. For over a fortnight she could keep nothing on her stomach." Mr. Henry White, when certifying to the truth of this on September 13th, 1900, at his house, 10, Pediford Terrace, Torquay, Devon, does not say what was the matter with his wife.

We know why the "little dish" failed to digest, and we quote the words of the famous physician to prove it: "In the nervous and irritative form of dyspepsia, this is a very prevailing symptom. As is also a sensation of sinking, as if the stomach required food, due to the fact that the food has left the stomach in a half-digested condition."

Who could enjoy a "little dish," when the food could be but half-digested? "She was troubled a good deal with wind, and seemed to be losing her strength. I fetched a bottle of Mother Seigel's Syrup from Holloway's Drug Stores, and she commenced taking it. In a short time she was quite well again." H'm, some men would now sell their shirt for a bottle of this remedy.

This essay, then, upon "little dishes" proves that while man and woman can in no wise *always* relish that favourite dish, yet a cure is ready to hand. One that has served men and women alike for more than the past thirty years.

MARKET REPORT.

[*Per Mail advices of 19th April* 1901.]

COFFEE.

The London Commercial Record says:—The market for East India continues extremely dull; the small proportion of colory quality sold at fairly steady rates, but the bulk of the supplies at auction met little competition and was chiefly withdrawn. Costa Rica and other Central American descriptions were in fair demand at slightly easier prices, but colory Vera Paz sold freely at extreme rates. With continued hesvy receipts in the Brazils and lower advices from foreign ports, the market for "futures" is depressed and closing prices shew an important decline for the week; latest sales of Santos comprise May delivery at 29s 9d to 29s, September at 30s 10½d to 39s, December at 31s 4½d to 30s 7½d, and March at 31s 9d to 31s 1½d per cwt. To-day's auction supplies consisted of 9 casks 1 tierce 4 barrels Ceylon, 1,087 bags 51 cases East India, 1,648 bags Guatemala, 2,074 bags Costa Rica, 377 bags Salvador, Fine E. I. and fine Costa Rica sold well at auction to-day, and full prices were paid, but undesirable qualities again favoured buyers. Good deal brought in.

London ...	... Santos ...	May delivery	... 29s 0d.
New York	... No. 7 Rio...	,,	... 5·10 cents.
Hamburg...	... Santos ...	,,	... 29½ pf.
Havre ...	... Santos ...	,,	... 36¼ francs.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	18,532	16,857	16,955	14,199
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	6,411	5,858	6,995	6,228

The preceding figures exhibit—	Tons.
In the Imports an increase this year of	2,756
Home Consumption an increase of	553
Export an increase of	767
Stock an increase of	1,675

Auctions this week have gone off as follows—

East India.—1,189 bags partly sold as follows: *Coorg* smalls, 44s 6d to 47s 6d, middling 49s 6d, good middling 53s to 55s 6d, bold 72s; *Mysore*, smalls 39s to 47s, middling 53s to 53s 6d bold 60s to to 72s; *Neilgherry*, middling dull colory 44s.

Mocha.—52 half-frazils bought in.

Jamaica.—4 barrels 19 bags withdrawn.

Costa Rica.—Of 7,952 bags catalogued 6,550 bags sold, smalls 31s 6d to 46s 6d, ordinary to fine ordinary 35s 6d to 42s, low middling greenish to colory 43s 6d to 47s, middling 47s 6d to 52s, good middling blue 54s to 59s, fine middling 65s 6d, bold 58s to 65s 6d, good colory to fine blue bold 70s to 81s, very fine 85s 6d, peaberry 45s to 89s 6d.

Guatemala.—2,092 bags catalogued and 1,370 bags sold, pickings 27s 6d, smalls 32s 6d to 38s 6d, low middling 43s 6d to 44s, middling to good middling 46s 6d to 52s 6d, bold 51s 6d to 66s, fine ditto 74s to 76s, pea-berry 46s to 56s.

Coban.—17 bags sold, smalls 36s 6d, fine middling 67s, good bold 71s 6d, pea-berry 57s 6d.

Vera Paz.—184 bags mostly sold, smalls 54s 6d, fine middling 67s to 67s 6d, bold 75s 6d, fine hard blue and mottled gray bold 100s 6d to 101s 6d, pea-berry 63s 6d to 100s.

Salvador.—1,495 bags partly sold, smalls 32s to 39s, fine ordinary 40s, low middling 41s to 47s, bold 50s, pea-berry 47s to 54s 6d.

Nicaragua.—347 bags about half sold, smalls 33s to 35s, fine ordinary to low middling 40s to 47, pea-berry 47s to 57s.

Colombian.—587 bags sold, smalls 30s to 35s 6d, low middling to middling 42s to 46s, bold 52s to 65s, pea-berry 43s 6d to 56s

Mexican.—998 bags catalogued and 785 bags sold, smalls 32s to 34s 6d, fine ordinary 39s, low middling to middling 41s to 45s, bold 53s, peaberry 47s to 58s.

Brazil.—52 bags Santos partly sold, small greenish washed 32s.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	2,420,000	2,996,000	2,737,000	3,804,000
Santos ...	7,239,000	5,370,000	4,008,000	5,680,000
Total...	9,659,000	8,366,000	7,745,000	9,484,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 1s $0\frac{1}{32}$d, previous day 1s $0\frac{3}{8}$d.

Havre, *April* 18.—Good average Santos April opened barely steady at 36½f. and closed quiet at 36½f., May opened at 36½f. and closed at 36¼f., September opened at 37¼f. and closed at 37f., December opened at 37¾f. and closed at 37½f.

Hamburg, *April* 18.—Good average Santos April opened quiet at 29¾pf. and closed quiet at 39¼pf., May opened at 30pf., and closed at 29½pf., September opened at 31pf. and closed at 30¾pf., December opened at 31¾pf. and closed at 31¼pf.

New York, *April* 18.—Closing prices of No. 7 Rio were as follow:—

	April.	May.	June.	July.	Aug.
April 18...	5·05	5·10	5·15	5·25	5·30
April 17...	5·20	5·25	5·50	5·40	5·45

East India offered in Public sale since 12th April, 1901.

April.	Mark.	District.	Size A		Size B		P. B.	
12	Edwin Hunts Karradi Betta.	Mysore ..	72	not sold	10	not sold	21	not sold
	,, ,, Cartaypoor ...	,, ...	73	,,	11	,,	23	,,
	,, ,, Mullapoor ...	,, ...	70	,,	11	,,	16	,,
	Arbuthnots Polli Betta ...	Coorg ...	57	,,	50	,,	17	,,
	Harris's Chick... ...	Mysore ..	31	69/	38	,,	14	67/
	Woger	,, ...	27	72/	14	,,	14	65/
	Yellikodigi	,, ...	26	62/6	17	47/6	9	63/6
	Norvayhegude	,, ...	22	48/	20	43/6	15	56/
	Igglore Mysore ...	,, ...	24	69/	27	49/	14	62/6
	D. B. C.	Coorg ...	14	66/	34	50/6	12	57/6
	I. M. Santi Coopa ...	,, ...	30	not sold	47	46/	13	59/
	I. M. Netley	,, ...	12	,,	23	46/	6	58/6
	Kowri Cadoo	,, ...	17	,,	18	47/	4	55/
	The Engadine	Mysore ..	13	47/	17	47/6	3	52/
	,, ,, ...	,, ...	36	48/	44	47/	8	56/
	Woodlands Shevaroy ...	Shevaray	10	60/	40	44/6	7	52/
	Igglore	Mysore .	24	not sold	27	49/	14	62/6
	D. B. C.	Coorg ...	14	,,	34	50/6	12	57/6
17	Arbuthnots Yemmagoondi ..	,, ...	53	,,	53	not sold	15	not sold
	,, ,, ...	,, ...			69	,,	18	,,
	C. M. N. Korthikad ...	,, ...	16	,,	44	,,	4	,,
	B. D. G. Attikhan ...	Mysore ..	36	,,	16	45/6	6	,,
	M. E. W. Abragay ...	,, ...	14	,,	39	not sold	4	60/6
	,, Kelagoor ...	,, ...	13	,,	22	,,	3	not sold
	Binny's Siddapur ...	Coorg ..	24	49/6	8	43/		
	,, Tooben Kolli ...	,, ...	34	not sold	12	not sold	6	,,
	J, P. W. C., D. ...	Mysore ..	40	53/6	13	52/	20	,,
18	Sulivan's Kibberi Betta ...	Coorg ...	78	72/	155	53/-55/6	39	,,

TEA.

China.—At auction this week the small supply of 1,444 packages sold steadily. Moning 4⅝d, Oolong 3¾d to 11d, siftings 2¾d to 3½d Souchong 3½d to 5⅛d, Ninchow 3¾d to 5d, Saryune 3⅜d, Paklin 5½d Panyong 3⅛d, siftings 2¾d, Pekoe 1s 1½d, Scented Orange Peko 7¾d, Scented Caper 4¼d per lb.

Indian.—The market re-opened after the hoildays on Monday when 32,400 packages were offered, against 35,800 packages on th 1st instant, and 22,000 packages at this time a year ago.

There was rather more enquiry for common to fair kinds with usefu style, both leafy and broken, which were occasionally a little dearer Medium Pekoes were in request for home and export use at firmer rates. Thick liquoring Broken Pekoes were also wanted, but those with unattractive cup were neglected. Quotations for finsst line were fully maintained.

About 1,900 packages from South India were included in the catalogues, and a few of the invoices now coming to hand from Travancore mark some improvement.

For 26,600 packages on estate account 7d per lb. was obtained *versus* 7⅝d per lb. for 22,000 packages and 9¾d per lb. for 18,200 packages in the two preceding seasons.

Exports from here continue shew development, those for the past three months being 3,694,000 lbs. *versus* 2,306,000 lbs. in the corresponding period of 1900.

Ceylon.—Public auctions were resumed on the 16th instant, when 31,900 packages were brought forward compared with 24,600 packages in the week before Easter, and 26,200 packages twelve months since.

Under 8d per lb. there was a brisker demand for all descriptions particularly Pekoes suitable for Continental requirements, which in many instances advanced ½d per lb., partly due to better flavour Broken Pekoes at this range also tended upwards. Fine and finest however were not so much sought after and ruled irregularly in buyers' favour, a considerable quantity being withdrawn owing to low offers.

Shipments from hence to outside quarters during March, as will be seen by the table below, were 650,000 lbs. more than in the same month last year.

The average remains as on the 4th instant, it stood at 7⅜d per lb and 7½d per lb. in 1900.

Java.—No sales have been held, but 3,900 packages are declared for the 22nd instant.

Deliveries.—The clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are *viz.*:—

From 1st to 16th April,	1901	10,308,079 lbs.
Do. do.	1900	4,564,588 ,,

During the fortnight the following have been printed for sale by public auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offered Pkgs.
India	28,229	4,196	32,425
Ceylon	29,240	2,668	31,908
Java	—	—	—
Total ...	57,469	6,864	64,333

Also 325 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated April 19th, 1901, says :—

Quantity brought to Auction in London from 1st June to date.

	Indian. Pkgs.	Ceylon. Pkgs.	Java. Pkgs.
1900-1901	1,571,589	1,148,446	52,038
1899-1900	1,561,107	1,062,402	53,638

32,717 *pkgs.* Indian
31,594 ,, Ceylon
— ,, Java
} Total 64,311 packages were offered in public auction this week.

The Chancellor of the Exchequer made his Financial Statement yesterday, but did not alter the Tea Duty, which therefore remains at sixpence per pound.

Exports of Indian Tea from Calcutta to places outside the United ingdom show progress in many important markets, that of North merica being a notable exception, doubtless caused by the large uantity of China Tea bought some time since; there appear to be ready signs of some revival of purchasing in this market.

Australia continues to increase its use of Indian Tea, while the ersian and Turkish markets have also expanded. Encouraging rogress has also been made in Russia and Germany.

	1900.	1899.	1898.
ustralasia	9,578,626	8,772,050	6,257,281
ndian Ports	3,299,542	2,780,516	3,969,610
. America	4,128,464	6,166,884	3,162,440
urkey	3,474,595	2,865,045	2,618,288
hina	997,315	1,204,945	901,441
ermany	861,780	704,877	507,620
ersia and Arabia... ...	586,565	508,322	593,257
ussia	307,571	44,811	132,154
gypt	99,196	89,660	57,191
traits Settlements ...	48,816	39,448	34,234
frica	83,077	46,449	27,855
rance	23,913	17,759	24,911
orway	Nil.	3,000	5,480
, America	Nil.	300	3,500
ustria	2,905	14,655	4,275
ther places	26,481	7,443	22,491
Total lbs.	23,518,916	23,262,164	18,322,078

INDIAN.—The first sale after Easter was held on Monday, when he market opened with a steady tone, prices continuing without uch change, bidding being good especially for better class Teas. he following averages are worthy of note:—"Runglee Rungliot," /2½; "E M P Sonajulie," 1/1; "Attaree Khat T Co. Paneery" and Beheating," 1/0¼; "Jaipur," 1/-.

Week's average of Tea sold on Garden Account 1901, 26,629 pkgs., v. 7·01d. 1900, —— pkgs., av. —d.

Total Tea sold on Garden Account 1st June, 1900, to date, 1,300,300 kgs., av. 7·29d. 1900, 1,233,708 pkgs., av. 8·28d.

CEYLON.—The first sale after Easter was held on the 16th. No aterial change took place on rates current before the holidays, idding on the whole being steady, although medium Broken ekoes were here and there a trifle easier. 271 packages Green ea were included in the auction. The following averages may be entioned:—"Sutton," 1/0½; "Portmore T Co," 11¾d.; "Holm-ood" & "Kotiyagalla," 11¼d.; "Henfold" & "Talawakelle," 11d.

Private telegraphic advice gives exports to U. K. from 1st to 5th April as 4,000,000 lbs., against 4,500,000 lbs. last year, and stimates the quantity available for the month as 8½ million lbs. verage for week 7·28d.

Ceylon Tea sold on Garden Account 1st Jan. to date, 387,151 kgs., av. 6·57d. 1900, 356,758 pkgs., av. 7·55d.

JAVA.—Javas were not represented, but 4,064 packages are ad-ertised for sale during the next fortnight. 11,431 packages are to e offered in Amsterdam on the 24th instant.

Bank Rate 4 per cent. Exchange on London three months' sight:—alcutta 1/4 5/32. Colombo 1/4 3/16.

COCOA.

Auctions on Tuesday offered 12,040 bags which large quantity net a fair demand, about 4,000 bags selling without any material lteration in value. Of 1,978 bags Trinidad catalogued 1,750 bags old—superior red 71s to 72s 6d, good to fine 68s to 70s, and iddling 66s, being quite previous rates. Of 1,533 bags Grenada 80 bags were placed, the fine grades being a shade dearer, whilst ommon moved in buyers' favour: fine realised 65s to 66s 6d, fair o good 63s to 64s 6d, and common to good common 60s 6d to 62s. 2 bags Jamaica brought 60s to 64s. 276 bags Dominica half sold t steady prices—60s to 64s. 12 bags St. Lucia quitted at 62s to 3s, whilst part of 21 bags St. Vincent brought 60s to 64s 6d. uayaquil slow of sale, and only 420 bags were disposed of out of ,503 bags catalogued; grey to fair Caraquez brought 60s 6d to 4s, and Machala 64s. 421 bags African about half sold at 60s to 2s 6d for fair to fine small red, and 41s to 41s 6d for garblings. Business in Ceylon growth does not develop, holders only being able to sell 440 bags out of the 3,663 bags presented for competition; middling to fair medium and bold realised 70s to 78s, common to good small 53s to 54s, and collected 58s to 59s per cwt. 320 bags Sanchez. 197 bags Samana, 281 bags Venezuelan, 33 bags Colombian, and 770 bags Bahia all passed the hammer unsold. Privately about 700 bags Grenada have been sold at auction rates, 750 bags Guayaquil—Caraquez at 63s to 64s, winter Arriba at 67s and summer at 70s to 80s—and some Ceylon at 70s up to 85s per cwt. for medium to good.

PEPPER.

BLACK.—The market has been firm this week and value is dearer. A considerable business has been done (about 400 tons in all), including fair Singapore on the spot at 5 15/16d up to 6 1/16d. Singapore for arrival has been sold up to 6⅛d for near at hand, at 6 7/32d for March-May, at 6¼d April-June and May-July, 6 9/32d for June-August, and 6⅜d for July-September.

At auction on the 17th instant, of 116 bags Aleppy 20 bags grey sold at 5⅞d. 300 bags Penang bought in at 6d, and 64 bags siftings at 4½d per lb.

The shipments of Black Pepper for the first half of April compare as follows:—

	1901.		1900.	
U. K.—Singapore	80	100	40	140
„ Penang	20		100	
Continent		150		40
U. S.		170		20
Total tons ...		420		200

WHITE.—A large business has been done and market is firm and dearer. About 300 tons are reported sold, *viz.*, fair Singapore on the spot at 9 3/16d to 9¼d, and fair Penang at 8½d to 8 7/16d. Singapore for arrival has been sold up to 9¼d for April-June, 9 7/16d June-August, and 9⅜d July-September. Penang near at hand sold at 8 5/16d and July-August 8 11/16d.

At public sale on Wednesday, 160 bags Penang retired at 8¾d per lb.

To-day. Black Pepper firm. Sales of Tellicherry May shipment at 55s 3d c.i.f. London.

Sales of 25 tons Singapore spot at 6¼d.

WHITE.—Sales on the spot at 9¼d for Singapore, and 8 3/16d for fair Penang.

The shipments of White Pepper for the first half of April compare as follows:—

	1901.		1900.	
U. K.—Singapore	20	20	30	50
„ Penang	*nil*		20	
Continent		90		*nil*
Total tons		110		50

GINGER.

COCHIN.—The market is very firm, with sales privately of 500 bags medium and small washed rough at 37s 6d. Under the hammer 122 cases 273 bags were offered, of which, however, only 17 cases 4 bags sold—bright, bold and medium cut, limed, new crop 80s, medium some small ditto 57s 6d, and cuttings 32s per cwt.

JAMAICA.—The large supply of 1,162 barrels experienced an excellent demand, and practically all sold at a rise of 2s to 4s per cwt. Fair to good bright plump washed realised 52s to 64s, low middling to middling 46s to 50s 6d, common to good common 41s to 45s, and Rhatoon 38s 6d to 40s 6d per cwt.

CINCHONA.

At auction on Tuesday there was a good demand, and the offerings were cleared at or after the sale at somewhat firmer prices. The average unit obtained for quinine-bark was 1¾d (fully equal to that of the last London sale), the unit for bark rich in chinchonidine being 2d. The Java shipments of bark for the first half of the month amount to 450,000 Amsterdam lbs., or about an average.

The following table shows the approximate quantities of bark purchased by the principal buyers :—

	Lbs.
Mannheim and Amsterdam factories	83,403
Imperial factory	57,280
American factory	51,250
Frankfort-on-Main and Stuttgart factories	34,625
Messrs. Howards & Sons	30,821
Brunswick factory	29,051
Paris factory	6,252
Druggists, &c.	35,650
Total quantity sold	328,332
Bought in or withdrawn ...	67,139
Total quantity offered ...	395,471

The quantities of bark offered and sold were as follows :—

	Packages Offered.	Packages Sold.
East Indian cinchona	1,258	1,018
Cuprea cinchona	344	344
Calisaya cinchona	191	191
African cinchona	122	122
Java cinchona	83	83
Ceylon cinchona	51	51
	2,049	1,809

The prices paid were as follows:—

African.—Fair quill, 6½d to 7d; and broken quill and chi 3⅝d per lb.

Ceylon.—Succirubra, stem chips and shavings, 3⅛ to 4 renewed ditto, 3⅝d; and root, 3¾d to 4⅝d.

Java.—Ledgerina, stem chips, 10d; branch ditto, 5⅝d; a dusty red root, 4⅛d.

South American.—Bolivian cultivated Calisaya quill, ordina small, 5⅜d; good, 8⅛d to 8⅞d; up to 10⅜d for rich; flat 1s 1d per Cuprea, 1½d to 3d.

East Indian.—Ledgerina, original stem chips, 5⅛d to 7⅞d; bran ditto, 5⅜d; natural hybrid chips, 4⅞d to 5d; branch ditto, 3 Officinalis, ordinary to good stem chips, 3⅜d to 7¼d: renewed dit 4⅝d to 9⅜d; branch, 3⅞d to 5¾; root, 4d to 8⅛d; fair quill, p broken, 8¾d to 10⅝d; and renewed quill, 10⅞ to 1s 3¼d per Succirubra, stem chips and shavings, 3½d to 4¼d; renewed, 3d 5½d; root, 3⅝d; and branch, 3⅛d per lb.

QUININE.

Is slightly firmer in second hands, but still very quiet. Th has been more inquiry since the result of the London bark-s was made known, and a little business has been done for Aug delivery at 1s 4d per oz., and October at 1s 4¼d; spot is quoted 3½d to 1s 3⅝d. The s.s. *Duke of Devonshire* has arrived with cases quinine from Batavia.

(Average for all India 7·01d., April 19th.)

Garden.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Du and Various	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Pric
Neilgherry														
Glenfruin ...	20	6½	5	1/0	15	4½ 4¾	...	...	...	...	...	...	...	...
Travancore ...	**1690**	**5·09**												
Arnakal ...	124 p	5½	8	5¼	68	5 5¼	33	7	2	3¾	...	...	13½c	2¾
Ashley ...	60	5	...	...	29	4½	31	5½	...	...	...	...	...	..
Balamore ...	220½c	4	...	...	152½c	3½ 4	16½c	4¾	...	...	4½c	3	3½c	2¾
Corrimony ...	200½c	5¼	...	...	98½c	4¾	76½c	6¼	19½c	3½	3½c	2¾	4½c	3
Glenmary ..	135	5½	55	5¼	...	...	35	7	25	4½	...	...	20	5½
,, ..	140 p	5¾	55	5½	...	..	35	7½	30	4½	...	...	20½c	3½
Glenmore ...	150½c	4¾	...	...	89½c	4 4¼	59½c	5½	...	...	1½c	2½	1½c	2½
Kan Dev H Co A ..	148 p	5½	...	...	21	4¾	68½c	6½	22	4¼	...	..	37½c	5¾
,, Munaar ...	134 p	5	...	...	...	...	52½c	7½	46	4½	...	..	36½c	3
Seafield ...	100½c	5½	...	...	63½c	4¾	35½c	6¾	...	...	1½c	3	1½c	2¾
Trav TEst CoMM ...	60	5¼	15	6½ 8	24	5¼	...	..	20	4	...	...	1	3½
Vembenard ..	208	4¾	43	4¾	53	4¼	62	5½	...	...	30	4	20	3¾
W ...	11½c	5½	...	...	11½c	5½	...	...	...	...	...	.	...	...
Wynaad ...	**245**	**5·80**												
Erramaculla ...	195 p	6	...	...	65	5¼	80½c	7	37	4¾	..	...	13½c	..
Perindotty ...	50 p	5	...	...	12	5½	10½c	8½	28	4	...	...	...	5¼

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 24th instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad.

May 11th.—*Weather*—We are having a spell of very hot weather which is doing the coffee a world of good. *Blossom*—A good blossom and well set is the report from the Shanivarsante side, the rain which gave it fell on the 28th and 29th ultimo. Some Munzerabad estates have had six blossoms this year. *Works*—Borer and manuring are the principal. Borer is very bad this year, collar-pruning is being extensively practised. *Interesting item*—The recently formed game and fish preservation league finds itself forestalled to its pleasure by the recent game enactment; some of the proposals in the same are however adverely criticised as being too stringent.

ASSAM.

WHEN agricultural prospects are bad in certain parts of India planters in Assam are certain of a good labour supply, should they require it. When, on the other hand, agricultural prospects are good in the districts where labour is mainly recruited, the cooly finds work enough near home, and declines to migrate to distant Assam. We are glad to note from latest official reports that the health of these coolies, *en route* to Assam and during their stay on the estates there, has greatly improved. The river route is preferred to the railway; and it appears that the cooly "finds his way" easily and travels fairly comfortably. The number of "unhealthy" gardens is now very small, the death rate among coolies on estates has reached the low level of 27·5 per mille, and things look favourable enough from the outlook of the labourer. As he numbers collectively, 636,208, he is a gentleman who deserves some special notice, just as the collective planter does for finding work for so large a number of the poor section of India's population. In 1899 the cooly in Assam was expectionally lucky. Not only was the public health

good, but so also were the harvests, though some districts did not fare as well as others. Rice, the staple crop of the Sylhet district, was good in all sub-divisions, but, excepting in Habiganj, not so good as in the preceding year. The sudden rise of the rivers in May, 1899, injured much of the *aman* crop which was considerably below the average. *Sail* was a very good crop in Habiganj and South Sylhet, but suffered from insect pests in North Sylhet and Karimganj. In Cachar the outturn of both early and late rice was much above the average. In the Naga Hills the outturn was fair; but in the Jaintia Hills, the extraordinarily heavy downpour during May and June is reported to have done some damage to the rice crop. In the Khasi Hills, where very little paddy is grown, the outturn was an average one. In the plains portion of the Garo Hills, the rice crop was greatly damaged by floods. In the Brahmaputra Valley the early rice crop was below the average, owing to damage by floods, but late rice yielded a bumper crop almost everywhere. The abnormal rains, floods, and dampness of the soil retarded the cultivation of mustard and *matikalai (phaseolus radiatus)*, and sugarcane suffered from want of rain in the cold weather. In Cachar the outturn of mustard, sugarcane, and pulses were slightly below the average. In Sylhet sugarcane and oil-seeds were both fair crops.

As regards tea, owing to the very favourable weather, the outturn in Sylhet and Cachar was abnormally large. The weather was favourable for tea in the Assam Valley also, except in Nowgong, which was the only district in the valley where the outturn was below the average. The climatic conditions were favourable, and the average outturn was 448 lbs. per cultivated acre, as compared with 396 lbs. in 1898, and 408 lbs. in 1897. The increased outturn was accompanied by a rise from 5 annas to 5 annas 7 pies in the average price per pound in the Sarma Valley. The price obtained for Assam Valley tea averaged 6 annas 8 pies, against 6 annas 9 pies in 1898. At the end of the year there were 284,807 acres under mature and 46,344 acres under immature plants, against 275,698 and 50,125 acres respectively, at the end of the previous year. The total outturn of the province increased from 109,286,995 lbs. to 127,576,168 lbs., an increase of 16·73 per cent. The total area taken up for tea cultivation was 1,027,779 acres. The Manipur tea-seed trade has not recovered. While the net amount of rice imported into the Brahmaputra Valley declined by 18 per cent. in consequence of a good harvest of late rice in 1898-99, the aggregate value of the tea exported from the Surma Valley rose by 85 per cent. and of that exported from the Brahmaputra Valley by 43 per cent. In fact, generally, imports declined in quantity and value, but owing mainly to the briskness of the tea trade, there was an increase in the value of exports. The total value of the imports into the Brahmaputra Valley was 194 lakhs of rupees, against 207 lakhs in 1898-99, and of those in the Surma Valley 129 lakhs, against 167 lakhs. The value of the exports from the Brahmaputra Valley aggregated 381 lakhs, against 290 lakhs, and of those from the Surma Valley 312 lakhs, against 220 lakhs.

It should be noted that experiments with other crops than tea are being made in Assam, some having for their object the improvement of local food supplies, others the production of supplies for exportation. It is with the latter that the planter is usually chiefly concerned, so we may pass by experiments with potatoes and rice without further comment. Tobacco has been tried, but has not yet achieved success. Fruit trees,—apple, pea, and plum—have been planted, but a not very favourably reported upon. Sisal hemp has be tried by one or two planters. On Dauracherra garden t plants continue to thrive and multiply, and there are nc 25,000 seedlings in nurseries. A valuation of £42 p ton has been received on a sample sent to London. M Hunter has commenced to clear fibre with machinery b some time must elapse before he will be in a position report results. An experiment in the cultivation of rhea w given up, as the land was found to be unsuitable. Son other products are being experimented with, but particula have not found their way into official reports. In spite the depression in tea, prospects for Assam and the Assa planter seems fairly bright.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.

Bounty on Green Teas.

The Indian Tea Association (Calcutta) has issued t following circular, dated 6th instant :—I am directed by t General Committee of the Indian Tea Association to addre you respecting the following resolution which has been adop ed by the Committee of the Association in London, *viz.* :—

"That 1½ annas per lb. up to a maximum of 200,000 lbs. to manufactured this season, be allowed out of the funds of the le (American and Foreign Market Fund) on shipments of green t for the American market and shipped there direct from India, su funds to be distributed as a bounty at the discretion of the Calcut Committee, the definition of the term 'green tea' for the recei of the bounty being taken to be tea made from the ordina leaf plucked on the gardens, such as would be ordinarily ma into black tea, but which in its altered manufactured state w not compete with the sale of black tea in America or elsewhe The bounty to be paid on the same quantity as before sanctione *viz.*, 200,000 lbs., until it is seen what success is attained in t manufacture of green tea. The Association in Calcutta to be r quested to notify the Committee promptly if a larger quantity th 200,000 lbs. is likely to be specially prepared for shipment America."

It will be observed that a wider definition is now given the description "green tea" it being intended to include n only green tea properly so called but "oolong" ar "namuna" teas, and the following revised regulations hav been framed :—

(*a*) The General Committee propose to leave the decisio as to what may be suitable for the American mark largely to the discretion of those who make the tea, and d not require that experimental samples should be submitted f their approval before the tea is made.

(*b*) They reserve the right however to defer payme of the bounty in any case where, after examination of sampl drawn under clause *d*, they think the tea is likely to be foun unsuitable, until production of a certificate showing its *bon fide* sale in America at a price not under the equivalent three annas per lb. in Calcutta for any separate grade in th invoice. No bounty will be paid on dust or fannings.

(*c*) The Committee while they do not require th previous submission of samples nevertheless recommend tho who intend to make tea in consideration of the bounty submit samples to them for the examination and report experts. The leaf to be used for the manufacture of gree tea should not be coarser than ordinarily plucked for blac tea manufacture. Arrangements have been made for pr curing samples of the teas (other than black) which are

present being sent from Ceylon, China, and Japan to America, and a limited number of samples will be available to members of the Association.

(*d*) When teas upon which the bounty is claimed have arrived at port of shipment samples should be drawn and sent to the Committee; and on approval of these, and proof that the tea has been shipped to America for sale, the bounty will be paid.

(*e*) There is no objection to the teas being sold on the Calcutta market if the producer so desires; but payment of the bounty to him can only be made on proof that the tea has been shipped to America.

(*f*) It must be clearly understood that all teas upon which the bounty will be paid will be for the American market only.

(*g*) The Association will not undertake, or be in any way responsible for, the shipment of the teas.

(*h*) It is proposed to pay the bounty only to those gardens which have subscribed in 1900 to the American and Foreign Market Fund.

I am directed to ask those who intend to make "green teas" for the American market, to inform me of their intention as soon as possible stating the quantity they intend making. It will be understood, however, that such an intimation will impose no obligation either on the garden to make the tea, or on the Committee to pay the bounty, should the latter not become payable—either under clause *b* or clause *d*—before the amount now allotted has been exhausted.

Yours faithfully,
W. Parsons,
Secretary.

* * *

Indian Teas for India.

The Hon'ble Mr. G. L. Acworth makes the following suggestions for exploitation of South India with good teas:

(1) That all Associations interested in tea in South India be asked to join the scheme for pushing sales of good tea among the natives of India.

(2) That for this purpose the Foreign Market Fund be abandoned, and a small cess of (say) ½ pie per lb. on outturn of tea be contributed by each estate.

(3) That the railways be first attacked and that tea be served at railway stations at a very small cost, just as coffee is now.

(4) That an Inspector be appointed to travel on the lines and see that tea is well and properly made. The railways might be asked to grant him a pass.

(5) That funds permitting, an eight tray up-draft Sirocco be purchased and set up at some such centre as Erode, and that good teas be there blended and put up in 3, 4, and 8 oz. packets for sale on the railways and elsewhere.

(6) That leaflets be published in Urdu, Tamil, Telugu, and Canarese giving information as to how to make tea and so on, and that these be distributed broadcast. They should be headed by some attractive bird such as a peacock.

(7) That as it is desirable that only good tea should be distributed, and as a large quantity of most undesirable stuff without garden or any other distinctive marks finds its way into India from Ceylon, and elesewhere, the I. T. A. be urged to petition H. E. the Viceroy to impose a tax of 4 annas per lb. on all tea imported into India from abroad, otherwise it will be impossible for Associations to control the business and prevent spurious imitations of their teas being vended.

COFFEE IN DISTANT LANDS.

XXVII.

Costa Rica.—Young Ceylon gives the *Ceylon Observer* the following particulars of Coffee cultivation in Costa Rica:—

Methods of weeding, etc.—By way of prelude for purposes of explanation it is as well to mention that the most common distances at which coffee trees are set apart is generally three varas by three, though other distances such as 2½ by three varas, and four by 2½ varas are known, but are not common, the natural lay of the ground often being the reason given for a distance greater or less than the three varas both ways the Spanish vara being 33 inches).

After new coffee is planted, the best time being considered the commencement of the rainy season in May, the first weeding or shovelling follows as soon as is practicable to prevent wash from the heavy tropical rains, which are the most violent and destructive at this period of the year: supposing the ground to have been ploughed up and harrowed previously during the dry season, the first shorelling is the aporca, which is effected entirely by hand labour, and to accomplish which no machine has so far been introduced that will effectively do the two things, firstly the barking up and completely covering of all weeds to the line of coffee trees, and secondly the prevention of wash by means of cross dams, whose distance one from another is determined by the pitch of the ground, and vary on hill sides from a cross dam at every tree known as labtero system, to a cross dam to every four or five trees on ground almost flat, forming what are called cajones or boxes, to translate literally; in new coffee shorelling to the trees in aporcas it is not considered advisable to raise up the ridge higher than 10 or 12 inches on account of burying up the young plants too much. Any less height however is not advisable for the reason that the ground shovelled up packs considerably after a few heavy rains, and the following cleaning, the raspa, has to be taken into account in which ground is taken from the ridges to the centre of the rows: it is good policy to have special care taken in building the cross dams of sufficient thickness, and a few inches higher than the ridges, there being the risk of water breaking out and washing in heavy rain, an idea of which can be formed supposing one to break out at the upper end of a row of coffee trees, in turn breaking through all in its course to the lower end of the row taking with it tons of the best soil in a single rain: on a hillside where tableros are in vogue the ground to build up the cross dam is taken from the centre of the square of trees and in sufficient quantity to give the bottom of the whole thus made a perfect level thus giving each tablero a maximum capacity of holding rain water until it soaks into the soil. On flatter ground where the pitch will allow of doing so, and cross dams can be effective for instance at every second tree, they can be made more secure by taking the ground from the lower instead of the upper side of the dam. hereby lessening the chances of a break out through the levelling of the ground, the water standing back the full length of the cajon before passing over the dam at its lower end. In coffee planted out older than one year ridges are often built up higher than 12 inches, many going as high as 24 inches, though the good results of this are questionable, much mischief being caused to trees abundant in lower branches by excessive piling up of the ground. The aporca described above is all the cleaning done till about July, when the ground is pretty sure to be up again in weeds and in need of the second cleaning or raspa, which is also done by hand labour, and is the reverse of the aporca in that the weeds are shorelled to the centre of the row and covered with ground, a few boys cleaning around the stems of the trees in advance of the shorellers; this is done to save them from being cut by the shorels in cleaning close to them, a good custom being to reinforce the cross dams at this time with a little additional ground if necessary, there being at all times the danger of a break out in heavy rains.

This second cleaning is considered sufficient till about the middle of October when the crops are sure to be showing signs of ripening, when an aporca is repeated, leaving the ground clean and favourable for picking; in January or February at latest a raspa is given differing from the one done in July in the following, so that the weeds are left uncovered, causing them to dry up quickly in a season of the year which is always rainless.

The shovel used is I believe peculiar to Costa Rica, being round-nosed, square backed, slightly indented to the centre, measuring from 14 to 20 inches across, according to numbers and is manu-

factured principally in U. S. A. Considerable strength and pactice are needed to make an expert shoveller and the majority of the working classes begin working at it in their early teens; during the rainy months from May to November shorellers work almost daily from 6 a.m. till 12 and often till 2 p.m. when the rain permits, and it is considered that the work done is a good day's work, when the leader or man who takes the first row sets a good pace and example, for which a little increase in pay is made, all shovellers by custom having to even up their work with that of the leader.

This custom of cleaning is sometimes raised, a machetea with broad bladed machetes taking the place of a raspa, though a cleaning in this manner is only effective in the dry season: the machete being very much like the Cuban cane-knife, but with a thinner blade besides having a twisted handle which enables the worker to skim over the surface of the ground lifting very little dirt: covered cleanings of both kinds with shorels though costing more are at the same time more effective, as they annihilate all stubborn weeds and grasses, this not being the case with machetes. The amount of ground that can be gone over in one day working till 2 p.m varies according to its nature and other conditions; in ground moderately steep, where shorelling is customary and the surface well pulverised, a labourer can do about $\frac{1}{8}$ of a manzana or $\frac{1}{4}$ of an acre, in some cases more, but this can be taken as an average in aporcas, raspas with shorels and macheteas cost 25 and 40 per cent. less than aporcas, the former generally having the preference during the rainy months.

The saying that what is worth doing is worth doing well has no better application than in shovelling, a shovelling badly done causing more loss of ground than if left alone, a state of things which is generally admitted as only needing time to cause the ruin of an estate.

Some adverse critics declare that the roots of the trees are cut and suffer from the shovelling; ocular evidence, however, proves that trees over 30 years old when pulled up have a complete system of roots extending over six feet all round and this often two feet or more below the surface.

That rain should be induced to soak into the soil instead of running off is considered a point of advantage by many recognised as authorities in such matters, this is one thing accomplished by good shovelling, beside the perfect pulverisation of the surface to a depth of about four inches, added to which the thorough mixing of any class of manures applied to the surface is insured.

The above applies to the interior of the republic known as the Pacific slope: cultivating with machines has been carried on in newer coffee farms on the Atlantic slope with different success, but here again the soil is very porous almost everywhere, and the native labour which is always preferred in coffee is much more expensive than on the western slope on account of climatic conditions. When prices of coffee were at their zenith a few years ago, several investments were made in coffee forms on the Atlantis slope; results, however, have now shown that labour, seasons of the year, and last but not least that prices in the market are all in favour of Pacific grown coffee.

Trinidad.—The growth of coffee at St. Clair is conducted under circumstances far from favourable but has nevertheless met with considerable success. A fairly large section was planted with *Coffea stenophylla*, raised from seed grown in the old establishment on trees which were near to bearing plants of both *Coffea arabica* and *C. liberica*. Among these seedlings, have appeared several DISTINCT VARIETIES, and the first tree to fruit has produced "cherries" containing beans *twice the size of the type*. The cherries are dark purple when ripe, going black in drying, and the bean appears to be of excellent quality, so far as can be judged by sight alone, but there was not a sufficient crop to make any test of its flavour, as the berries were all required for seed purposes. Othe plants have also ripened fruit, but the berries vary in size There appears to be some little evidence in favour of the vie that these varieties are natural hybrids between the type an the Liberian, but the beans appear of much finer quality tha those of the latter species. The greater portion of the tree on the section, are now showing their habit of growth, and considerable variation in the size of the leaves is to be notice throughout. *Coffea stenophylla*, is evidently a plant whic will fall readily into the hands of the plant breeder, as shows a variability of character, which opens out a possibilit of the production of improved strains, which it was almo hopeless to secure from the less variable *Coffea arabica*. A the trees have done best where well shaded with the "Saman, but in places where they where open to the midday sun, th growth is fifty per cent. less. Good supplies of seed are no being harvested from our first planted trees. *Coffea sten phylla*, is evidently a plant which will be widely cultivate in the near future. Some of the trees have yielded si pounds of dry coffee per tree.

Two plants of a new kind received under the name o "Congo Coffee" have grown well, and have just set a fai crop of fruit. Their vegetative characters are somewha similar to Liberian, but the flowers are more like the Arabia type, set in the axils of the leaves, in large rosettes, of fro twenty to thirty flowers.

The strain called "Mexican Coffee" appears to be one o the most prolific croppers of the Arabian class. The tree are not large, but the produce appears to compare favourabl with good Arabian brands.

The coffee introduced under the name of "Abbeokuta has grown well, and probably is the best coffee of all to stan the sun. In habit and appearance it is somewhat similar t Liberian, but there is little to indicate it as being more tha a variety of that species but still there are characters whic readily distinguish it. There is considerable variety in th foliage of the different trees and the size of the beans.

The trees of "Golden drop" coffee, fruited freely durin the year, and some hundreds of young plants are on hand fo disposal. It appears to be a very productive kind and i golden yellow berries give it a very distinct appearance fro the ordinary Arabian of which it is a variety.

"Maragogipe" coffee continues to do well, producin beans of large size and excellent quality.

The narrow leaved or "Minerva" coffee, has again fruite freely. It probably fruits more regularly and at a younge stage than any other coffee, and is altogether a very desirab variety.

NOTES.

Vanilla in Trinidad. The Superintendent of the Roy Botanic Gardens, Trinidad, repor that the experiment with vanilla has made good progress.

Ceylon Tea Exports, 1901. The Committee of the Planter Association of Ceylon has adopte 146,000,000 lbs. as the estimate of the probable total expor of tea in 1900.

The Madras Labour Laws. The Government of India has pe mitted the Government of Madras refer the amended draft Bill to reg

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nicholson's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf people, unable to procure the Ear Drums, may have them free.

Address—No. 989 D, THE NICHOLSON INSTITUTE,
Longcott, Gunnersbury,
London.

[w. 26-5-00—26-5-1901.]

ate contracts in Southern India to the U. P. A. S. I. for emark.

Cinchona and Quinine in the U. S.

The following are statistics of imports of Cinchona and Quinine into the United States of America :—

		1899.	1900.
Cinchona ...	...	lbs. 3,328,006	4,163,698
Quinine ...	...	oz. 3,802,638	3,091,735

Java Quinine.

The exports of quinine from Java during November, 1900, amounted o 154 cases, of which 92 cases went direct to New York, 4 cases to Amsterdam, and 8 cases to Rotterdam. From uly 1 to November 30 exports have been :—

	1900.	1899.	1898.
Cases ...	1,193	695	614

Tea Inspection in Ceylon.

Some of our insular neighbours are warmly advocating the establishment of a system of Customs' inspection of tea in Ceylon, with a view to preventing the export of rubbish. Mr. Harcourt Skrine doubtless rejoices at these public admissions hat *some* Ceylon "tea" *is* rubbish.

Rubber in Trinidad.

Experiments in rubber cultivation are being conducted on a fairly extensive scale at St. Clair, Trinidad. *Castilloa* has done vell. *Hevea brasiliensis* grows rapidly. *Funtumia* has made splendid growth ; when lightly tapped at 2½ years the trees were found to produce rubber of excellent quality. *Ceará* has not done so well.

The Position of Coffee.

There is absolutely no inducement to buy coffee beyond near-by requirements, says the *American Grocer*. The situation in a nutshell s that supply is, and likely to continue for the next two years, far in excess of demand. The 1901-02 crop of coffee in Brazil is conservatively estimated at 11,500,000 to 12,000,000 bags, while the present crop is certain to exceed 10,000,000 bags.

The Glazing of Coffee.

Coffee is glazed in order to preserve aroma and aid in its clarifying. Several patents have been issued covering formulas for glazing coffee. One issued to John Arbuckle, Jr., in 1868, names a preparation consisting of half an ounce of Irish moss, half an ounce of gelatine, half an ounce of isinglass, half an ounce of white sugar, and twenty-four eggs. The first three are boiled in water and the moss strained clear. It is difficult, observes the *American Grocer*, to frame an excuse for the charge that coffee is coated in order to improve its appearance, because it is sold in sealed packages and is not presented to the buyer for inspection ; while the price indicates that it is not a high-grade article.

The Central Asian Caravan.

The Indian Tea Association (Calcutta) has decided to telegraph to Mr. Foley to exercise his own discretion as to his return route from Meshed to India, provided the time limit of four months is not exceeded. The sale of tea in India. In reply to a letter from the Hon'ble Mr. G. Acworth, Chairman, Central Travancore Planters' Association, in regard to the question of the extension of the sale of tea in India, the Indian Tea Association (Calcutta) has replied that the local contributions of tea would be accepted, and in fact were required by the proposed Tea Distributing Agency ; but before any final decision is come to by the Central Travancore Planters' Association, particulars of their scheme should be sent to Calcutta.

Ceylon Tea in London.

The *London Tea Market*. In their weekly telegram of 9th instant to Colombo, Messrs. Gow, Wilson & Stanton report that the market generally is weak, and that the market for medium liquoring Pekoes and Broken Pekoes as well as for common Pekoes and Broken Pekoes is also weak. The price of fair liquoring Ceylon Pekoe Souchong is 5d (a farthing down) and the average price of Ceylon tea sold on garden account this week was 6½d (an eighth of a penny down)—as against 6¼d and 7⅛d respectively in the corresponding week last year. Reuter reports that the tone of Ceylon tea is generally steady. Pekoe Souchongs are quoted at 4¼d (same as last week) and the average for the week at 6½d (⅛d down) as against 6⅛d quoted for Indian tea. 20,000 packages of Ceylon tea were offered for sale, of which 17,000 were disposed of ; while of the 15,000 packages of Indian tea offered, 13,000 found purchasers.

Cacao in Samoa.

In his report for 1900 the British Vice-Consul says :—At the present time cacao is engaging much attention here. At a distance of two or three miles from the sea it grows almost wild, and can be cultivated with success everywhere in Samoa, except perhaps on the summit of the mountains, where the climate will probably be too cold. The quality is good. Mr. Carruthers' cacao fetched lately the highest price in the London market. The Governor is introducing plants of the celebrated Soconusco variety from Mexico. Cacao planting should draw the attention of home capitalists. The great drawback is that leases from the natives for a longer period than ten years are not likely to be confirmed, as the Government does not wish to encourage land speculators, and refers any application of this kind to the Berlin authorities. British capitalists wishing to lease land should make application in the first instance to the Colonial Department at the Foreign Office, Berlin.

The Travancore Tea Estates Company.

This Company proposes making an issue of pre-preference shares, bearing ten per cent. interest, to enable the Company to carry on its operations. It will be remembered that the concern closed its season with a heavy deficit, and it was at first intended to ask all shareholders to make a ten per cent. contribution, with the probability of a further ten per cent. later on. This deferred liability did not meet with general support, and it is now proposed to issue these pre-preference shares, which will rank next to the Debentures. A meeting of the Preference shareholders has been called to discuss the subject, and the Board hopes that the necessary alteration in the Articles of Association will be sanctioned. A Home writer remarks :—One has heard a good deal of late years of the coming competition of South India teas. But if it is so difficult to finance a Company which started under such bright auspices as the Travancore, the thought is suggested that tea growing there, under present conditions, is attended with great difficulties, and that, after all, their competition is not greatly to be feared.

The Sunflower.

Dr. Harvey W. Wiley, chief of the division of Chemistry, United States Department of Agriculture, in a special report shows that the sunflower can be grown successfully over large areas in the United States ; that it is a crop which makes a considerable drain on the elements of soil fertilisers ; that one of the most valuable constituents of the plant is the oil, which exists in large quantities in the seeds ; that the economic production of the sunflowers is now confined almost exclusively to Russia, where it is an agricultural industry of considerable importance ; that in the United States it is grown as an ornament and for the production of seeds, which are used chiefly for poultry and bird feeding and for condimental and medicinal properties with farm animals ; that the oil of the sunflower seed is not produced commercially in the United States ; and that in the cultivation of the sunflower the methods pursued for growing Indian corn are to be followed, and the plant is capable of cultivation over almost as wide an area as Indian corn.

GENERAL ARTICLES.

MR. RENTON'S VIEWS ON THE OUTLOOK.

INTERVIEWED IN PARIS.

To interview Mr. Renton, and obtain his views on the crisis in tea, was, I knew from previous experience, a pleasant task, says a representative of the *Times of Ceylon*. I found the Ceylon Commissioner in his office in the Rue de Rome, near the Gare St. Lazare, and saw at a glance that I had disturbed a very busy man. Looking up from a long letter which was going, as I afterwards learned, to Colombo, Mr. Renton showed me several others still unanswered, and from various parts of the Continent, which demanded his attention. Despite his smile I felt that the genial Commissioner had not the time to spare to me that day, and it was arranged that I should see him after office hours at his hotel. Hotel du Tibre, Rue de Helder, just off the Boulevard des Italiens and within a stone's throw of the British Chamber of Commerce, accordingly found me the next day, and Mr. Renton also—again writing. This time it was someone in Germany, experimenting with the sale of Ceylon tea, who wanted hints on advertising, and to whom Mr. Renton was unbosoming himself: but he was ready for me in a few minutes.

"When I heard of the proposal to throw 10 per cent. of our acreage out of bearing my first act was to write out and instruct my Manager that he was to adhere loyally to any resolution which commended the support of the majority.

"Did you personally approve of the suggested means of relief?"

"I am not on the spot," replied Mr. Renton, "but I think it would be only a temporary help to throw 10 per cent. out of bearing. Besides I somehow feel that it would be rather hard upon and unfair to the owners of good estates. The market is not affected by the production of good quality teas, but there is a glut of common qualities. It is certainly my general experience that there is not too much fine quality tea on the market. It is quite true that the immense quantity of low priced tea which has been shot on to the market has had the effect of bringing down in prices the high quality teas, but it must not be forgotten that the fall in the prices of the latter has been nothing like that in the former.

"Then the 10 per cent proposal, in that it will put out of bearing the good and bad tea alike, does not altogether meet the necessities, you think?"

A STOP-GAP MEASURE.

"No. From one point of view of course it is only natural to expect the owners of good estates producing fine quality teas to do all they can to help their less fortunately situated brethren in a crisis like the present, but I fear that even if agreed to there is the danger that it may turn out to be only a mere stop-gap measure.

"In what way?"

"There is a lot of young tea which must come into bearing, and the exportation of tea is increasing every year. Even if we reduce the output by 10 per cent. for two years, what is there to induce to think that at the end of that period we shall have sufficien large markets to account for the additional output.

"Have you in mind any alternative idea to the 10 per ce proposal?"

Whilst disclaiming the idea of making a proposal, Mr. Rent was good enough to express his views upon the matter.

"I myself," he said, "would prefer getting managers in heavy flushing months to pluck their bushes properly, in order keep them in good heart and condition, and to throw away the la leaf. If this were done on estates, the coarse quality of teas wo be reduced, whilst at the same time the production would not be large.

"This is exactly what you contend is necessary?"

"Yes, to reduce the production by a process of eliminating coa qualities. But I would say that men at a distance like mys who have been away from the island for a year, are not compet to express as good an opinion as men on the spot. One can judge altogether from newspaper reports, and, although I th that the destroying of the large leaf in the heavy flushing mon would be the best means of attaining the end in view, possibly, were in Ceylon and saw the condition of the fields, I would something else. But I would repeat as an objection to the 10 cent. proposal that we are not producing nor exporting too mu tea of good quality.

NEW MARKETS.

"You will have something to tell me, Mr. Renton, about markets?"

"Yes, and I may say that I felt the gravity of the present posit to be a sufficient reason for the commencement of my campaign Europe within a few weeks of finishing work in connection with Exhibition. Apart altogether from proposals to reduce the out of tea, I do feel most profoundly that the only solution is to found in new and bigger markets. And I wish to add that, e with bigger markets, this will not avail in the long run, unless exportation can be stopped of the common rubbish which wil the long run assuredly disgust all consumers.

"What countries did you visit this year?"

"I made an extensive tour through Germany, Austria, Northern Italy, besides, of course, in France.

"What is your plan of campaign, if I may so call it? Is it *a outrance* against teas other than Ceylon?"

"No," replied Mr. Renton, "I make war on no one."

For a moment I felt that my suggestion had perhaps been tasteful to the Commissioner, and I was relieved to hear following excellent reasons why Mr. Renton proclaims no Jeh against China teas:—

"I make no war against China tea as a matter of policy. countries where there is very little tea drunk, and where it is many parts unknown, I think the very first thing to be done is induce the people to drink tea at all. It is no good running do the production of another country. When once we have got people to take to the drinking of tea, they will want it stron than the China people can give it 'em."

After a momentary pause Mr. Renton added: "Of course, wh ever I go among the wholesale firms and the people who handle generally, I preach the doctrine that Ceylon tea is far better t China. *Cela va sans dire.*"

"Following the success which has attended the pushing of Cey teas in Paris, do you prosecute the same measures elsewhere?"

"This is what we are trying to do, and I am convinced that best method to attain our ends is to follow the example of Paris provide *salles de degustation* wherever possible on the Contin which in time we hope will become as popular as the ones in Pa Of course, we have not funds large enough to permit of our do more than assisting private enterprise in this way—we cannot selves run tea shops in the various towns. My great aim pa cluarly during my lost tour was to induce the import firms, and wholesale firms to take up this aspect.

"There is no doubt about the success of these measures Paris?"

"Not the least in the world. We have been thoroughly succe ful, and in Paris there is no question now about Ceylon tea be known.

"And outside of Paris—what progress has been made in other large towns of France?"

"I would like to see Ceylon tea offered in cup and package in

the *patisseries* and confectionery shops in all the big French towns. In many places you will see it at present, and there is no doubt that the habit of tea-drinking is growing.

"And Germany and Italy?"

"The same measures must be adopted. We must get the public accustomed to look upon tea not as an article of luxury, but as an article of food just as much as coffee.

"In this you have an uphill task?"

"Most undoubtedly; and, having regard to the limited funds at our disposal, it is difficult to do as much as one would like to in the supporting of the firms who handle our teas.

"Do you encourage the big wholesale English firms?"

"I find the wiser way is to support the natives in each country; for instance, in France, to help the French importing firms who sell to the French grocers.

"Is anything done to assist firms on the Continent in bringing Ceylon tea prominently before the consumer?"

"Yes, very often suggestions for effective advertising are made by me, and where a firm has its own ideas in this way it is helped financially in so far as possible on the basis of proportionate expenditure. It is very satisfactory when you come across continental firms which show enterprise and strike out on original lines, as has been my experience during the tour.

"Were you satisfied with your tour through Germany and Austria?"

"Yes, quite. Arrangements for the handling of Ceylon tea have been made with large firms importing through Bremen and Hamburg. It is satisfactory also to find that the German statistics show an increased market. In France, outside of Paris, I was very pleased with my visit to Marseilles. I found Ceylon tea in several shops in Marseilles and also called upon three importing firms who are handling it. In Austria I am hopeful that we may do well, and the arrangement we have made with a well-known house with ramifications all over the country should open out this market.

"You don't force any particular form of *publicité* upon the firms before they receive your tangible co-operation?"

"Not at all, I say to a man 'You advertise Ceylon tea in the way you think best'; and on the basis of one-third we assist him in bearing the expense."

Mr. Renton explained some of the difficulties he met with in visiting continental firms—such as the lack of the Government stamp (the banderole) which Russian tea has, and the complaint from customers that Ceylon tea will not keep (with the necessity of explaining to them the procedure to be followed upon receipt of a consignment). I gathered, however, that the future was quite hopeful in the Commissioner's opinion, if only one thing can be assured—that the doctrine of keeping up the quality of tea shall be universally adopted in Ceylon.

THE LONDON MARKET.

The London Commercial Record of 26th April says:—

This week has been an exceptionally dull and depressed one, the reaction after the excitement over the recent Budget making itself felt in every branch of our trade. Sugar, as we anticipated, both for spot and arrival registered a decline, the pressure to sell available parcels, those that had been thrown into our ports to evade the duty, has a depressing effect upon our market, and the consumer is slow in availing himself of the cheap offers submitted to him. Everybody appears well stocked, sometime will elapse before the speculative holder of ready Sugar will reap the benefit of his venture, although he is endeavouring to induce consumers to avail themselves of the opportunity of buying cheap sugars. These holders are at the moment prepared to sell at about 1s 6d below market value, but as there is no demand for spot goods they will have to await their opportunity which is sure to come sooner or later. In the meantime dock charges and rents will somewhat diminish their profit, which however is of secondary importance considering they are holding a margin of 4s 2d per cwt. The strong feeling against the conditions of the new Budget are slowly abating, people come to realise that they have to face the inevitable and that grumbling and kicking against the increase of the Income tax which after all is the principal, if not the only, bone of contention are of no avail, the most important point for us is to endeavour to shake off the gloom it has cast upon us and revive trade which has already unduly suffered from its effect. All markets are anxiously awaiting the improvement generally and confidently prophesied after the passing of the Budget, and the sooner it makes its appearance the better for all of us, for the Lane at the moment is suffering from a severe fit of depression. There are several articles which, owing to their favorable statistical position, would under ordinary circumstances undoubtedly demand general attention and support, but they lack the interest they deserve in consequence of the absence of confidence and enterprise ruling in the Lane at the moment. Pepper, to pick out only one of a number, has become flat—as far as Black is concerned—although its statistical position is generally and openly recognised as being eminently favorable to a bull movement. Weak and sporadic attempts have been made to raise the value to a height demanded by its position, but after a few days pushing prices are allowed to drop down again to their former level. There is, perhaps, no better thermometer indicating the temperature prevailing in the Pepper market than Tellicherry Pepper. The moment a better tone begins to gain ground in Black Singapore, enquiries for this Indian Pepper reach our market to vanish instantly when the former description is showing the slightest tendency to weakness. We have seen a good business in Tellicherry Black this season indicating good trade in Black Singapore, but at the moment buyers have withdrawn from the market and view indifferently the efforts of Indian holders to create renewed interest by simulating extreme firmness and quoting higher prices. Of course the movements of this Pepper are not altogether regulated by the state of the European markets, the Eastern demand, principally that of Calcutta, has a great influence upon the tendency of its fluctuations, and, as at the moment a strong Eastern demand is favoring black Tellicherry, holders naturally entertain very lofty ideas, the more so as the position of the article demands the greatest care at the moment on the part of its operators. Stocks, we are informed, are exhausted, and the entire quantity still available in the interior is estimated to amount to about 2,500 tons only. This quantity will have to suffice to meet the demand until the arrival of the new crop in January, 1902. Indeed a very small total, if we consider that the exports of Tellicherry Pepper from 1st April to 31st December, 1900, to Europe amounted to about 1,100 tons and about 2,300 tons to Indian ports. Any attempt at raising Black Singapore will therefore have every support from India.

THE REDUCTION OF CROP AND CEYLON.

"J" writes in *Capital*:—

For some time it has appeared to those who have studied this question that, if it was to be brought about by means of combination betwixt the two great producing countries, India and Ceylon, there was but little chance of any result being attained, and, India was again to be made to play into the hands of needy Ceylon, for, to those who are acquainted with the economic conditions under which a large proportion of the crop of the spicy isle is produced, it seemed a foregone conclusion that Ceylon could not, from its financial position, cut short or hold back its crop; a fact which must be quite well known to the wire-pullers in Mincing Lane. Picking up an old Calcutta "Directory" and taking the first twenty gardens on the list, we find the relative position of India and Ceylon reflected in the area of the gardens. The area of the 20 gardens of Assam reaches a total of 35,496 acres, whilst the Ceylon 20 represent only 6,139 acres. The difference in size of the gardens is very marked, and there is not a 700 acre garden amongst the Ceylon lot at all. In Assam, there are two small gardens of 100 acres each—one owned by a native, and the other, only evidently a beginning, and this brings down the average of the Assam gardens very much, but we have taken them just as they come. Of the 20 Assam gardens, there are 2 of 100 acres or under, 3 of 700 acres, 7 of 1,000 acres, 3 of 1,500 and upwards, and 5 of 2,000 acres and over.

Contrast Ceylon with this, and we find there are 6 (or almost 30 per cent.) under 150 acres, 7 from 200 to 300 acres, 1 between 300 and 400 acres, 3 between 400 and 500 acres, and 3 between 500 and 700 acres. It is worthy of note that there is not a single 700 acre estate. The deduction to be made from the above figures is that Ceylon estates are more numerous, but very much smaller in area,

and, are consequently owned by a very much greater number of people, probably not so well to do as the big Assam Companies, more difficult to get at, and less able to bear any strain upon their finances. In fact, the Ceylon tea industry holds much the same position to the Indian that the highland crofter does to the lowland farmer at home, and it is for this reason that we say that until Ceylon by force of circumstances has its holdings condensed, there is little chance of carrying out any set programme, and that after all the question will be settled in the old way, *viz.*, by supply and demand. That the Ceylon men got a fright last year is undoubted, and this year they will probably pluck a little finer leaf than they did in 1900, but if the Indian crop is short, and everything points to this owing to climatic influences, then they will again revert to coarse plucking. The number of factories in Ceylon is as nothing compared to the number of estates, and it is quite common for one central factory to buy and manufacture the leaf from 3 or 4 smaller estates. Cash has to be paid for the leaf, and to get the cash back, the manufactured tea must be sold for what it will bring; in fact, throughout the greater number of estates this hand to mouth sort of existence obtains, and when the 1 lb. draft dispute was on, Ceylon gave India away, as it could not hold out, it was bound to realize, and the same thing will continue to be the case until a large proportion of the smaller holdings are wiped out and formed into good, strong, financial companies.

India has nothing to be afraid of in the struggle; as most of our best agency houses have put all their good concerns into good fighting trim by building up reserves and pursuing a conservancy policy, which has been anything but the case in Ceylon. In fact for many years a number of Ceylon concerns have been paying away without any thought to the morrow their uttermost farthing, and are now ruing the day they did. Some of our Indian Companies have pursued the same course, and are now finding out the mistake they have made, but fortunately they are in the minority. The news from London that Ceylon cannot guarantee a reduction of eight millions has just come in time, and given our Indian planters a chance still further to put their house in order, and, we can see nothing for it, but to let the matter be fought out, and the sooner it is done the better, for after all it is a case of the survival of the fittest, and Ceylon will yet live to add another to the list of its many failures—coffee, cinchona, cardamoms, rubber and possibly tea, in the near future. There is no use disguising the fact that tea cannot pay with the prices now ruling, and those who continue to pluck and manufacture 3d. to 4d. rubbish will be the losers, not those who content themselves with a fair outturn of leaf, and a fair quality of liquor in cup. Tea, as an old planter years ago remarked, is made on the teelah, and and in the tea house, and if people persist in plucking fishing rods and gig whips they must be content to work their gardens at a loss, and this will put a stop to bheel gardens being opened out in India and extensions in Ceylon, and when the industry has passed through the fire and been cleansed and purified, we believe there is a good look out in future years; but, how many will emerge scatheless? Not many, and some will have had their wings scorched, we are afraid, through the action of the selfish part of human character.

ARABIAN COFFEE.

Mr. T. M. Hastings writes from Cairo to the *B. C. African Times* :—

The following is the only account of the growth of coffee in Arabia that I have been able to find in the Khedivial library here. It is from the book of an Italian Manyoni who travelled twenty years ago. It will be remembered that in Arabia as in Cholo, coffee is "Kumangwao." "The tree which produces the coffee grows to a height of from two to four metres from the ground but is seldom of greater thickness than from five to eight centimetres (1½ to 2 inches) in diameter. When arrived at maturity it very much resembles a lemon tree of eight years growth. The lower branches generally curve downwards, thus taking a shape somewhat like an umbrella. The wood is so soft and pliable that the top branches can be bent as to almost touch the ground." (Then follows an account of the leaves, flowers—which seem more fragrant than ours—and berry, of which the Arabs apparently make a decoction of the pulp). "The Arabs assured me that the plant is propagated from seed and not from cuttings, as some travellers have state The entire berry as plucked from the tree is sown in a bed, an afterwards when the young plants come up they are transplante in specially selected plans on the sides of the hills in the shadie and dampest corners, well sheltered from the wind. Moreover, i order to give shade and an equal temperature, and the necessa moisture, the Arabs plant splendid tamarind, bananas, and oth trees. The most difficult thing in the cultivation of coffee is preserve the moisture about the roots which is absolutely necessa for the growth of the plant. This object the Arabs attain by lea ing the water which runs from the mountains in small channels the roots of trees. There are 18 different kinds of coffee. All t year round the trees are covered with both flowers and fruit. T principal gathering, however, takes place in May, etc., etc"

The Arabs seem to dry the berry and grind off the husk in stone mill. This account seems to me interesting as showing th the Arabs not only shade, but also irrigate the coffee.

The coffee districts could be easily visited by any one going fro Aden to Hoderdah, north of Mocha, on the Red Sea, and then three or four days into the interior.

I cannot find what the rainfall of Yemen is. An Engli traveller describes the country as being very beautifully wood with mountain torrents; and no less a person than Alexander t Great decided to spend his declining years there. Any person w has "come, seen, and conquered" in B. C. A. might do worse th go there. It is governed by the Turk and would offer a pleasa change to those who are dissatisfied with the *régime* in B. C. Their labour regulations, I understand, are still of the old fashion kind.

TEA TRADE IN THE UNITED STATES.

REPORT BY BRITISH AMBASSADOR.

A report was recently made to the British Ambassador Washington on the tea trade in the United States, and subs quently sent to the Foreign Office. From this report whic has been forwarded by the Colonial Office to the Secretary the Ceylon Association in London, we take the following :—

"There is now a monthly importation of tea of between nine a ten million pounds. This is an increase of nearly one milli pounds per month as compared with twelve months ago, and near two million pounds compared with two years ago.

"Taking the figures for the eight months ended February 28 la the amount imported was 78,794,023 lbs. Of this about 54 per ce came from China and 37 per cent. from Japan. Only a little over per cent. was imported from the United Kingdom, British Nor America, and the East Indies combined.

"The previous year for the same eight months, China had abo 47 per cent. of the trade, Japan about 44 per cent., and the Briti possessions about 8 per cent.

"China therefore has increased her trade considerably, while a the other countries have sent less.

"The difference may be even greater than is shown by the figures because there is nothing to show from what country the t imported from British North America came. Part of it may ha come from China and Japan.

"Though the quantity of tea drunk per capita in the Unit States is less than previously, it does not necessarily mean that le tea is going to be consumed. The population is increasing rapid and large numbers of the immigrants come from non-tea-drinki countries; though they cannot be considered as tea consumers first, there is no doubt they will in time become so when they their children adopt the customs of the country. The habit drinking tea is certainly on the increase, and there will certain be a very much larger business to be done in the future than the is at present.

"The demand for Ceylon and Indian qualities is increasing most parts of the country. With energetic pushing and particul attention being paid to the quality and price preferred their oug to be no difficulty in securing for British dealers a much larg share of the trade.

"If we glance at the prices of tea imported from the sever countries it will probably suggest a reason why the sale of th from China has increased so much.

"Prices per pound of tea imported during the eight months nded February 28th:—

From	1901. cents.	1900. cents.	1899. cents.
United Kingdom	19·6	19·1	22·8
East Indies	13·5	12·6	17·1
British North America ...	17·2	16·3	16·1
China	10·6	12·0	12·4
Japan	14·1	12·4	13·7

"It will thus be seen that China has been selling her tea cheaper han her rivals and increasing her trade while other countries have ncreased their prices and have done a smaller trade.

"The following information supplied by dealers in tea in different oasts in the United States may be useful.

"*New York.*—The China qualities sell best in the East and the Japan in the West, Formosa included in the China teas. The demand for Ceylon and India qualities is increasing. The demand is chiefly for the cheaper grades on account of the duty. The proportion of green tea sold as compared to black is about 1 to 5.

"*San Francisco.*—The China qualities sell best, then Japan, and Ceylon third. The demand for Ceylon tea is increasing, the demand s chiefly for the better qualities. The proportion of green to black s 1 to 3. Demand for green is decreasing.

"*New Orleans.*—China tea is the best seller, but demand for Ceylon is slightly increasing. The chief demand is for medium and for better grades, the proportion of green to black is about 1·3 green to 2·3 black.

"*Philadelphia.*—China and Japan sell best. Never much demand for Ceylon. Demand is greatest for medium grades. Proportion of black to green 5 to 1. Demand for latter is decreasing.

"*Baltimore.*—China sells best. No demand for Ceylon. Demand chiefly for cheaper grades. Proportion of black to green about 5 to 1."—*H. & C. Mail*, April 26.

THE TEA DUTY.

LIVELY DISCUSSION IN THE HOUSE OF COMMONS.

Last night in the House of Commons the question of the tea duty was discussed. On the resolution for continuing the duty on tea at 6d per lb.,

SIR SEYMOUR KING

said he desired to say a few words with reference to the duty and its incidence. He was speaking on behalf of an industry in which 30 millions of British money were invested, which had caused jungles to be turned into smiling tea-gardens and which had given employment to hundreds of thousands of persons. The industry was, by the admission of the Chancellor of the Exchequer himself, doing extremely badly. There were forty-five companies registered in London, with a capital of £9,000,000, or nearly one-third of the total amount invested in the tea trade. In 1897 he found that capital was worth £12,000,000; to-day it was worth less than £10,500,000. Seventy per cent. of the companies engaged in the tea industry were paying no dividend. The result was that large numbers of these concerns had to go to the wall and that there was a great loss of employment among the coolies. That was largely due to the hostile legislation from which the industry suffered here and in India. Cocoa, the wholesale price of which was 6d per lb, was taxed 1½d per lb. Coffee, which sold at 8d per pound wholesale, was also taxed 1½d. But tea, the average wholesale price of which was 6d per pound, was taxed 6d per pound, or 100 per cent. Indeed, millions and millions of pounds of tea were sold at the wholesale price of 3d and 3½ per lb, so that the duty on such tea was at the enormous rate of 150 per cent. They all professed great devotion to temperance, but they did serve it much by taking the most popular of the temperance drinks 100 per cent. He agreed with the Chancellor of the Exchequer that people who neither smoked nor drank should contribute something towards the cost of the war, but he did not understand why tea should be taxed so heavily as compared with cocoa and coffee. The tea industry was being taxed out of existence, and the only satisfaction the planter enjoyed was the grim satisfaction that the Chancellor of the Exchequer would be unable to extract any income-tax out of them. He admitted the difficulty of obtaining any reduction of the tea duty this year, but he could not allow the imposition of it again this year to pass without lifting up his voice against it.

Mr. Lewis moved to amend the resolution by substituting "March 6, 1902," for "August 1, 1902," as the date to which the tea duty in its present form is to run. He said that the tax was most oppressive to the tea producers and consumers alike, and that there should be a reduction in it at the earliest opportunity.

The Chancellor of the Exchequer said in the Act of 1899 August was named as the date of expiry of the tax, because it was necessary to allow of sufficient time after the ordinary time of the year at which the Budget was introduced to prevent the clearing of tea in anticipation of an increased duty or the holding back of tea in anticipation of a decreased duty. Last year March 6 was adopted, because, for obvious reasons, the Budget was brought in on a very early date. He must adhere to the month of August, and he hoped the amendment would be withdrawn.

The amendment was, by leave, withdrawn.

Mr. Broadhurst asked whether the Chancellor of the Exchequer had made inquiry, as he promised last year, in regard to the feasibility of taxing tea on value and not on weight. The poor man who bought common tea paid as much duty as the man who purchased the best tea, and that was absolutely unjust. He hoped that in the course of a few years the duty on tea would be abolished.

Mr. W. Redmond said he wished to move an amendment with the object of reducing the tax on tea to the figure at which it stood before the Chancellor of the Exchequer's proposals of last year. The tax paid in Ireland upon tea was enormous, and the fact that tea was consumed to a much greater extent in Ireland than in Great Britain proved that the tax fell with greater severity upon Irish tax-payers than upon English tax-payers. Tea might almost be said to be the national drink in Ireland, and the percentage of alcohol consumed by people in Ireland was much less than the percentage consumed in England or Scotland. The amount paid by Ireland on tea in the year 1898-99 was £564,000. In 1899-1900 it was no less than £648,000. It was impossible to say what the figure for 1900-1 was because the Committee had not at their disposal the figures to show what the tax realised. He considered that was most inconvenient and improper, and he for one refused to consent to the re-imposition of the extra tax put upon tea last year until he knew what that tax had realised.

The Chancellor of the Exchequer said he would try to have these figures presented earlier next year. It would certainly be an advantage. As far as he could tell the total amount received last year on tea was £6,250,000, and of that the Irish share would be £875,000.

Mr. W. Redmond said that showed an increase of over a quarter of a million on the amount raised before the additional tax was put on. From the Irish point this taxation was unjust because it arose out of the monstrous state of things in South Africa. The people of England had allowed the war to be brought about, and had applauded it, and he took great satisfaction in knowing that they would now have to pay for it. The spree was over, and the taxpayer was beginning to find out that the wine was bad and that he had a headache. He moved to reduce the tax on tea from sixpence to fourpence.

Mr. Lough (Islington, W.) believed that any attempt to graduate the tea tax would be a failure; the inevitable effect would be to put a premium on the lowest quality and to beat down the higher qualities. If any reduction in duty took place he hoped it would be an all-round reduction, but they could hardly hope that any reduction would take place. We got 84 per cent. of all the tea used in this country from the colonies, and only 16 per cent. from foreign countries. On the other hand, we got 94 per cent. of our sugar from foreign countries and only 6 per cent. from the colonies. The tea so largely consumed by our people was for the most part produced in India and Ceylon, and undoubtedly the increase in the tax which was made last year had struck a disastrous blow to the industry. The consumption of tea had been checked, which had caused prices to fall, and thereby the producer had been hit. The consumer also had suffered; if there had been over-production the consumer would have got the benefit, but he had not got it. Before the tax was raised tea had been sold at 1s per lb., but now it was not retailed at less than 1s 2d, and it would be of great benefit if the extra 2d were taken off. As to the case of Ireland, there was no way in which that country could be worse hit than by raising the tax on tea or tobacco. He urged that the figures of Ireland's contribution should be given; they must be known, as the Chancellor of the Exchequer had quoted the gross amounts.

Mr. Austen Chamberlain said he would make inquiries as to the return; there was no desire to keep back information.

Mr. Lough said he had been trying to get these returns in time to be of any use for the last six years, but could not get them from the Treasury before August or September.

On the return of the Chairman, after the usual interval, Mr. Farrell supported the proposal for a reduction of the duty on tea. It was 40 years, he said, since Mr. Gladstone fixed the duty at 6d on the pound, so that the Chancellor of the Exchequer was not acting on very progressive lines in maintaining the duty at that figure. Tea was of universal consumption in Ireland, and there was some evidence to show that the increase of lunacy in that country was connected with the excessive use of adulterated tea. He contended that the increase of lunacy in Ireland was due to the shocking quality of the tea which was used by the people, and this low quality was caused by the high duty placed on an article of universal consumption. Generally speaking, however, their opposition was based on the higher ground of the financial relations existing between the two countries. He asked whether the Chancellor of the Exchequer could not see his way to differentiate the duty as between England and Ireland. If the right hon'ble gentleman did so, he thought that the loss to the revenue could not be very great, while the relief thereby afforded to the poor in Ireland would be very substantial.

Sir M. Bhownaggree said he hopped on some future occasion the Chancellor of the Exchequer would be able to announce a reduction in the tea duty, and thereby encourage native industry in India.

Mr. Lewis said the right hon'ble gentleman had allowed a golden opportunity to pass by, and now the burden would fall, not only on the producers, but the consumer of tea. If the Chancellor of the Exchequer pleaded that in a year like this he could not make a concession he would point, in reply, to the doles and sops which had been given in the last few years to the favoured classes whom the Secretary of State for India described as the friends of himself and his party. If these doles were taken away and a reduction of 2d made on tea, the Chancellor would earn the gratitude of great masses of people.

Major Rasch said that tea planters and merchants had in times gone by been making very considerable profits, whereas the people in the agricultural districts had to eke out a precarious existence by growing wheat at 40s and selling it at 30s (Laughter.) Yet they made no complaint to the Chancellor or anybody else.

The Chairman informed the hon. member that the point he was making was not relevant to the amendment.

Mr. Daly continued the discussion.

The Chancellor of the Exchequer.—My hon. friend the member for Central Hall and the hon. member for West Islington have approached this matter from the point of view of India and Ceylon, but I hope I have shown that I have not been wanting in sympathy with the tea interest thereon what I have already said with reference to this subject. I am quite aware that the tea interest is a most important one, and that at present it is in anything but a satisfactory position; but I rather attribute that state of things to over-production than to increased taxation. My hon. friend compared the taxation of tea at 6d per lb. with the taxation of cocoa and coffee, and he suggested that the tax on cocoa and coffee ought to be raised. But I would remind my hon. friend that when the taxation of tea was 6d on the lb. the taxation of coffee and cocoa was the same as now, and that when the tax on tea was lowered cocoa and coffee remained as they were. My hon. friend said that in his opinion the increased duty last year had been paid, not by the consumer, but by the producer, and that the price of tea has not been increased on account of excessive production. I think there is a good deal of truth in those statements. I do not say that the extra duty of 2d imposed last year has not been to some extent an increase of burden on Ireland, but my belief is that, owing to the reduced cost of the article, apart from the duty, although those who live in Ireland have had to bear a larger amount of the total sum raised from tea than before, I believe they have had more tea for it. The increase of duty, therefore, has not been, as is represented by hon. members, a loss to Ireland. I confess that, although I sympathise with the great industry of India and Ceylon, yet I think in dealing with this question we must first consider the interests of our own tax-payers. If I could reduce the tea duty I should be glad to do so, but to talk of a reduction this year is to my mind simply impossible.

Mr. Caine (Cornwall, Camborne), strongly opposed the d duty of 2d on tea imposed last year as pressing heavily on the consumers who purchased in small quantities, and as havi depressing influence on the tea trade of India and Ceylon. long as the Government persisted with their system of doles to agricultural interests every form of new taxation would be oppo

Mr. W. Redmond asked that before the second reading o Finance Bill a return should be presented showing how th ditional tea duty had operated in Ireland

The Chancellor of the Exchequer said he would do what he c towards providing the return.

Mr. Lough supported the request of the hon. member for Cl

The Committee divided, when there voted;—For the amendn 140; against, 221; majority against, 81.

The Committee then divided on the resolution, when the num were:—For the resolution, 221; against, 130; majority, 91.—*I and Colonial Mail*, April 26.

BASIC SUPERPHOSPHATE.

A NEW MANURE.

"On the 1st ultimo at Burlington House before the Societ Chemical Industry Mr. John hughes read a paper on his manure, Basic Superphosphate. He says that favourable no have already appeared in the *Times*, April 5th; the *Dublin Far Gazette*, April 6th; the *Morning Post*, April 10th; the *Stand* April 16th; the *Field* (page 522), April 13th; and the mate though only invented last November, is now being made by s the largest manure firms in the United Kingdom. Already manure has been shipped to Calcutta, Mauritius, Demerara, Trinidad."

Basic super is not intended to supersede ordinary superphosp on good arable land containing plenty of lime, but is intende be applied on soils that are either deficient in lime or contai excessive quantity of vegetable acids such as sour pastures It is also recommended as specially suitable as a fertiliser turnips grown on land subject to the disease known as "finger toe." Manure manufacturers have suffered seriously from petition with basic slag because on sour grass land acid man were unsuccessful, but now by the simple addition of slaked l ordinary superphosphate can be converted into a manure ticularly adapted to all sour soils.

The manure is known as "Hughes' Patent."

THE PROPOSED TEA EXCHANGE.

The London correspondent of the *Ceylon Observer* writes

THE TEA AND PRODUCE COMMITTEE OF THE CEYLON ASSOCIATIO met this week to consider the proposed Tea Exchange, and, a considerable discussion, this very diplomatic resolution passed:—"The Tea and Produce Committee of the Ceylon Asso tion in London having considered the Memo. and Articles Association and Bye-laws of the proposed Tea Exchange and Address of the Chairman of the meeting held on the 29th Ma are of opinion that benefit might result to the tea trade gener by the establishment of a Council which would bring together representatives of the various sections of the trade. They are entirely satisfied that the substitution of restricted auctions lim to members of a Tea Exchange for the entirely open public auct at present held would be of benefit to the producers and impor of tea, but they suggest that some form of private auction might be tried under conditions to be arranged by the vari sections interested in the tea trade."

It is possible that in Ceylon this may be thought rather a wol position to take up. But, under the circumstances, it is a reas able one enough, for it seems now practically certain that the system is to be given a trial, several firms of importers hav agreed to the principle. It is not so much that they think t sellers will benefit by the change, but that they think it politi humour the dealers who are bent on trying private sale. And th is also the feeling—on the *omne ignotum pro magnifico* pri ple—that no change can be for the worse and may possibly t

t for the better. At the same time, as I have said before, this ew departure is a thing to be carefully watched. At a time like e present, when shipments are moderate, private sales may amuse e dealers and do no harm to us. But, if there is again an over-pply of tea, as there was three months ago, these tentative sales ight be used as a lever for boycotting all public auctions and for rcing sellers into a hole-and-corner sale-room where teas would ot meet with honest competition. That way lies disaster for pro-ucers and for the London tea market.

CACAO PODS AND SEEDS.

A Cacao Planter has sent the *Ceylon Observer* the follow-ng interesting extract from his diary of tests made in 1894 nd 1900, and since kept as guides as to what pods to use or planting :

1894. Pods from a Young Estate.	Weight.	Length.	Round.	Number of Seed.	Wet. oz.	Dry. oz.
Forastero Rough and red, grooves yellow when ripe	2 to 9	12	45	5	2½
Condameera Smooth, red long groves yellow when ripe.	2 to 9	12	29	2½	1¼
Hybrid Smooth, red with green grooves, when ripe yellow	2 to 8	11	38	4	2⅛
Caraccas Rough and red, pink grooves latter, when ripe yellow ...	2 to 8	10	36	3¼	1½
Marawa Rough, green, whole pod, when ripe yellow	2 to 9	11	40	4	1⅝
Condameera Smooth, green whole pod, when ripe yellow	2 to 8	11	45	5	2½
Total	12 to —	—	233	23¾	11⅛
Say Average	2 to —	—	385-6	35-6	1⅞

1894—Selected *small* pods from an old estate well manured—hough I had many 3 lb pods.

Forastero Rough, red, pink grooves, latter yellow, when ripe ...	12-16	9½	11	51	4½	2⅛
Condameera Smooth, red, pink grooves, latter yellow, when ripe ...	1-13	8½	13½	43	5	2¼
Condameera Smooth and green, whole pod yellow, when ripe... ...	1-3	7	11¾	36	4	1⅛
Hybrid Rough red with green grooves latter yellow, when ripe ...	2-10	11	13½	38	4	2⅛
Hybrid Smooth red with green grooves later yellow. when ripe... ...	1-8	8½	12	26	3½	2
Caraccas Rough red, grooves get yellow, when ripe	1-4	8	11¾	35	4⅝	2⅛
Caraccas partially rough red, whole pod pink, when ripe	1-1	7	11½	30	3	1⅝
Marawa Rough, green, yellow grooves when ripe	1-2	10½	11¼	21	3½	1⅝
Marawa Short, smooth whole yellow, when ripe	1-2	7½	12	38	3¼	1¾
Forastero Hybrid Short, rough, green grooves, latter yellow, when ripe ..	1-3	7	11¾	36	4	2⅛
Total 10 pods	14 to —	—	—	354	39¾	20⅜
Say average	16½ to —			-35½	4	21-16

The last three pods from a dying Forastero tree 12 years old experimented on—

November, 1900. 1 pod ripened, though husk thin and soft ...	7 oz.	—	—	39	2	1¼
1 pod ripened, though husk thin and soft	7¼ „	—	—	40	2⅛	1 5-16
1 pod ripened, though husk thin and soft	8 „	—	—	42	2⅛	1 7-16

Among cocoa 10 and 10 The tree gave in last seven years 1,666 large good pods, cut out in November, 1900, seed equal to 2 oz. for pod or say 1¾, but cacao seed last seven years—no pods turned black, but all ripened, though tree was dying for practically four months.

THE COFFEE EXPERT EXPLAINS.

If you want to get puzzled about coffee, talk with an "expert" for a little while. Here is an explanation of the commonness of bad coffee, given to the reporter of a New York newspaper, by "the coffee buyer of one of the city's largest grocery establishments":

"There is no question about it, all coffee ought to be ground just before it is cooked, and yet fully three-fourths of our retail trade is in ground coffee. Laziness and late breakfasts have ruined our American coffee, and patent coffee pots have finished the job.

"About the only place I know of where I get coffee to suit me now-a-days is in the little village where I spend my vacation. I send up the green coffee, and the landlady browns it in small quantities and grinds it as she needs it. Then she makes it in a battered tin coffee-pot, settles it with an egg, and serves it with real cream, and I feel that I'm really getting my money back and that life is worth living.

"Of course, buying coffee already browned isn't so disastrous as buying it ready ground. I advise browning it at home, a little at a time, but it does take time and bother, and practically no green coffee is sold except to coffee roasters. They have every convenience for wholesale roasting and do it well enough.

"Anyone who knows anything about coffee can tell one kind from another, in the green; but the coffee roasting process has been so perfected that the green berry marks may be completely obliterated.

"Individual tastes in coffee differ greatly, and much of the flavour depends upon the roasting, which is another reason why coffee should be roasted in the home, to please the taste of each family. Some coffee-drinkers affect special mixtures, too, and buy the different berries and mix them themselves, so as to get exactly the blend they like.

"Not one cook in a hundred is careful enough not to allow coffee to boil, and boiling will queer the best coffee on earth. It must come just to the verge of boiling and stay there for a few minutes, but never go beyond; for boiling brings out the tannic acid and not only injures the flavour and aroma, but makes the stuff positively injurious."

CULTIVATION OF RUBBER TREES.

Some people may be surprised to learn that there is still a raw product that man finds just as difficult to obtain as it was a hundred years ago, and that it is harder to obtain than ever. It is the milk of a very insignificant looking tree, growing in great quantities over a large tract of territory. The tree itself is generous; liquid follows the incision; a wait of a few hours for the milk to harden and a man has the equivalent of a day's wages. This white liquid, after exposure to heat, and many species to that of the sun alone, and without any further treatment, gives thirty per cent. of its bulk in pure rubber. Despite this, the world cannot obtain a tithe of the supply it needs. The simple reason for this state of affairs is that the tree, although generous itself, elects to grow in regions which for the most part are death to white men and are removed from civilization by thousands of miles of swamp and jungle.

To alter this condition of things two sets of men are working on opposite lines. They are engaged in a sort of race for a very high stake—an unusually high stake indeed, as the pure rubber is now selling for something more than $1 a pound. One set are chemists, who are trying their best for the last twenty-five years to find a substitute for rubber. So far there has not been an unqualified success among their attempts, and there are experts who go so far as to say that chemically it is impossible to combine for the market a substitute having the different properties of pure rubber. Be that as it may, hardly a day passes but the long-expected substitute is brought forward and the company formed to exploit the perfect substitute of the year before goes into the hands of a receiver.

The field of activity of the other set of men is very different. It is found in a few farms in Mexico and Central America, and in a few Government experiment stations, notably in Jamaica and Ceylon. There are a small number of farms where something like a systematic attempt is being made to farm rubber on a large scale; some half dozen in the Isthmus to Tehauntepec and a very few more in Nicaragua, Costa Rica, and the rest of Central America.

The difficulties which confront this handful of farmers are peculiar. In the first place, no one ever tried before to make rubber grow as a crop for the market. There are no data, no facts of even the simplest kind to tell these men whether their ideas are the right ones The natives of the country take no interest in things outside their own particular business, and a man about to establish a plantation has had to start fresh, with his own ideas to guide him and these latter cannot be said as yet to have become authoritative, for none of the farms are more than six years old, and the trees must be up that time before the question of growing them can be settled. Rubber planting, then, is not only an absolutely untried undertaking, but there has been nothing of tradition or general knowledge of the subject with which to make a start. If rubber were a delicate tree, or difficult to cultivate, the outlook would be disheartening indeed.

Second, the general conditions are against the planter. The nature of the country throws him entirely upon his own resources, and the climate is apt to be enervating, to say the least. Transportation is a great problem. Labour is scarce and not easy to handle, the native peon of Central America being a mixture of childishness and independence, and a hard drinker to boot. Although strong and active as young men, excellent axemen and better with a spade than any other labourers in the world, they become debilitated very early in life. They have no constitution and must be cared for like children. Furthermore, they look to the patron or owner, for the settlement of every ill, spiritual or temporal. You must keep them sober, get them out of debt, make peace between them and their wives, arrange any infelicities that may occur between them and their neighbors' wives, doctor the whole family, and educate the children, if you have time. For the peon is essentially a creature formed for the patriarchal system. With a chief or employer whom they know or respect the better class of peons become in many essentials ideal labourers—steady, careful, hard-working, quick to catch an idea, faithful to follow it out, entirely honest; their employer's interest becomes their own. But in order to obtain this desirable state of things a farmer should be a first-rate judge of capacity and character, a fair lawyer, physician, and man of business.

A third problem before the farmer of rubber is where to plant. *Castilloa elastica*, for practical purposes the only rubber in Central America, has an extremely varied *habitat*. It is found at all elevations up to 2,000 feet and in a great variety of soils and locations, with a consequent variation of rainfall. So here, again, the farmer must make a choice, and one upon which his success will probably depend, with nothing to guide him in the making. As regards location, it is conceded that Castilloa needs a tropical climate, a rainfall that can be depended upon, a good drainage, and an elevation of less than 1,500 feet, but these conditions have great latitude of choice.

The most important of the questions relative to the method of planting rubber is the one about which the farmers are most divided, and is probably the most vital connected with its cultivation. It is the question whether to plant in groves, in the open, or under forest shade. The advocate of the former system says that in any other part of the world, if one wants to get a particular crop, it is customary to give the tree or plant all the chance possible. One clears the ground, turns it up, and after the tree is planted keeps all weeds from encroaching upon its light and food space. Why not apply these elementary principles to rubber and plant in plowed and open land, in groves, like an apple orchard?

The advocate of the forestry system points, however, to the manner in which the tree grows naturally, and says that rubber is found thriving best under shade, in a cool, wet spot, and by "thriving" he says he means gives the most rubber. The tree will grow, it is quite true, faster in the open than in the forest, and you will get your groves of rubber trees more quickly, but the question is, will you get the milk from them? For it does seem to be a fact that rubber found in open pastures will not yield so much milk as those trees growing in the forest, where it is cooler and moister. If it could be ascertained exactly what function the milk of the tree performed, one would probably be able to tell how much sun and how much rain would produce the tree with the largest quantity of rubber. The milk is not a sap, but a latex, which is carried just under the outer bark, and the slightest nick from a pen-knife will be followed by a thick liquid, which if caught on the finger dries at once, leaving a shred or two of pure rubber, like small elastic bands.

There are farms established by exponents of each theory. can see in Mexico rows of young trees in open cleared lan every respect like a coffee or orange plantation; and aga Costa Rica the farm consists of rubber trees planted in amon forest trees, only cleared where the growth is very thick, thou course the bush is kept down by cutting twice a year. Those are following these two theories will be relieved when they their first crop. But at present they are having rather an an time of it, for on the one hand it will be expensive business, n say impossible, to plant shade among those trees in the open the rubber may be ruined before the shade comes up. But course would be imperative should the advocates of the orc theory find themselves in the wrong. On the other hand, sh the forestry people be at fault it will require considerable ski the owner of the rubber growing in the forest to cut out the and let in the sun without injuring the rubber. Ringing tre the right phases of the moon, some eminent scientists to contrary notwithstanding, will go far toward solving the pro for the grower of rubber in the forest and make his positio stronger of the two, on the whole, in that he runs the lesser as it is easier to cut out the shade than to put it back.

As for the rubber planter's profits, nothing definite can be about them as yet. A man might buy a thousand acres of rubber land for $5,000, and he might plant it and bring it to duction for $45,000 more—$50,000 in all But now as to the ret it is like figuring on the chicken industry; one becomes alarm the rate chickens, eggs, and profits pile up. In the same way estimated that rubber will produce a handsome return every at the end of the sixth year from planting. Anyone can work for himself the following sum in multiplication for the profi the eighth year: One thousand acres with 200 trees to the a one pound of rubber to the tree each year, sold at a net pro 50 cents a pound.—*Ag. Gazette.*

GLAZED COFFEE.

The *American Grocer* remarks :—

The package coffee war in Ohio has some humorous features, of the sort that may prove very costly for those originating th For instance, circulars have been sent through the State, tw which are headed respectively, "An Appeal for Pure Food in Kitchen" and "Common Sense About Coffee." They state there is a great deal of glazed and self-settling coffee on the mar and that it is under the ban of the Dairy and Food Com sioner; that this glazing is intended to cover up defects in co and is largely composed of either bad eggs, or glue, or rosin, Irish moss. Then follows a statement that glue is made out of bones, hoofs, etc The circular also displays a cut, showing collection of "factory eggs," "roaster eggs," "muscular eggs," shows a few eggs with young chicks just emerging from the sh These circulars also state that by the use of "glazing" the ma facturer gains about two ounces on each pound. The inferenc that "glazed" coffee is ruining the health of users, and that S Dairy and Food Commissioner Blackburn had found it neces to call a halt on its sale in Ohio.

Such statements injure the entire trade by creating a dist in the minds of consumers, which cause them to ignore all pack coffee. This ought to be a good time for the grocers of Ohi push bulk coffee. The coffee department can be made a g trade-getter and very profitable Never was there a more favour time for making money in retailing coffee than now. There difference in price between No. 7 Rio and the finest Padang Inte of 24 cents. a pound. Mexican, Central American, and Venezu coffee that will roast as well as any Padang Interior can be bou from 12 to 15 cents, and having a heavier body, is sure to satisfaction, particularly if a good blend is made.

The secret of a good coffee trade is to buy the very best flavou bean, have the coffee fresh roasted every day, and educate sumers to buy the whole bean and grind the coffee as wanted use. Keep the grades high, and remember that a high price car conviction to the minds of consumers that it means the high quality. A satisfied palate seeks gratification unmindful of c It may grumble, but it cannot resist the temptation to sat desire. There are department stores in New York that mak great fuss about 20 and 25-cent. roasted coffee, and yet offer th very finest selection at 45 cents per pound.

DISTRICT ASSOCIATIONS.

SHEVAROY.

Proceedings of a Meeting of the Committee of the Shevaroy Planters' Association, held in the Victoria rooms, at 1 p.m., on Monday, the 6th May, 1901. PRESENT :—Messrs. W. J. Lechler, C. Rahm, C. G. Lechler, Rev. M. Andersen, and Mr. R. Gompertz (*Honorary Secretary*).

Read Circular No. 33/01 of 24th ultimo from Secretary, U. P. A. S. I., forwarding letter from Honorary Secretary, Central Travancore, requesting our support in obtaining an import duty on tea.

Resolved that we consider the C. S. P. Association ought to be supported in this matter.

Read letter from Mr. G. Russell Gunning offering his services to proceed with the tea caravan to Persia to sell coffee for us.

Resolved that he be informed that this Association regrets that it is unable to employ him.

Read letter from Private Secretary to H. E. the Governor saying that it was impossible to grant the requests mooted by the Planters, *viz.*, to reduce the minimum for which supply bills can be granted and that notes should be cashed at the Yercaud Treasury.—Recorded with regret.

Read letter from S. Stanes & Co. forwarding correspondence with the Traffic Manager, Madras Railway, asking that the freight charged on coffee should be reduced to the same rates as that charged on Northern Railways.

Resolved that Honorary Secretary be requested to ask the Chairman, U. P. A. S. I., to move in the matter.

The following papers were read and recorded :—

Circulars received from the Secretary, U. P. A. S. I., Madras.

No. 29/01. Baron Von Rosenburg wants to know the rate of land tax paid to Government for coffee lands.

No. 30/01. Madras Chamber of Commerce forwards copy of letter addressed to Mercantile firms and Railways *re* obtaining a reduction in freight from Madras and hopes the U. P. A. S. I will support it.

No. 31/01. Forwarding correspondence between Madras Chamber of Commerce and Government of Madras *re* improvement to Madras harbour which Chamber considers emergent.

No. 32/01. Forwarding letter from Legislative Member enquiring whether it would be desirable for a Committee of the U. P. A. S. I. to discuss amendments to Labor bill, or whether it should be left till Annual General Meeting.

No. 34/01. Madras Chamber of Commerce will be glad to join U. P. A. S. I. in endeavouring to prevent the adulteration of coffee.

No 36/01. Malabar Chamber of Commerce will gladly join in any action to stop adulteration of coffee.

Letter from Superintendent, Police, Salem, in reply to this Office letter No. V, dated 22-4-01, regarding the behaviour of the Police in the Coffee-stealing Case at Scotforth Estate.

Books and papers received during the month :—

Proceedings of the Coorg Planters' Association, dated 30-3-01.

Proceedings of the Indian Tea Association.

Brazilian Review, dated February 19th and 26th, March 5th and 12th, 1901.

Planting Opinion, dated March 30th, April 6th, 13th and 20th, 1901.

(Signed) ROBT. GOMPERTZ,
Honorary Secretary, S. P. A.

INDIAN TEA ASSOCIATION.

The following are extracts from an Abstract of the Proceedings of a Meeting of the General Committee held in Calcutta, 7th May, 1901 :—

Considered a draft of a proposed Circular to the members of the Association respecting the amalgamation of the Cachar and Sylhet Branches. On the 4th March the Surma Valley Sub-Committee had submitted to members a scheme under which the two existing Branches would be replaced by one organisation to be styled the Surma Valley Branch This Branch would consist of nine District Committees—four for Sylhet and five for Cachar—and a General Committee. The members of the District Committees would be appointed by Calcutta Agents; and the members of the General Committee—fifteen in number—by the District Committees. The scheme had been received with approval by all Calcutta Agents interested in the Surma Valley. The Sub-Committee had accordingly decided to put it into operation. With that end in view they had prepared the draft circular already mentioned, the main object of which was to ask Agents to communicate with their representatives on the District Committees, in order that those bodies might be got into working order without delay. There were, however, two other points raised in the Circular regarding which the General Committee thought some further discussion was required. They were (1) as to a local subscription; and (2) as to the Secretaryship of the Branch. The Sub-Committee thought no subscription was necessary; and that an Honorary Secretary should be appointed.

After some discussion it was agreed that the arrangement proposed by the Surma Valley Sub-Committee should stand temporarily. That is to say that for the twelve months throughout which Mr. Cresswell would act there should be no subscription. In the meantime the District Committees and the new General Committee (when formed) would consider the matter, and report as to whether a local subscription and a paid Secretary were deemed necessary. Certain modifications were to be made in the draft circular to bring it into conformity with this decision.

The Committee discussed with Mr. Mann a letter dated 14th April which he had addressed to them with reference to certain recent statements made in the English press by Mr. E. H. Skrine and others upon tea as a possible carrier of microbial disease. The statements were to the effect that some tea that had been examined in England had yielded colonies of microbial forms, living, and capable of cultivation by the ordinary methods of bacterial culture. In commenting upon these statements Mr. Mann pointed out that few natural products came into consumption with so great a guarantee of freedom from dangerous microbe infection as tea; for in the drying process during its manufacture it was always twice, and in some cases three times, treated in such a manner that all dangerous organisms were destroyed. Any material exposed to the air of a city such as London for a single minute would give colonies of microbial forms. But they were not dangerous, and were inevitable. From the point of view of microbial contamination the advantage on the side of tea was very great, when its all but absolute security was compared with the constant dangers to which milk, water, beer, etc., were exposed.

The Committee had also noticed a letter in the London *Times* of 13th April from a Mr. Geo. Brownen, F.C.S., in which similar statements to those traversed by Mr. Mann were made. Mr. Brownen had further remarked that, "for some time past, most unpleasant rumours from some of our "tea-producing countries have warned us that damaged, and therefore injurious, teas were being "craftily blended and manipulated, and sold as genuine or sound commercial articles." This remark was, in the opinion of the Committee, absolutely without foundation so far as India was concerned. And they resolved to draw the attention of the London Committee particularly to it although they had observed that that body had decided to take no notice of the statements made by Mr. Brownen and Mr. Skrine. A copy of Mr. Mann's letter was likewise to be sent to London, with the object of showing that the allegations as to the presence of dangerous microbes in tea were also entirely contrary to the facts.

Considered a letter dated 24th April from the Hon'ble Mr. Granville L. Acworth, Chairman of the Central Travancore Planters' Association, with regard to the question of the extension of the sale of tea in India. Mr. Acworth stated that his Association were considering a scheme for exploiting the markets of Southern India. It was proposed that, for this purpose, 10 per cent. of the low grade teas produced by the local gardens should be utilised. In the first place, however, he considered it necessary to ascertain if the proposals which had been formulated in Calcutta were intended to

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

include Southern India within their scope. If so, he thought the teas sold should be obtained locally.

This letter had been submitted to the Sub-Committee appointed in connection with the question. They had expressed the opinion that the operations of the proposed Tea Distributing Agency should include Southern India

It was decided to reply in this sense to Mr. Acworth's enquiries; and to suggest that possibly the local scheme might be worked in conjunction with the Agency. But, if not, and if the latter organisation had sole charge of the work in Southern India, contributions of tea from planters there would be of course accepted, and would in fact be required. It was also to be suggested to Mr. Acworth that before any final decision was come to by the Central Travancore Planters' Association, particulars of their scheme should be sent to Calcutta.

Considered letters dated 12th, 20th and 22nd April from Mr. E. G. Foley in connection with his journey to Meshed. He reported that the caravan left Quetta on the 19th April. He expected that it would reach Nushki in about a week's time. From that place the journey to Meshed would occupy about forty to fifty days. On reaching Meshed he proposed to await the Committee's instructions as to his written route. He thought it advisable that he should return *viâ* the Caspian Sea, Baku, Odessa, Alexandria, Suez and Karachi. In June and July camels could not face the Baluchistan desert by reason of the intense heat; and to return by the Seistan-Nushki route would consequently mean a delay at Seistan. He also submitted alternative proposals for a return journey through Russia, to enable him to make enquiries into the prospects of Indian tea in that country.

In their letter No. 337-O of 30th March the General Committee had sanctioned Mr. Foley's journey to Meshed on the understanding that the time occupied would not be longer than four months. They now decided to telegraph to Mr. Foley to the effect that he might exercise his own discretion as to the return route provided the time limit indicated were not exceeded.

With reference to the possibility of sending Indian tea into Russia overland, the Committee decided to ask the London Committee to endeavour to obtain some information as to the quality of tea, the style of packing, etc., which would be most suitable for that market.

Considered a letter dated 18th April from the Honorary Secretary, Central Travancore Planters' Association, with reference to the following resolution which had been adopted at the Quarterly General Meeting of that Association held on the 13th April, *viz.*:—

"That this Association do ask the support of the Indian Tea Association, and the United Planters' Association of Southern India, in urging on the Government of India the immediate necessity of putting an import duty on foreign-grown teas."

In the letter it was stated that in 1899 half a million lbs., and in 1900 1½ million lbs. of Ceylon tea, had found its way into India duty free. The Central Travancore Planters' Association thought that Ceylon and other foreign teas should be taxed; or that Indian teas should be admitted into Ceylon free of duty. The Ceylon teas sent to India were mostly without estate marks, and were consequently of a quality likely to be prejudicial alike to the interests of India and Ceylon.

The Committee discussed this proposal, and decided to point out, in replying to the letter, that an import duty upon foreign tea of 5 per cent. *ad valorem* was already levied in India; and to ask if it were suggested that this should be so enhandced as to make it a protective duty. Further enquiries were also to be made as to the reasons, especially in regard to Ceylon teas, which had led the Travancore planters to the conclusion that a tax was required.

MARKET REPORT.

[*Per Mail advices of 26th April* 1901.]

COFFEE.

The London Commercial Record says:—Large supplies of East India have been brought to auction during the week, and have met with a slow demand, but, as importers have shown a disposition to sell, a fair quantity has changed hands, prices for the most part showing a decline of 2s to 3s per cwt., but even at this concession many parcels remained unsold; the very limited proportion of choice grades brought, however, quite francy prices. Costa Rica and Central American descriptions have not been in such liberal supply, but they also show a reduction in value. A generally dull tone has prevailed in the market for "futures" until yesterd when an estimate of 6,500,000 bags for the next Santos crop be reported, prices rallied 6d to 9d from the recent lowest point, closing quotations are rather higher for the week; latest busin includes, May at 29s 10½d to 30s, September at 30s 6d to 31s and December at 31s 1½d to 3 s 10½d per cwt. Supplies to- at auction embraced 26 packages Ceylon, 1,588 bags East India bags Nyassaland, 211 bags, &c., Jamaica, 9 bags Salvador, bags Guatemala, 2,689 bags Costa Rica, 355 bags Nicaragua, bags New Granada, and 84 bags Colombian. Jamaica in pu sale went well, but Costa Rica and other kinds largely bought Tone of the market quiet.

London ...	... Santos ...	July delivery	...	30s 6d.
New York	... No. 7 Rio...	,,	...	5·35 cen
Hamburg...	... Santos ...	,,	...	30¾ pf.
Havre ...	... Santos ...	,,	...	37½ fra

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	19
Tons ..	18,786	17,275	18,565	15,
	Home Consumption.		Export.	
	1901.	1900.	1901.	19
Tons ...	7,020	6,135	7,742	6,

The preceding figures exhibit— To

In the Imports an increase this year of	...	...	3,
Home Consumption an increase of	...	...	
Export an increase of	...	...	1,
Stock an increase of ...	...	...	1,

Auctions this week have gone off as under:

East India.—8,801 bags partly sold as follows: *Naidoobat* smalls 39s 6d to 45s, middling 53s 6d to 51s, bold and extra b 64s 6d to 87s 6d, pea-berry 45s to 50s; *Mysore*, smalls 33s to low middling 40s to 46s 6d, middling to good middling 49s 6d to 6d, bold 60s 6d to 98s, pea-berry 47s 6d to 81s; *Coorg*, smalls 6d, to 45s 6d, low middling 41s 44s, middling to good middling to 56s, bold 61s to 76s 6d, peaberry 47s to 64s; *Neilgherry*, sm 37s 6d to 44s, low middling to middling 41s to 46s 6d, five ex bold 68s, pea-berry 44s 6d to 55s; *Wynaad*, smalls 40s 6d; *Nelli pathy*, smalls 38s.

Costa Rica.—Of 1,199 bags catalogued 950 bags sold—smalls to 43s, low middling to middling 43s to 52s 6d, good middling 6d to 57s 6d, bold 62s to 73s 6d, peaberry 42s to 58s.

Guatemala.—1,567 bags rather more than half sold—smalls 6d to 34s, good ordinary greenish 36s, low middling 41s to bold 53s to 65s 6d, peaberry 43s to 55s.

Salvador.—Of 2,005 bags offered 1,550 bags sold—smalls 32 35s, good to fine fine ordinary 37s to 39s 6d, low middling to m dling 40s to 43s, good middling 46s to 50s, bold blue 62s 6d, p berry 43s 6d to 58s

Colombian.—771 bags sold—damaged: smalls 33s to 35s, medi 43s 6d to 44s, bold 49s 6d to 51s, peaberry 42s 6d to 46s 6d.

Peruvian.—42 bags partly sold, small 32s, middling 45s peaberry 48s 6d.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897- Bag
Rio ...	2,467,000	3,034,000	2,771,000	3,851,
Santos ...	7,327,000	5,398,000	5,058,000	5,746,
Total...	9,794,000	8,432,000	7,829,000	9,597,
Crop...	—	8,971,000	8,772,000	10,461,

Rio Exchange 1s 0$\frac{13}{16}$d, previous day 1s 0¾d.

Havre, *April* 25.—Good average Santos April opened ste at 36½f. and closed steady at 37¼f., May opened at 36½f. closed at 37¼f., September opened at 37¼f. and closed at December opened at 38f. and closed at 38½f.

Hamburg, *April* 25.—Good average Santos April opened ste at 29¼pf. and closed steady at 30¼pf., May opened at 29¼pf., closed at 30¼pf., September opened at 30½pf. and closed at 31 December opened at 31¼pf. and closed at 32¼pf.

NEW YORK, *April* 25.—Closing prices of No. 7 Rio were as follow:—

	April.	May.	June.	July.	Aug.
ril 25...	5·15	5·15	5·25	5·35	5·40
ril 24...	5·00	5·05	5·10	5·20	5·25

East India offered in Public sale since our last.

	Mark.	District.	Size A.		P. B.	
	Olivers ...	Mysore ...	45	75/	15	86/6
	Colocumbie ...	Neilgherry ...	17	54/	8	49/6
	Stanmore ...	,, ...	20	53/	10	53/6
	Hopeville ...	,, ...	12	52/6	4	54/
	Heighfields ...	,, ...	14	not sold	7	51/6
	Tuttapollium ...	,, ...			21	52/
	Tudor Valley ...	,, ...	13	,,	5	48/6
	Woodlands Nilgiris ...	,, ...	17	,,	7	50/6
	Panora Peak ...	Wynaad ..	16	,,	5	50/
	Errumaculla ...	,, ...	14	,,	5	not sold
	Panora Peak ...	,, ...	22	,,	8	,,
	Mockett ...	Mysore ...	56	75/	34	63/
	Mocket ...	,, ...	62	not sold	46	60/6
	Harsanda Hukloo ...	,, ...	43	,,	14	54/6
	H. M. B. Hoshully ...	,, ...	34	,,	7	not sold
	Woodbriar, Nella Cotta ...	,, ...	14	,,	10	52/
	Craigs Eliya ...	Wynaad ...	18	56/	9	53/
	E. A. F. Wooligooly ...	Coorg ...	84	not sold	42	not sold
	Seaforth Naidoobatum ...	,, ..	43	,,	9	,,
	Vallavachen	Naidoobatum	15	,,	12	38/
	Balmadies Naidoobatum ..		18	78/	12	58/6
	J. H. Pilloor	Neilgherry ...	51	not sold	23	not sold
	Koodra Panchan ...	Shevaroy ...	33	,,	8	52/
	Hilgrore	Neilgherry ...	30	,,	10	49/6
	Naidoobatum Balmadies ...	Naidoobatum	11	69/	7	52/
	Tudor Valley	Neilgherry ...	9	not sold	4	48/
	Kotergherry K. C. ...	,, ..	8	,,	5	50/
	Tuttapollium	,, ...	17	51/	4	42/6
	Wood Suntikoppa ...	Coorg ...	30	not sold	2	49/6
	Mangles Hallery ...	,, ...	40	,,	8	55/
	Ruxidie Mysore... ...	Mysore ...	10	not sold	8	47/6
	Dubarry Bamboo ...	Coorg ...	33	59/	14	not sold
	Netrokul	Mysore ...	17	not sold	18	55/
	Chisholms Edorado ...	Coorg ..	42	,,	23	61/
	Murgaddi	Mysore ...	25	,,	24	53/
	Buliartry	Coorg ...	21	,,	9	60/
	J. R. Grove	,, ...	24	61/	11	58/
	Chisholms Banangalla ...	,, ...	18	not sold	13	62/
	Praters Deverah Cadoo ...	,, ...	76	55/6	42	57/6
	Westbury	Neilgherry ..	16	not sold	11	48/
	Chisholms Chinagiri ...	Coorg ...	11	61/	5	63/
	,, Selpikadu ...	,, ...	10	65/6	6	62/
	Waterfall	Neilgherry ...	20	not sold	14	55/
	Guynd W. P. C. ...	Naidoobatum	25	82/6	16	78/
	Barwood	,, ...	8	65/6	4	46/
	Barham	,, ..	9	64/6	6	48/
	Kelly	,, ...	25	87/6	15	79/
	Lawriston	,, ...	10	71/	6	45/
	Tulloes	,, ...	12	86/	6	80/
	Helen	,, ...	15	63/	6	48/
	Suffolk	,, ...	9	70/6	7	50/
	Goodaloor Mullay ...	,, ...	7	71/	6	51/6
	Lawriston	,, ...	5	67/6	4	49/6
	Hope	,, ...	19	79/6	6	65/
	Clovelly	Neilgherry ...	6	not sold	6	44/6
	Grange	,, ...	21	50/	7	46/6
	Goodannie	,, ...	6	56/6	4	51/
	H. C. S.	Mysore ...	100	71/	39	78/
	H. C. S. S.	,, ...	44	73/	16	72/
	M. B. Honeyvale ...	,, ...	108	60/	24	not sold
	D. H. Sidderkhan ...	,, ...	18	not sold	7	61/
	M. B. Merthikhan ...	,, ...	94	,,	19	52/
	Horkkhan	,, ...	7	73/	4	60/6
	Gubgull	,, ...	4	50/	7	48/
	D. B. C. Koosboor ...	,, ...	21	71/6	17	61/
	Tumblegherry	,, ...	5	60/6	2	50/
	H. M B Yemmekhan ...	,, ...	6	76/	3	61/
	Yemmekhan T. P. ...	,, ...	21	65/	11	60/
	The Giri	,, ...	15	71/6	21	60/6

April.	Mark.	District.	Size A.		P. B.	
25	C. S.	Coorg ...	35	76/6	14	69/6
	C. T. Coorg	,, ...	10	67/6	3	59/6
	C. T. H.	,, ...	9	48/	3	47/
	C. I. Pulkimad	,, ...	22	not sold	11	56/
	W. M. B. Allymangla ...	South Coorg.	7	47/	3	47/6
	C. I. Modur	,,	12	73/	5	63/6
	B. M. M. Acktoor ...	,, ...	12	48/	4	49/
	A. M. Nellore	,, ...	10	55/	7	57/6
	,, ...	,, ...	4	43/6	2	40/
	Cannon M.	Mysore ...	58	77/	16	81/
	Sriconteyas Sundekere ...	,, ..	15	not sold	11	not sold
	Moyaar Estates	Wynaad ...	15	,,	7	,,

TEA.

CHINA.—At auction during the week 3,334 packages offered and partly sold at steady rates. Moning 3⅝d to 4⅝d, Scented Caper 3¼d to 4¾d. Oolong 3¾d to 11½d, Saryune 3½d per lb.

INDIAN.—A reduced quantity was brought forward at auction, *viz.*;—25,000 packages contrasted with 32,400 packages previously and 27,900 packages a year ago.

There was quieter tone in the bidding and except for the most desirable invoices, prices were not so generally favourable to importers as in the week before, especially for parcels with red or mixed leaf. Orders for some of suitable Pekoes and Pekoe Souchongs were to hand from outside quarters Rather under 2,000 packages from South India, mainly of ordinary quality, were represented in the sales.

No doubt the large amount of capital locked up in clearances in anticipation of the Budget in tea, &c, has hampered the trade for the time being, and rendered dealers indisposed to buy freely until they have been able to work off a portion of their stocks.

For 20,600 packages on Estate Account 7d per lb. was obtained, compared with 7½d per lb. for 16,000 packages and 9⅜d per lb. for 11,000 packages in the two preceding seasons.

Including what is advertised for Monday next, the total printed in April is as under:

1901.	1900.	1899.
116,000 pkgs.	111,800 pkgs.	61,200 pkgs.

making 1,579,000 packages put through the Mincing Lane Public Sale Rooms from 1st July against 1,549,000 packages and 1,457,000 packages in 1899-1900 and 1898-1899.

CEYLON.—Catalogues comprised 32,700 packages opposed to 31,900 packages on the 16th instant and 30,800 packages in 1900.

On the whole there was not such a strong demand and most kinds went rather irregularly. Quotations for both leafy and broken descriptions up to 7d per lb. were as a rule about maintained, but over that figure there was less inclination to purchase and for many of the medium and fine lines, particularly broken Pekoes, considerably below former rates had to be accepted to effect business. Finest were also in somewhat smaller request and easier. Shippers gave fair support to Pekoes and Orange Pekoes with good flavour.

The average is 7d per lb. On the 18th it stood at 7⅜d per lb. and also in 1900.

JAVA.—Nearly 4,000 packages passed the hammer. Not much change occurred in the value of the upper grades, but for others the tendency was lower.

For Monday next 2,500 packages are advertised.

Deliveries.—The clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 23rd April,	1901	13,015,344 lbs.
Do. do.	1900	7,488,205 ,,

During the fortnight the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	21,237	3,877	25,114
Ceylon	27,504	5,199	32,703
Java	2,649	1,292	3,941
Total ...	51,390	10,368	61,758

Also 333 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated April 26th, 1901, says :—

Quantity brought to Auction in London from 1st June to date.

	Indian. Pkgs.	Ceylon. Pkgs.	Java. Pkgs.
1900-1901	... 1,598,446	1,182,436	56,379
1899-1900	... 1,589,054	1,093,558	57,250

25,286 *pkgs.* Indian
33,329 „ Ceylon
3,941 „ Java
} Total 62,556 packages were offered in public auction this week.

The low prices lately current have undoubtedly assisted materially in promoting a taste for Indian and Ceylon Tea in foreign countries. The re-exports from Great Britain given in the following table show an increase in every country specified.

Quantity of Indian and Ceylon Tea re-exported from 1st January to 31st March.

	1901.	1900.	1899.	1898.	1897.
	INDIAN.				
Countries in Europe...	1,717,011	1,161,569	985,802	951,555	788,111
United States ...	444,512	121,413	194.204	200,021	156,214
Canada	583,228	344.586	700,846	400,008	695,532
Newfoundland ...	18,063	14,873	13,043	5,921	—
Other Countries ...	931,703	663,978	275,638	260,266	195,040
Total lbs...	3,694,517	2,306,419	2,169,533	1,817,771	1,834,897
Transhipments to North America ...	329,957	408,974	180,096	615,265	1,779,782
To other Countries ...	159,836	—	—	—	—
	CEYLON.				
Countries in Europe...	2,404,232	1,730,433	1,523,680	1,544,029	1,344,252
United States ...	566,876	253,134	300,953	350,678	307,683
Canada	422,905	318,204	467,596	446,309	667,398
Newfoundland ...	51,032	33,472	29,698	43,803	—
Other Countries ...	855,229	494,861	315,521	323,116	237,343
Total lbs...	4,300,274	2,830,104	2,637,448	2,707,935	2,556,676
Transhipments to North America ...	695,097	343,193	104,033	432,360	682,515
To other Countries...	151,996	—	—	—	—

Indian.—A marked diminution in the size of the auctions is now taking place, only 25,286 packages being brought forward during the week, while the quantity advertised for next week only totals 23,031 packages. 229 "last of the season" invoices have been brought forward to date, against 257 to the corresponding date last year. There was not much change to note in the market except that bidding was hardly as brisk as last week, while some slight irregularity was occasionally noticeable in prices. There was good competition for some fine liquoring parcels from Assam. The following averages are worthy of note:—Budla Beta T. Coy.'s gardens "Budla Beta" and "Kanjikoah," 1/2¼ and 1/2, respectively; "Jokai T. Co. Hattialli," 1/1¾; "Koomtai," 1/0¾.

Week's average of Tea sold on Garden Account 1901, 20,824 pkgs., av. 6·89d. 1900, 25,524 pkgs., av. 7·56d.

Total Tea sold on Garden Account 1st June, 1900, to date, 1,321,124 pkgs., av. 7·23d. 1900, 1,259,232 pkgs., av. 8·27d.

Ceylon.—The heavy auction of 33,329 packages coming after the sale of 31,594 held last week proved a severe strain upon the market; this was most pronounced in medium and better liquoring Teas, which have been in somewhat fuller supply than was the case a few months back. Broken Pekoes of this class were more depressed than whole leaf Teas, and frequently sold at a distinct decline upon last week's rates; the firmest grades were Teas for price, which remain at about the same quotation as last week.

Average for week 6·90d., against 7·34d. in 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 419,151 pkgs., av. 6·66d. 1900, 387,079 pkgs., av. 7·53d.

Java.—A somewhat heavy supply was brought forward, comprising 3,941 packages, in which twenty gardens were represented, all the Teas being of direct import. Competition was fairly general, although several breaks were withdrawn from sale; the market was, nevertheless, on the whole, slightly firmer than was the case before the holidays, this being the first auction held since Easter.

Bank Rate 4 per cent. Exchange on London three months' sight:—Calcutta 1 4$\frac{5}{32}$. Colombo 1/4$\frac{3}{16}$.

COCOA.

There was little movement in the market on Tuesday when 3, bags were brought forward for public competition; only ab 1,050 bags found buyers, prices generally ranging about the sa as last week. Of 702 bags Trinidad offered, 490 bags sold—fine 70s to 70s 6d, middling to good 67s to 69s 6d, and blacks 45s being valuations. 42 bags Dominica brought 59s to 61s 6d, bags fine bright red St. Vincent 65s to 66s, and 12 bags fair Lucia 62s to 63s. Guayaquil moves off fairly well at steady pric 880 bags offered and 500 bags sold—grey to fair Caraquez 62s 64s 6d. The following passed the hammer unsold:—153 b Grenada, 254 bags Samana, 99 bags Colombian, 50 bags Bahia, bags Venezuelan, 262 bags Puerto Cabello, 447 bags Ceyl Private transactions embrace 200 bags Trinidad, including f at 71s 150 bags fair common Grenada at 60s. 100 bags Colomb on secret terms, small lot of Venezuelan at 72s, and 200 b Guayaquil-Caraquez at 61s 6d to 64s 6d per cwt.

PEPPER.

Black.—The market has passed through a very quiet week, a the only business reported for arrival is a sale of 15 tons Singapo March-May (s.) at 6$\frac{5}{32}$d, which is in favor of the buyer. On spot moderate sales of Singapore have been made at 6$\frac{1}{16}$d.

At Auction on Wednesday 166 bags Aleppy retired at 6d to 6 13 bags good bold heavy brown Ceylon realised 6d per lb.

White.—is steady with a fair business at full rates for Singapo Penang being dearer in the spot. On the spot sales of Singapore are reported at 9¼d, and Penang at 8$\frac{9}{16}$d to 8⅝d. arrive only a limited trade—Singapore, July-September (s.) at to 9$\frac{9}{32}$d, and Penang, June-August at 8⅝d (the latter being decline).

At public sale on the 24th instant 39 cases 120 bags Singap were bought in at 9¼d to 11½d, whilst 21 bags good Ceylon sold 9⅜d to 9½d per lb.

GINGER.

Cochin.—The market has quietened down considerably, but undertone is very strong. Privately only small sales have pass recent top rates being well maintained in the business done, wh at auction of 58 cases 289 bags offered 20 cases small rough c heavily limed, sold "subject" at 38s 6d washed rough being boug in at 40s per cwt.

Jamaica.—was again in excellent demand, and practically whole of the 1,105 barrels catalogued sold, prices obtained exhib ing a further rise, especially in the case of the best lots. Good fine bright washed realised 62s to 71s fair 52s 6d to 60s low m dling 46s to 51s, common to good common 41s to 45s 6d, low da 38s 6d to 40s per cwt.

St. Lucia.—22 bags limed rough small sold at 36s to 40s per c

Green.—10 barrels realised 40s per cwt.

CINCHONA.

The auction to be held at Amsterdam on May 9 will consist 5,430 bales and 109 cases, weighing 513,543 kilos. Java bark. I expected that a supplementary catalogue will be issued later. the drug-auctions 8 serons of Huanoco sold at 6¾d to 7d, and twen three serons of Loxa quill were held for 1s 6d per lb.

QUININE.

Dull of sale, and easier in second-hands. The small business d includes a few thousand ounces German sulphate, at 1s 3¼d to 3¾d for August delivery; spot is quoted 1s 3¼d per oz.

CARDAMOMS.

Fine qualities were dull of sale, 3s 7d being refused for extra b pale, which were valued at 4s; medium and lower qualities w dearer, however. The following prices were paid:—Ceylon-Mysc Fine bold pale (1 case), 3s 6d; medium to bold pale, 2s 11d to 3s medium palish, 2s 6d to 2s 8d; medium long brownish. 2s 5d; sm and medium pale, 1s 9d to 2s 2d; small palish, 1s 7d to 1s 1 small specky, 1s 8d; good splits, 1s 4d to 1s 5d; brown pickin 1s 4d to 1s 5d; very small shelly, 1s 1d; dull greenish to pale, 2s to 2s 2d. Ceylon-Malabar: Good bold polish, 2s; small ditto, 1s and ordinary pickings, 1s 4d. Seeds were in demand, and practica all sold, at from 1s 10d to 2s 2d per lb.

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

VOL. VI.] MADRAS, SATURDAY, MAY 25, 1901. [No. 21.

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SUBSCRIPTION.—Payable in Advance: Yearly, Fifteen Rupees; Half-yearly, Eight Rupees; Quarterly, Five Rupees, and Monthly, Two Rupees, including postage. Single Copies, Eight Annas.

ADVERTISEMENTS.—The charge for line advertisements is As. 4 per line for the first; As. 3 for the second, and As. 2 for the third and succeeding insertions. Five-line (or shorter) advertisements from Subscribers will be inserted for three issues for One Rupee; non-Subscribers will be charged Two Rupees.

DOMESTIC OCCURRENCE.—The fee for inserting a domestic occurrence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 31st instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

THE COST OF COFFEE.

Estimates of the cost of a particular product, like estimates of the cost of a particular mineral, must necessarily be somewhat unreliable. The conditions of planting, like those of mining, vary very considerably and one man or one mine may be able to produce an identical commodity or mineral at 10 or even 20 per cent. lower cost than another, because of circumstances not under human control. Notwithstanding this variability of conditions, however, estimates as to the cost of production of coffee are not without their uses. If carefully made, they give some idea of the minimum price under which even the most favoured planters cannot produce with a margin of profit; they give some indication of the points at which this or that estate, or even this or that producing country, must drop out of the race; though allowance must, of course, always be made for the quality produced in each country and for the geographical and political circumstances that regulate the choice of market. As to the cost of Indian coffee, we have, we regret to say, no reliable information. It is but natural that planters should hesitate to give out to the world a note of the price at which they can produce; that they should not care to publicly announce the point at which profit ceases and loss begins. Yet we cannot but think that it is to the interest of the coffee-planting community in India as a whole that every member should have some idea either of the average or of the probable maximum and minimum cost of producing coffee in the different districts, with a memo. as to how the average quality produced compares in value with a given type. It should be possible to obtain information of this kind from the majority of planters and to form at least an approximate idea from it as to what coffee costs in Coorg, Mysore, Nilgiris, Wynaad, Shevaroys, Nelliampathis, etc. We would suggest that all such calculations be made on the basis, not of cost *on the estate*, but of cost per cwt. *delivered*

c.i.f. London. This, broadly speaking, is the market where all the different qualities of Indian coffee meet in competition.

We have published from time to time estimates of the cost of Brazilian coffee. A more recent calculation of sale proceeds compared with cost is given below, not merely to show figures relating to a very small lot but to indicate the general lines on which Indian estimates might be drawn up, for comparison with Brazilian. The estimate is made by a planter in Barra Mansa, in the State of Rio de Janeiro, and is as follows:—

Freight per Railway	64$000
Cartage at Rio	10$000
Duties	96$000
Hire of Bags	4$000
Commission on Sale 3%	27$000
	201$000

To this, he states, must be added the cost of production, as follows:—

Cartage from the Plantation to Station	100$000
Picking 250 alqueires at 800 reis	200$000
Hauling to the drying Yard	16$000
Drying at 40 reis	40$000
Washing and Sorting	40$000
Freight of Bags at 300 reis	7$400
Transfer from the Western to the Central Railway	2$500
Work on Plantation	100$000
Unloading, etc.	30$000
Management	60$000
Interest 10% on 536$600	53$660
Employees	210$000
Expenses of Planter's family	205$000
Total cost	1,064$660
Yield of 100 arrobas at 9$000	900$000
Loss	164$660

This gentleman complains that as at 9$ per Arroba coffee leaves a dead loss it is better to leave it unpicked on the trees. The *Brazilian Review* criticises the above calculations, remarking that for so small a quantity as 100 *arrobas* the planter's expenses personal and for employees seem excessive. Undoubtedly, says our contemporary, "for small plantations managed on such a scale, present prices must be absolutely ruinous. Even deducting interest and personal expenses, at 9$000 the *arroba* there remains on 100 *arrobas* only 94$000 clear after payment of all other expenses. How the small planters in the States of Rio and Minas are to live at all under such conditions is hard to see and, should the present excessively low prices continue much longer, must result in some sort of a transfer of plantations to the labourer and elimination of the capitalist element." With special reference to coffee already gathered, our contemporary points out that according to the above account-sale the cost of delivery from Barra Mansa is 2$000 *per arroba*, so that, even at the villainous prices now current, 6$700 would remain over to the planter for every arroba of coffee that had already been picked and delivered at the station. If the expenses of hauling to the station (100$), return freight of bags and transfer from one railway to the other be included, in all 110$000 for 100 arrobas, the cost of delivery of the coffee would be raised to 3$110 per arroba and at 8$700 still leave a surplus after payment of expenses of delivery of 5$590 per arroba. It seems, therefore, unquestionable that when coffee has been actually gathered it will not fail to be marketed even should prices fall below present quotations. The expenditure for care and maintenance of plantations has been already incurred and that for harvesting and delivery, exclusive of the planter's personal expenses and interest, c not exceed, in this instance 4$360 per arroba. So that wh ever may happen to the next or subsequent crops, th seems little question that even at 8$000 per arroba greater part of the coming crop will be marketed. Th are, of course, many outlying points where such a pric prohibitive, but these must be exceptions. This by the w We have digressed merely to give an indication of one of useful deductions that can be drawn when a man has a idea of what his coffee actually costs. Such knowledge be turned to account in many other ways also, and we can but think that the planting community would benefit estimates of cost were submitted from various districts carefully collated.

THE SAN JOSÉ SCALE.

We give to-day some interesting papers on the San J Scale, a pest that has tried the patience of Californian fr growers very severely. In the ravages of this pest and various pests in India, as also in the remedial measures t commend themselves to agriculturists and scientists, ther a basis for interesting comparisons. Our readers sho institute these for themselves when their estates are affli by pests of any kind, for an account of the treatment of description often affords useful hints as to how to deal w others. For instance, a few months ago Dr. George Watt s gested that parasites might be utilised to wipe out pe Now in California the San José Scale has not been hav quite a peaceful time of late, and it is claimed that the truction of the Scale noticed in orchards in the Santa C valley and in the vicinity of San José, has been due larg to the attacks of one particular parasite, *Aphelinus fuscipen* This is one of four kinds that are known to feed on the Sc The parasites are exceedingly small, wasp-like creatures, larvæ of which feed upon the Scale insect. To determ whether or not this little friend was present in an orch Prof. W. G. Johnson once cut twigs about 4 in. long, c taining Scales, and inclosed them in glass tubes about 6 in length, the ends of which were stopped with cotton. there were any parasites present, they were seen in a days crawling on the surface of the glass within. In instance 1,478 parasites were taken from a single tube, 1, from another, and over 1,000 from another. This was first important discovery of these little friends in abundanc eastern U. S. A few days before this discovery the Profes had advised the owner to cut and burn all the badly infes trees. Immediately after finding the parasites, he was advi to cut and pile all the wood and branches, but was given spec directions that they should not be burned. If the trees been burned, all the parasites would have been destroy On the other hand, where the twigs were left in the orch the little insects escaped and concentrated their attack u the destructive Scales on their trees where they had b overlooked. Now, as this keen observer of Nature, remarks "By using a little judgment in these matters an orchar can assist nature in restoring the balance she desires." the same time he throws out a warning that it must be bo in mind that we cannot expect too much from these li friends, and it behoves every fruit-grower to do everyth in his power to prevent the further spread of the Scale,

t the same time foster the development of nature's own educing agents, the parasites.

Ten times more interesting than cock-fighting would a ontest be between, say, the green bug and some parasite friendly," if the observer were the proprietor of a stricken state. It is obvious that the world of parasites deserves to e studied, and that the little hymn, so dear to school-boys, bout "big fleas" and "little fleas" points to a line of cientific research that deserves to be followed up "*ad nfinitum.*"

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S .I.)

The General Committee of the Indian Tea Association Calcutta) have issued, under date 16th instant, their Monthly Return of Sailings and Daily Customs Entries of Tea from Calcutta, also a Return of Exports of Ceylon Tea for four ears up to 29th April, 1901.

Exports of Indian Tea from Calcutta.

	1901. Lbs.	1900. Lbs.	1899. Lbs.
ailings to Great Britain in April ...	444,317	127,873	419,402
ailings to Australia and New Zealand in April	35,840	80	107,231
ailings to America in April ..	13,123	*Nil.*	135
ailings to other places in April ...	556,960	127,537	99,713
otal Sailings in April ...	1,050,240	255,490	626,481

		Lbs
aily Customs Entries for Export to Great Britain in April	1901 ...	195,555
Do. do. do.	1900 ...	431,993

Exports of Tea from Ceylon.

otal Exports from 1st January to 29th April ...	1901 ...	45,229,618
Do. do. do. ...	1900 ...	46,056,792
Do. do. do. ...	1899 ...	35,381,047
Do. do. do. ...	1898 ...	36,663,813

Statement showing the Exports of Tea to Sundry Ports during the month of April, 1901.

FOREIGN PORTS.

	Lbs.		
rieste	100		
openhagen	1,000		
otenburg	250		
onstantinople	27,387		
ape Town	6,800		
anzibar	1,034		
ombassa	1 130		
erbera	2,160		
auritius	150		
rinidad	300		
den	520		
ahrein	56		
eddah	68,961		
hanghai	500		
ushire	23,276		
under Abbas	880		
atoum	11,028		
ientsin	350		
enang	20		
ingapore	1 928		
ussora	30,520		
aiffa	500		
affa	1,050		
amsoun	2,980		
ersina	2,322		
rebizonde	20,655		
		205,857	lbs.
ombay	319,232		
urrachee	2,440		
ther Indian Ports	29,431		
		351,103	,,
Total		556,960	,,

NOTES.

Coffee in London. Cable advices, dated 20th instant, put Stock at 27,000 tons; fortnight's landings, 4,300 tons; deliveries, 2,200 tons.

Cinchona in London. Cable advices report a firm market, price per unit 2d. Total monthly sales, 3,500 packages.

India's Tea Export. The quantity of tea entered for export to the United Kingdom in the first half of May is 466,704 lbs. against 692,064 lbs. last year. The total from 1st April to 15th May is 662,259 lbs. against 1,424,057 last year.

The Hon. Mr. Buckingham. A proposal is afoot to present the Hon. Mr. Buckingham with a piece of plate in public recognition of his services to the tea industry. The subscriptions are limited to £1. The lists close on 31st May.

Lipton, Limited. Lipton, Limited, pay a final dividend at the rate of ten per cent. per annum, making a dividend of ten per cent. for the year; £15,000 is placed to reserve, and £19,500 written off to depreciation. £5,166 is carried forward.

New York. The following are statistics of Imports to New York in 1899 and 1900:—

	1899.	1900.
Cocoa and Cocoa shells ..	£1,002,204	£1,215,600
Coffee	£9,755,791	£9,868,905

Tea is not specially mentioned in the consular report from which we take the above figures.

Rubber in the Straits Settlements. A brisk demand for Pará rubber seeds is still reported from the Straits Settlements, though the number of planters does not increase. The termite is found to be the chief enemy of the young tree. The most promising of recently introduced economic plants is said to be *Kickxia Africana*. *Castilloa* is not a success.

To make them pay. The Satyr was amazed because Man used his breath to warm his hands and cool his porridge. Well, during the last few weeks it has been urged in all seriousness that to make Indian Tea pay the yield must be reduced and to make Indian Coffee pay the yield must be increased. The Satyr must still regard human bipeds as "impossible animals."

Java Cinchona. The N. Y. Nederlandsche Veem, cinchona-bark department at Amsterdam, reports the shipments during April, 1901, from Java to Europe at 800,000 Amst. lbs., against 530,000 in 1900,

TO THE DEAF.

A rich lady, cured of her deafness and noises in the head by *Dr. Nicholson's Artificial Ear Drums*, gave £5,000 to his Institute, so that deaf people, unable to procure the Ear Drums, may have them free.

Address—No. 989 D, THE NICHOLSON INSTITUTE,
Longcott, Gunnersbury,
London.

[w. 26-5-00—26-5-1901.]

996,000 in 1899, 856,000 in 1898, and 560,000 Amst. lbs. in 1897. The total shipments from January to April have been 3,423,000 Amst. lbs. in 1901, 2,436,000 in 1900, 3,021,800 in 1899, and 3,212,000 Amst. lbs. in 1898.

Indian Teas.

"The season has now closed, and has proved—say I. A. Rucker and Bencraft in their circular dated April 25th—for the Planter quite the worst on record An over supply of common quality reaching this country to face an increase in the duty, has made quotations exceptional. For some time Indian Tea Shares were at a heavy discount, but recovered very quickly when the worst of the Tea market had been seen."

The London Tea Market.

In a cable dated 16th instant, Reuter reports that the tone of Ceylon tea is generally steady. Pekoe Souchongs are quoted at 4¼d (same as last week) and the average for the week at 6⅜d (⅛d down) as against 6d quoted for Indian tea. 20,000 packages of Ceylon tea were offered for sale, of which 18,000 were disposed of; while of the 13,000 packages of Indian Tea offered, 11,000 found purchasers.

Ceylon Tea in London.

Cabling on 17th instant Messrs. Gow, Wilson & Stanton report that the market generally is steady, that for medium liquoring Pekoes and Broken Pekoes as well as for Common Pekoes and Broken Pekoes being also steady. The price of fair liquoring Ceylon Pekoe Souchong is 5d (same as last week) and the average price of Ceylon tea sold on garden account this week was 6⅜d. (⅛d. down)—as against 6¼d. and 7⅛d. respectively in the corresponding week last year.

Amsterdam Bark Market.

The amount of bark announced for sale at the Dutch auctions in Amsterdam on May 9th, was 7,057 packages, containing 652,093 kilos. (nearly 1,434,615 lbs.) The exports of Java Bark for April were 791,000 Amsterdam lbs. against 524,000 Amsterdam lbs. last year, and 1,009,000 Amsterdam lbs. in 1899. The total for the four months is 3,382,000 Amsterdam lbs., against 2,418,000 Amsterdam lbs. last year, and 3,025,000 Amsterdam lbs. in 1899.

The New Tea Season in India.

It has been decided to hold the first auctions of the new season at Calcutta on the 31st instant. The news from the districts reports much more favourable weather, rain having fallen in all districts. Its distribution, however, has been very irregular in parts of Assam and Dooars, and a further fall would be welcomed. The quantity manufactured to date is said to be about 25 per cent. only of last year's returns The total exports from the 1st April to date show an increase; but include a large quantity of old season's tea, probably about 1½ million pounds.

Colombo Tea Sales.

Bidding was slow at the sale last week, but good or desirable kinds sold well and quite up to last week's prices. The *Times of Ceylon* remarks:—There was weakness, however, in common to medium sorts, and Pekoe and Pekoe Souchongs of this class were in less demand and sold in buyers' favour. Another report states:—Competition at this sale was rather slack, except for tippy and thick liquoring Broken Pekoes, which were in strong demand. Common Pekoe and Pekoe Souchong were neglected, and could only be sold at lower quotatio Very few fine teas were offering, but these realised g prices. Dusts and fannings were very firm. Quality ge rally very poor.

Advance in Price of Roasted Coffees.

American papers to hand are of coffee. The Coffee War is said have been ended, or at least a tr has been called, and in consequence the Woolson Spice peo advanced their *Lion* brand 1/2 cent. to 10 1/2 c. per lb., t placing it on parity with Arbuckle's *Ariosa*, which has usua been a full cent. higher than its rival's. It was reported t Havemeyer had made over control of the Woolson Spice to Arbuckles, but this was afterwards contradicted. It see however, certain that the Coffee and Sugar War has b at length settled, which is the great point as far as we concerned and a fact that cannot fail to favourably affect price of coffee generally.

Coffee in London.

Fine quality still commands spec terms. Advices, dated 3rd insta state:—The low prices ruling for Coffee have caused the tra to buy more freely—the supply to come forward is, howev still very large. East India shews a reduction of fully per cwt. for the bulk, but fine colory kinds, suitable for home trade, have quite maintained their value Fine or nary to low middling green Jamaica sold readily at advance of 2s to 3s per cwt. The higher grades of Co Rica and Central American are quite steady, but other qua ties are rather in favor of buyers. "Futures" have furth risen 1s per cwt.; Santos opened to-day at 31s. 3d May, 6d July, 32s September, and 32s 6d per cwt. December.

Coffee in Sao Paolo.

It is stated, says the *Brazili Review*, that the coffee crop in Simão this year will come out far under the estimate, owi to the great quantity of stunted berries. The flowering w about the average, and the fruit looked promising in its fi stages; but the great heat experienced during January a February prematurely ripened an immense part of it; the being fazendas on which two-thirds of it are useless. T phenomenon has been chiefly noticed in lands along the Se Azul. On 31st ultimo a meeting of planters took place Cravinhos, when resolutions were passed that the State Go ernment should be requested to take measures with a view the reduction of coffee tariffs and imposts. Accounts fr Mattao state that the late tremendous rainstorms have knock down about 30 % of the coffee berries in that neighbourho

Brazilian Coffees.

The *Brazilian Review* remarks th the prices recently ruling for coff must be ruinous to many planters, leaving absolutely margin for expense for the following season. Clearly wit out money and without credit many planters must go inev ably to the wall. It is possible that, even so, their plan tions will find buyers to continue the struggle, but as ye by year profits are cut down and disappear, plantations mu be more and more neglected and their yield diminishe Besides within two years all the new plantations will ha come to full bearing, when from one cause and another t production of coffee in Brazil may be almost certainly expect to show a regular reduction, as progressive as the increa since 1890 has proved. Prices will of course rise in cons quence, but only when they attain very much higher rat

an those current are they likely to stimulate planting in ew districts again as in 1890—1895.

razilian Coffee and British Tea Planters.

The *Brazilian Review* remarks :—"A SENSIBLE PROGRAMME—In Ceylon and India the "over-production" of a is creating as much discussion as coffee here. All kinds f proposals are rife, from limiting production down to prohiition of exports, but good sense is, as usual, re-asserting self as shown in the following programme adopted by influntial Associations : 1*st* Increase of the tea cess. 2*nd* Agitaon for the reduction of the duty on tea in England. 3*rd* o moderate manuring and manure more for quality than uantity. 4*th* To waste no time on wild schemes for reducing ne output, but to concentrate all attention on the means o increase the demand for tea. 5*th* Advertise, advertise, all ver the world ! 6*th* That those interested in producing should ecome interested in the large distribution Companies abroad nd a Reserve and Extension fund of Tea companies be emloyed for buying shares in Home Companies like Mazawattee, tc. We recommend the consideration of this programme to Brazilian planters."

Brazilian Crops.

The *Brazilian Review* of 2nd ultimo remarks that as regards coffee there eems to be some question whether it will be so extraordinaily early as was anticipated. From the interior of S. Paulo eports regarding the condition of the fruit on the trees are not atisfactory ; in many parts the fruit is hollow and empty and s generally expected to give a much lower yield in weight han last crop. Indeed it would be scarcely surprising, as he yield was exceptional this year, 50 to 55 litres of dry ruit having given 15 kilos. of marketable coffee, whereas 65 o 75 kilos. is the usual average. It seems possible that this ear even that average may not be reached, in which case, owever big the crop may look on the trees, a shrinkage of 0 to 20% in weight would cut a big figure. By some plantrs the poor appearance is attributed to the weather and by thers to prolonged neglect of the plantations and late weedng. Besides the idea is gaining ground that the crop will ot be so early, after all, as the good fruit is still green and nly the empty burned-up fruit has yet yellowed or seems eady to pick.

The London Tea Market.

The Produce Markets' Review of 27th ultimo says :—INDIAN TEAS—With considerably reduced supplies and a good steady demand most descriptions brought quite last week's rates. The medium and finer teas which formed a smaller proportion than latterly of the quantity brought forward were briskly competed for, and sold at prices somewhat less favourable to buyers. This was more particularly the case for those of earlier import of good appearance and quality, which are free from the uneven colour of the leaf noticeable in the Autumn growths. As these kinds are getting into a small compass, and there is every prospect of a good steady demand continuing, a firmer market is quite probable. The common teas have sold irregularly, and, on the whole, at easier prices, some of the lowest grades having been down to 3½d, while the trade have not experienced any difficulty in supplying their requirements at 5d and under. Of the coming crop the early reports were not favourable, but later prospects considerably improved, and the season is likely to be as forward as last year. The public sales comprised 25,200 packages compared with 32,400 last week, 3,122 being withdrawn. Most of the above consisted of Autumn growths, many of which were of mixed Red Leaf, for which the demand was slow, while the more desirable sorts met with a good reception.

The London Coffee Market.

The Produce Markets' Review of April 27, 1901, says :—After the heavy fall in the terminal market during the last few weeks a reaction has set in and prices began to advance early in the week. On Thursday a reduced estimate of the coming Santos crop was issued and considerably helped the upward movement, quotations advancing a further 9d per cwt. Seeing, however, that there is still much uncertainty as to the out-turn of the present crop, the total estimate for the year being already exceeded, although there are still two months to run, we cannot place much reliance on figures for the crop which is perhaps just commencing to be picked in the earliest districts. There is no doubt much that can be said in favour of higher prices, the present ones are abnormally low and, with a high exchange, planters getting a much lower price per bag. Still the coffee is there and must be marketed, and the principal feature that we see to favour an advance is that quite possibly some estates may after this year go out of cultivation and if so a continuance of bumber crops cannot be looked for. At the auctions a dull tone has prevailed ; Plantation East India, of which the bulk has consisted, has gone out of favour in many quarters both here and on the Continent, and as there is a heavy crop this year prices have had to be materially lowered until now it is by far the cheapest coffee in the market.

GENERAL ARTICLES.

TEA REDUCTION AND GREEN TEAS IN CEYLON.

AMERICA *v.* RUSSIA.

The *Ceylon Observer* says :—A gentleman who owns tea property in Ceylon and knows a great deal about tea-growing and manufacture in more countries than one,—indeed was "in tea" we suppose, before a million lbs. was exported from our island—thus expresses himself in the course of a letter sent to us by last mail :—

"As to the late discussion in your columns *in re* over-production, though I said nothing I think a great deal—and my thought is, How anyone in possession of any common-sense at all can support such an utterly nonsensical and unjust scheme as to urge a 10 per cent. reduction on all estates, no matter where situated In the first place such a combination is totally against the principles of political economy and in the second is a subtle way of robbing Peter to pay Paul. Indeed I cannot help thinking that the proposers and supporters of the scheme must have axes of their own to grind, which would be done if their views were carried out. I go further and say that in my opinion it is an unjustice and a sheer robbery to ask well-chosen and well-cared-for estates to fine themselves in order to support and keep alive estates which should either never have been brought into existence or cultivated with some show of reason other than 'grab all for themselves and let others go to the deuce.' Now that they find the boot pinches them, they appeal to the gererosity (foolishness rather) of those who have *not* been enjoying for a few years past the same prosperity as themselves, to save them. No—a thousand times no—an industry which cannot live except by the appeal to the generosity of the more wise of the same body deserves to die. The plain simple maxim applicable in this case is 'The survival of the fittest,' and the extinction of such places as cannot produce what the public demand, at a price that pays. I know a case in point : when I became interested in Ceylon, a friend who was seeking an investment at the same time—after many arguments—decided to invest in a low-country property. I placed my faith in high country.

Which of us had the better result? For many years my low-country friend undoubtedly scored over me and being wise in his generation he sold out at an enhanced price after some years of prosperity. Do you suppose I should pity him *now* if he had not done so and was now feeling the pinch? No—most decidedly no! Demand rules supply and if the latter attempts to gain the mastery, *it always fails* and suffers.

[There is, however, the hard case of owners of old coffee estates who had no option but to go into tea. - ED. *C. O.*]

"As regards the attempt at green tea making, as at present conducted, it is in my opinion doomed to failure, and I look upon the Bonus given to it by the 'Thirty Committee' as so much money absolutely thrown away. I have been for many years conversant with the green teas produced by China and Japan and their position in the markets of Canada and America, and I feel sure that, as at present made, there is no future, except one of failure, before the green teas now produced in Ceylon. My reason is that, as compared with the green teas of China and Japan, the Ceylon manufacture shows no point of resemblance, and therefore cannot compete with them. If you are able, by such subsidy and pushing, to create a demand in Canada and America for what is practically a *new type of green tea*, well and good, but my experience tells me that it is a most difficult and profitless task to try and change a nation's taste, and I do not think that such change will be effected.

"And this brings me to a final word. Years ago I spoke to one or two of the then 'Thirty Committee' urging that three-fourths of the money then, as now, was being absolutely *wasted* in America, and should be employed in Russia, but my advice, costing nothing, was deemed worthless. Perhaps bitter experience is now teaching the Committee the truth of it. America is not a large tea-drinking country, is prejudiced against change, and especially where that change is likely to benefit any British industry; whilst Russia is one of the most persistent users of the fragrant leaf, and is only now showing that interest in the Ceylon article, which a proper use of the 'Thirty Committee' funds would have induced years ago."

MODERN ARTIFICIAL FERTILIZERS.

THEIR ORIGIN, MANUFACTURE AND USE.

"H" writes in the *Planters' Monthly*:—

The following treatise is intended mainly for the guidance of farmers in the selection of the proper fertilizers for our particular soils. Besides it is the purpose of these notes to explain the general principles upon which modern, rational manuring is founded.

The Chemical Composition of Plants.—In order to ascertain which elements a plant requires for its normal growth and development it is necessary to find out of what it is composed. If the ashes of wood, straw, roots and other parts of plants is subjected to a chemical examination it is found that the same consists, invariably, of the following, *viz.*, phosphoric acid, potash lime, magnesia, sulphuric acid, chlorin, oxyd of iron, silicic acid, and soda. Water, carbonic acid, and ammonia (Nitrogen) have escaped as volatile gases during the process of combustion. All plants are therefore built up of these twelve substances combined together in different proportions.

The question now arises: Are all of these substances absolutely necessary for the normal growth and development of a plant or not? This matter has been the subject of careful and extensive experiments by eminent scientists. These experiments have demonstrated that a plant cannot thrive without sufficient quantities of water, carbonic acid, nitrogen, phosphoric acid, potash, lime, magnesia, oxyd of iron, sulphuric acid, and chlorin; whereas silicic acid, and soda seem to be unessential. The former ten therefore constitute the real plant-food, for without one of them no real plant-life is possible. Of course some of these are more important than others, besides some plants require more of one than of another; and it must be considered that soils differ a great deal in their chemical compositions, they are often rich in one plant-food and poor in the other. A soil, however, must contain all of these in order to be productive, with perhaps the exception of water and carbonic acid, which are supplied by the atmosphere, as is also a part of the nitrogen. It remains now to be determined which of the above substances are the most necessary and essential ones and which of them are generally deficient in our soils.

There is scarcely any soil on the Hawaiian Islands which la in oxide of iron, for the oxides of iron and alumina form the grea part of the bulk of our soils. Magnesia, sulphuric acid, and li are also mostly present in sufficient quantities Although the p centage of lime is sometimes quite low, it is nearly always suffici for the purpose of plant-food.

Nitrogen, phosphoric acid, and potash must therefore be cal the most important substances for it is these that we have supplement by means of manure. A chemical analysis may of reveal quite a good supply of one or all of these in a soil, yet th are mostly present in a more or less insoluble and inert form s therefore of little or no avail to the plants. The plant-food of a is absorbed in a dissolved form by a peculiar action of the fine roo it must be soluble before it is accessible to these roots, a although a small part of it is gradually rendered so through the fluence of the sun, rain, and atmosphere, as well as the action the roots themselves (by means of an organic acid secreted by the that is in most cases not sufficient to produce good crops y after year

Upon these facts are based the modern views on rational man ing and subsequent manufacture of suitable artificial fertilizers.

Artificial Fertilizers and their Manufacture.—The manufact of artificial fertilizers is a distinct branch of the chemical indus and a flourishing one, for artificial manures are to-day just as in pensable on the modern farm or plantation as a plough For intense and rational management they are an absolute necessi in fact oft-times the life of a farm depends upon it.

The material used for the manufacture of artificial fertiliz must be divided into three classes, *viz*, such that supply the ph phoric acid, or the nitrogen, or the potash.

The main sources of phosphoric acid are rock phosphat guanoes, and bones.

Rock phosphates are mineral phosphates of sedimentary ori and are found principally in Florida, South Carolina, Canada, Spa Algeria, and many other places, in crystalline form (Apatite) non-crystalline form (Phosphorite). They contain up to 80 and per cent. of pure tribastic phosphate of lime and are therefore v concentrated. They are scarcely ever used in their raw state, a manure, as they are of little use even if finely ground. But ma factured into superphosphate they form the bulk of the phosph manures on the market. Guanoes are found on many islands the Atlantic and Pacific. They consist mostly of carcasses a dung of sea-birds with more or less impurities. Some of th contain also considerable ammonia. Guanoes are also used ext sively in the manufacture of superphosphates, in fact they superior to minor phosphates, owing to the absence of fluorine a other undesirable ingredients, often found in the mineral ph phates.

Bones in the raw state are of little or no value as a fertiliz they contain more or less fat, which retards their early fermentati Various means have been brought into use to render the bo more available for manuring purposes. Boiled or steamed bon when ground, form an excellent manure for some purposes, a bone-ashes and bone-black (charred bones). Bones are also used the manufacture of superphosphates and double superphosphate

In all of these substances the prevailing form of phosphoric a is tricalcium phosphate and as this form is totally insoluble and little use to the plants, it has to be converted into monocalciu phosphate, a water soluble form, before it can be used for manuri purposes.

When phosphates, guanoes or bones (containing tribasic ph phate of lime) are treated with the proper amount of sulphu acid to displace two of the bases, the result is a mass consisting monocalcium phosphate and gypsum. This mass readily solidi and is afterwards ground and sold as superphosphate. Anot from of phosphoric acid is the dicalcium phosphate, in this only base is displaced by sulphuric acid. Dicalcium phosphate is of known as available or citrate soluble phosphoric acid It is soluble in water, hence not as valuable as the monocalcium ph phate.

Double superphosphate is a very concentrated superphospha in which liquid phosphoric acid has been used for dissolving, inste of sulphuric acid.

There is another phosphate preparation known as the phosph slag or Thomas Phosphate powders—a by-product of the Besse process of refining iron ores. It is used to a great extent Europe owing to its cheapness. The phosphoric acid is mos

esent in the form of tetracalcium phosphate. As it is low in rcentage of phosphoric acid it must not be regarded for export. is article must be finely ground to be of any avail, as it is plied directly to the land without first undergoing the process dissolving by sulphuric acid.

Of all the phosphate fertilizers there is none better suited to the cal soils and conditions than the superphosphate, for it supplies e phosphoric acid in an easily soluble form which is immediately ailable to the plants. It contains large quantities of gypsum, aking therefore the liming of fields unnecessary where it is used.

The nitrogenous manures are divided into three classes, accord- g to the form in which their nitrogen prevails. They are: Organic nitrogenous manures; 2. Nitrates, and 3. Ammonium mpounds. In the two latter forms, especially the nitrate, the trogen is almost immediately available as plant-food, whereas the rganic manures have to pass through a process of decomposition, fore their nitrogen contents will become available to the plants.

The chief products containing organic nitrogen are of animal igin, and consist mostly of dried blood, tankage, dried meat or sh meal, fish offal, horn or hoof meal and also hair, wool and ather clippings. All of these are of more or less value as manures, wing to the great differences in their relative percentage in itrogen as well as their mechanical conditions. Dried blood is the ost valuable one and as it readily ferments, its nitrogen is soon nverted into a soluble form. Good flesh meal as well as horn and oof meal are also good fertilizers for some purposes, but not as uick acting and effective as dried blood. The same thing may so be said of fish-scrap (fish guano) provided it contains not too uch fat. Hair, wool, and leather clippings are very slow acting anure and therefore of questionable value and unsuitable for rtilizing purposes.

Nitrate of soda or Chili saltpetre, as it is also called, is chiefly ported from Chili and Peru, where extensive deposits are found. contains from 15 to 16 per cent. of nitrogen. Nitrate of soda is e most active of all nitrogenous manure, which is due to its ighly soluble state, and is therefore often used as a top dressing here quick action is desired. No large quantities should be plied at any one time, for it is not absorbed by the soil and nsequently may be easily leached and carried down into the sub- il beyond the reach of the roots. An excessive use may produce jurious effects as it stimulates a rank growth of the foliage and tards maturity, but when judiciously applied it is a valuable imulant.

Sulphate of ammonia is considered the most valuable of nitro- enous manures, it is almost as active as nitrate of soda, but at the me time, not quite as soluble. Its chief advantage is that it is adily absorbed and retained by the soil, especially our clay soils, ithout losing its good qualities. Sulphate of ammonia contains sually about 20 per cent. of nitrogen It is quite expensive, the ost of it being imported from England and since annexation took lace, the imported article has to carry a duty of six dollars per wo thousand pounds, which does not tend to make it any cheaper. evertheless it is one of the principal constituents of the so-called mplete fertilizers, and the preferred form of nitrogenous manures.

The bulk of the potash manure is manufactured by the Potash yndicate of Strassfurt, Germany, where large deposits of carnal- t, sylvinit, Kieserit, etc., etc.. are found. These raw salts are ncentrated and converted into the following potash fertilizers, s., sulphate of potash, containing about 50 per cent. pure potash; uriate of potash, containing about 60 per cent. pure potash; lcined fertilizer salts, with about 38 per cent. pure potash, and ainit with about 12 per cent pure potash. Of these only sulphate potash and muriate of potash must be considered for these lands. The other two are not concentrated enough to bear high eights and other charges connected with exporting, although for me purposes they are just as good manures as the former. They re therefore mostly used in Europe. Sulphate of potash seems to be e general favourite on these islands and surely it is the best of all otash manures, for it is water-soluble and readily absorbed by the il, where it is retained for the gradual use of the plant. Wood- shes is also often used, but as the article generally contains only bout 6 to 7 per cent. of potash it is seldom imported.

Since artificial fertilizers are made out of two or more of the arious materials abovementioned, it follows, that there exist wide ifferences in the relative percentage of phosphoric acid, nitrogen, id potash, which naturally corresponds with the quantity used of ch of the ingredients. As their fertilizing as well as commercial value depend upon their contents alone, it is necessary that the farmer should know exactly what he is buying.

The following combinations are mostly used, *viz.*, superphosphate and sulphate of ammonia, superphosphate and sulphate of potash; superphosphate and sulphate of ammonia and sulphate of potash. These are the three best and most advantageous combinations and no doubt form the bulk of the artificial fertilizers used on these islands. The percentage of phosphoric acid, nitrogen, and potash can be made to suit the requirements of the soil. Nitrate of soda, dried blood, and some of the other substances abovementioned are also often found as constituents of artificial manures. Nitrate of soda is used mostly alone as a top-dressing. Fertilizers containing phosphoric acid, nitrogen, and potash are called complete fertilizers.

A proper fertilizer should be of good mechanical condition and its moisture should not exceed 12 per cent. The various ingredients must be so well mixed that the different particles cannot be discerned with the eye, in fact the fertilizer must look like one homogenous article. It must not cake in the bags and when dissolved in water should contain no coarse material in the sediment

Will it pay to use artificial fertilizers? This is indeed a well-founded question, which is only answered by careful, practical experiments and trials. But under any circumstances it must be the aim of the farmer to conserve the fertility of his soils, and not only by proper tillage but also by systematic restoration of such plant-food as is taken out of the soil by the annual crops. Even the richest soil will not continue to produce good crops without the use of proper fertilizer, on the contrary it will be gradually depleted of its fertility.

THE SAN JOSÉ SCALE.

The *American Agriculturist* gives the following advice as to **Spring Treatment for the San Jose Scale**:—

Trees of all kinds infested with San Jose scale should be given careful attention before the leaves appear, and the following methods of treatment are suggested.

1. All trees incrusted with this scale should be dug up and burned.
2. Moderately infested trees should be headed back by cutting out the tops and thoroughly washing the trunk and larger branches with a 2-lb. solution of whale oil soap and water. This can be applied with any ordinary spray pump. Use a potashlye whale oil soap rather than that made with caustic soda. The former is very much more effective and more easily applied, as it does not thicken when cold. The peach tree illustrated herewith is one in a block of 3000 cut back and treated one year ago. It represents one year's growth after treatment.
3. Slightly infested orchards of peach, pear, plum and apple should be sprayed with a 25% solution of 150 deg. fire-test kerosene and water before the buds open. About 25,000 peach trees were successfully sprayed last spring with this material in the Blue Ridge mt peach belt.
4. A 25% solution of crude petroleum and water can be used in the same manner. Commercial crude petroleum is exceedingly variable. A grade containing little or no asphaltum, but a fair percentage of paraffin, is desirable. It should have a specific gravity of not less than 43 deg. (Beaume scale) and not necessarily over 45 deg. Crude oils of this character cost 8 to 12c per gal. by the barrel.
5. Small trees of all kinds can be cheaply fumigated with hydrocyanic acid gas. The Emory box fumigator should be used. We will describe this apparatus in a future issue.
6. All trees should be pruned as much as possible before spraying. All brush should be piled near the orchard, left until midsummer and burned. This will enable the natural parasites to escape and concentrate upon other scale-infested trees.

In the same issue our contemporary writes on **The San Jose Scale Scare**:—

This pest is responsible for the biggest furore ever caused among American fruit growers in general and New York state horticulturists in particular. And rightly so, for it threatens orchards and nurseries whose products in this stage alone represent an annual value of millions of dollars. Even comparatively small townships in central and western New York ship thousands of carloads of fruit products yearly, while young stock is shipped from York state nurseries by the trainload.

The interests of fruit growers and of commercial nurserymen are alike in this matter. They should unitedly fight the common enemy. Division of forces, in this crisis, is worse than useless.

"More scared than hurt" perhaps best expresses the horticultural situation in the middle, southern and New England states just at this time. Yet if the scare forces all to co-operate in combating the scale, much dreaded injury may still be prevented. For the matter is quiet as important in all the region cited as in the Empire state. Indeed, Prof. Britton says the danger of this pest in Connecticut is greater from within than from without the state.

We believe that, with a few important exceptions, nursery stock should be fumigated with hydrocyanic acid gas. This treatment kills all living insects, not San Jose scale alone. It is cheap and simple, and with proper judgment nursery stock so treated is not injured. . . . Many nurserymen in various parts of the country have successfully fumigated for several seasons Hundreds more will do so this spring. It is probably quite as needful in other states as in New York. Further directions will appear later as to what stock to fumigate, what not to treat, etc. It is "no great chore" to fumigate nursery stock, and by being able to guarantee one's trees free from scale the nurseryman so far increases his sales and profits that lots of them are doing this for their own advantage without waiting for legislation, the sooner this practice becomes general, the greater will be nurserymen's profits. And the very few who now criticise American Agriculturist's position will then be warmest in praise of our policy.

Yet to compel nurserymen to fumigate, and let the fruit growers alone, will not fully cover the case. The scale is now so well established that legislation which fails to reach the fruit grower will be insufficient to check the further spread of this pest. This is "as true as preaching." And progressive fruit growers realize the fact and are already combating the scale . . . These people, like the gressive nurserymen, are looking out for No. 1 without waiting for the legislature to act. But while we believe that such self-help is the best help, those fruit growers or nurserymen who jeopardize the welfare of others as well as their own interests by neglecting the pest, require some law to induce them to be more mindful of the general good.

With a good law, economically administered by competent officers, who have had the co-operation of the entire horticultural interest, Maryland has solved this problem in a practical way at small expense. Michigan, Illinois, Iowa, Virginia, Georgia. North Carolina, etc. have laws of a similar character working in a satisfactory manner. West Virginia, Pennsylvania and some other states have the matter before their legislatures this winter.

The Maryland law gives the entomologist and the state pathologist absolute control of every orchard and nursery, including public or private property, on which plants are grown. These officers can condemn, destroy or have treated, under their supervision, any plant considered dangerous. In case instructions for the treatment of any plants are not carried out within the specified time, the state officers remove or treat them at the expense of the owner, the cost being collected by the state attorney

The Maryland law is backed by every nurseryman and fruit grower in the state. Public sentiment is so strong in its favor, there has not been a single case of compulsory removal or treatment of plants. In this movement in the eastern U. S. Maryland is the acknowledged pioneer. The $8000 expended annually has been worth millions to her fruit and nursery interests. Never in her history has the sale of nursery stock been so great as since the fumigation law went into effect.

While the utmost vigilance in fighting the pest should be insisted upon, it is more than probable that nature will, in a measure, help the work. The internal parasite Aphelinus fucippennis is credited by some as being responsible for the reduction of the San Jos éscale in the Santa Clara valley of California, has already been discovered doing effective work in one Maryland orchard, and should be carefully considered in this connection. American Agriculturist was one of the first to call attention to this enemy of the scale several years ago, and our efforts to encourage the dissemination of this important parasite have been of great value to the country. Yet because of this almost invisible friend at the seat of war, no one is justified in letting the scale run riot. All interested should cooperate with nature. But let us keep cool, do nothing rash, but counsel together and stand as one man, allied with nature, against the common enemy. A single season of such effective co-operation would go far toward controlling the scale.

EGYPT AND CEYLON TEA.

A PARSEE MERCHANT'S VIEWS.

A representative of the *Ceylon Independent*, in the cou of conversation with Mr. Dadabhoy regarding his recent to Egypt, enquired as to the sale of Ceylon tea in the lan the Pharaohs and it is interesting to hear what Mr. Dadab has to disclose :—

"I have," he said, "found to my regret that Indian tea gained a footing in Egypt, the trade being in the hands Mahomedan Persian merchants. Indian tea is not only sold Cairo, but also on the way throughout to the River Nile at s places as Luxar, Assoun, Wady-Halfa, Lower Nubia, Kharto Soudan, and even as far as Abyssinia. I have visited several Ind tea shores belonging to Persian merchants situated in Mani Khan-el-Khalil and found Assam a common poor liquoring tea, which in appearance is a fine, "wiry tippy" tea. It is liked by upper classes. Rubbish Souchong is sold to the poorer classes. find out what tea was given by the several Café Houses I visi well-known Cafés, *viz.*, Café Chica, Egyptian Bar, Splendid B Finde-siecle, etc. The rubbish they gave me was quite enough upset me. They have a peculiar way of drinking tea there. T use lemon with tea. They do not know the virtue of milk in th tea. But nothing daunted I asked for some milk. The peo there only stared at me and said *la*. I then put lemon ju instead and found that it improved the taste of the tea and mad palatable. Ceylon tea is only sold by Messrs, Walker Mei rachi, Limited, at Esbekieh, who are the Agents of the Ceylon operative Tea Gardens Company. They sell the "Bee" Brand T It is well and good they offer this tea for sale in their stores, the quantity sold is infinitesimal. Ceylon tea is supplied to English Army from Colombo. But Ceylon tea is evidently worked at all. No effort has been made to push Ceylon tea amon the vast masses of the population of Arabs, Egyptians, Coptics, Soudanese, who can be easily weaned to tea from coffee which costly luxury. A small cup of simple tea, unpalatable as it is sold at Cairo from half to one piasteres or from 8 to 16 cents. the Ceylon Planters' Association will take this matter up I assure them they will not regret it. With a market in this par the world with an intelligent man who can speak Arabic, the und taking is sure to prove an immense success."

PEPPER.

According to a telegram received from India the monsoon broken out on the Malabar Coast with unusual vehemence, s the *London Commercial Record*. Heavy rains and storms h visited the coast, rendering shipping extremely difficult greatly interfering with the forwarding of goods from interior to the ports. Inundations are threatened, roads h become impassable, and produce liable to be affectedby dam ness has to be kept back awaiting a break in the bad weath Thus the whole business with that part of India has been int rupted and a season has been brought to a close which m be regarded as an exceptionally unsatisfactory and unprofita one to all concerned. In some instances the speculation am native dealers and planters, which of late years has gradu attained larger proportions, has been the cause of an absolut unnatural state of affairs, whereas on the other hand over-prod tion in other instances has been the means of a ruinous depre tion in values In the case of ginger and pepper, native operat have ruled the market; they have decided the future, and Eur has been compelled to look on, unable to compete to any appreci extent. From the very first the poor prospects of the ginger c induced native speculators to operate on the bull tactic, and am themselves succeeded in maintaining a level of prices considera over that of London, with the result that our speculators abstai from purchasing, the position of the article not offering suffici inducement to them to pay a high premium over spot valu History has since proved that they were wrong and also that opinion—expressed on several occasions—of an ultimate rise values was absolutely correct. The Continent seems to have tak a different view of the future altogether; no doubt underestim ing the strength of the native bull clique, operators there ente to a considerable extent into bear sales of those sizes which

eferred by Continental consumers. These daring bears have d to buy back or cover with loss in India. London on the whole s looked on, buying extremely little on arrival terms, and being parently satisfied with pushing spot values up 6d to 1s at the me. In this way a good quantity of stuff has changed hands, t hardly in any case have the profits realised been unusually od ones. The break of the monsoon will probably put a stop to rther shipments from the Coast, but Bombay dealers may yet y London with their purchases, and more shipments from there e sure to arrive, although we are inclined to believe that they ll amount to little only. A good market may therefore ensue d last for some time. The same applies to Tellicherry and Alleppy pper. Natives have operated very successfully in these sorts well, much to the annoyance of European speculators, but the onsoon brings business in them to a close as well, and to holders spot stuff will be afforded an opportunity to realize with advant-ge. Coffee on the other hand is hopelessly depressed and declin-g owing to the enormous weight of Brazilian sorts and the sappearance of the American Coffee Ring which was to do ch wonders.

RUBBER IN GERMAN EAST AFRICA.

There are numerous sorts of caoutchouc creepers and trees digenous to German East Africa, but the only kinds which are of lue are *Landolphia Kirkii* (Kiswahili, Mohango), and *Mascarenhasia elastica* (Kiswahili, Mgora). Until quite lately it was believed at the best rubber was the product of *Landolphia florida* var. *omorensis* (Kiswahili Mbungo), but it has now been proved that is creeper is practically worthless. Samples of the milky juice the wild fig tree have been sent to Europe on several occasions, t the price obtained has always been so low as not to repay the st of transport. *L. Kirkii* is principally found in the Kilwa, ndi, Mahenge, Songea, and Langenburg districts; a little also mes from the Hinterland of Dar-es-Salaam, Tanga, Pangami, and agamoyo, and from Bismarchburg, Mpapua, and Tabora. A rtain amount brought from Portuguese territory finds its way the port of Mikindani. *Mascarenhasia elastica*, known in the ade as Mgoa rubber, is only found south of Dar-es-Salaam. everal trials have been made with other kinds of rubber. *eve Brasiliensis* (Pará rubber) has been planted repeatedly, but ithout success, the climate being too dry. *Ficus elastica, L. adagascariensis*, and an *Euphorbia sp.* (from Madagascar) have ne fairly well. *Castilloa elastica, Hancornia speciosa*, and *Willughbeia* were each tried once, but the seed did not germinate. *anihot Glaziovii* (Ceará rubber) was first planted at Tanga in 91. There are at present about 20,000 trees, but it is feared that will not pay as the atmosphere is too moist. It is thought proble that Ceará rubber will do better in Donde-Barikiwa (Kilwa strict), where a small experimental plantation has lately been ened.

The Decree which came into force on January 1, 1898, forbidding e export of impure rubber, was altered on June, 7, 1900. Such bber, when met with, is to be confiscated by the authorities, om whom it may be purchased by responsible European merants, who bind themselves not to sell the same as rubber of good ality.

THE MARCH COFFEE MOVEMENT IN THE UNITED STATES.

The deliveries of coffee last month in Europe and the United tates have only been exceeded three times since March, 1900, and ere 102,996 bags above the monthly average for the present crop ar; and yet the visible supply was increased 135,609 bags for e month. Receipts at Rio and Santos were more than double hat they were in March of last year. It has been demonstrated ready that the Brazil crop this season is the heavies ever harvested, hile conservative estimates make the 1901-02 crop nearly 20 per nt. greater, or 11,500,0 0 to 12,000,000 bags.

It is certain that supply is heavily in excess of demand, and that e full productive force of new plantations has not been felt. hether it will pay to carry heavy stocks on the basis of present st is a matter of individual opinion. The burden of supply is too eat to permit of a speculative control of the market.

Reports from Java fix the estimate of the 1901 crop of Government, Private, and Liberian coffee at 383,000 piculs, as against 542,000 piculs in 1900; of which 131,000 piculs Liberian, against 106,000 piculs in the previous year. Central American coffee is largely held in Europe, where the market is weak.

The following statement shows the movement and general position of the article :—

	Bags.	Bags.
Stocks, March 1, 1901—		
United States	953,031	
Europe	3,917,637—	4,870,668
Receipts during March—		
United States	760,356	
Europe	616,986—	1,377,342
Total supply, April 1 ...	...	6,248,010
Less stocks, April 1, 1901—		
United States	1,154,094	
Europe	3,813,183—	4,967,277
Deliveries, March -		
United States	559,293	
Europe	721,440—	1,280,733
Deliveries, March, 1900—		
United States	589,743	
Europe	706,331—	1,296,077
Decrease as compared with March, 1900		15,344
Deliveries (United States and Europe), March ...		1,280,733
Do. do. do. February ...		1,067,607
Do. do. do. January ..		1,328,216
Do. do. do. December ...		1,180,838
Do. do. do. November ...		1,281,638
Do. do. do. October ...		1,340,059
Do. do. do. September ...		981,198
Do. do. do. August ..		917,608
Do. do. do. July ...		1,219,058
Total for nine months, 1900-1901		10,596,995
Do. do. 1899-1900		11,783,570
Decrease as compared with 1900-1901 ...		1,186,575

The February deliveries in the United States consisted of 432,203 bags of Brazil; 127,090 bags of all other sorts.

The visible supply of the world on April 1, 1901, was 7,412,277 bags, against 7,276,668 bags on March 1 (an increase of 135,609 bags), and 6,222,595 bags on April 1, 1900.

The visible supply on August 1, 1900, was 5,817,759 bags, so that in nine months it has increased 1,594,518 bags.

The total receipts at Rio and Santos for the first nine months of the trade year were 9,338,000 bags, against 8,220,000 bags for the same time the previous year, and 7,503,000 bags in 1898-99.

Trading in options on the New York Coffee Exchange in March reached a total of 685,750 bags. The lowest price for options was 5·50 cents for April and May; the highest, 6.90 cents for March, 1902. Spot coffee, No. 7 Rio, fluctuated between $7\frac{5}{8}$ and $6\frac{7}{8}$ cents. —*American Grocer.*

BRITISH GREEN TEA IN CANADA.

A Canadian agent of one of the largest houses in Japan lately wrote to his principals :—

It will be of interest to members of the Tea Guilds in Japan to know that Canada cannot any longer be depended upon as a consumer of Japan teas on the parity of last year's prices, owing to the improvement already made in the quality of Ceylon Green Teas—the fact that a bonus of two cents per pound is paid upon all Green Teas by the Ceylon Tea Planters' Association—and that the teas can be purchased at a laid down cost in Canada of fully five to six cents per pound under the corresponding quality in Japan Teas.

If it be not already known, and, if the trade of Canada is of any importance to Japan, it should be demonstrated that the Canadian market cannot be held for Japan unless teas of good quality can be laid down in Canada at a maximum price of sixteen cents per pound for the simple reason that the staple tea in all descriptions—China-Japan or British grown is purchased by the "consumer" at twenty-five gold cents per pound—to realize which it must pass through the following hands :—

1*st.*—Wholesale grocer pays 16c. less 3 per cent. for cash.

2*nd.*—Retail grocer pays 18c. less 3 per cent. for cash, and, unless this can be done, Ceylon teas will assuredly take away within three years the whole of Canada's trade in Japan tea because to-day equal quality in Ceylon greens can be supplied to:—

1*st.*—The wholesale grocer at 14 cts.

2*nd.*—The retail grocer at 18 cts.; and since upon the Ceylon tea the wholesale grocer can make a profit of 4 cts. per pound—all his inclinations and energies are concentrated towards the sale of the teas which pay the largest percentage of profit.

In 1900 Japan teas of suitable quality cost:—

1*st.*—The wholesale grocer, 18½ cts. to 19 cts.

2*nd.*—The retail grocer, 19 cts. to 20 cts.; consequently neither wholesale nor retail grocer made any money and the effort to make the consumer pay 30 cts. or 35 cts.—instead of 25 cts.—proved a dismal failure, and consistently so, with every other tea grown offering freely at prices which enabled both wholesale and retail grocers to make a handsome profit and yet permit the teas reaching the consumer at twenty-five gold cents per pound.

It is probably true that owing to the advance in cost of production, Japan teas cannot be laid down in Canada at 16 cts. with profit to all through whose hands the teas have to pass before reaching the distributor here, *i.e.*, the wholesale grocer.

That it will pay better to let Canada's trade pass, and to cultivate silk or other products instead of tea—and the wisdom of the decision will rest upon those interested—but it is abundantly evident that, so far as Canada is concerned, the tea growers, the tea guilds or the Government of Japan must take prompt measures to meet the competition from British grown teas—or step down and out of Canadian trade.

BRAZILIAN EXCHANGE AFFECTING COFFEE.

SAID TO BE BASIS OF LEWISOHN BROTHERS PURCHASES.

There has recently been considerable talk in the coffee market in regard to large purchases commonly ascribed to the "metal trade." These purchases, however, are by close market students declared to be for members of the firm of Lewisohn Bros., the well-known copper merchants, acting in conjunction with the Rothschilds and other representatives of what is usually termed haute finance of the Continent. So far as this buying can be measured by prices it may be said to have caused an advance of 80 points on December from the lowest point last month and 1 cent on the nearer positions. The low point was the result of a succession of favourable crop reports indicating another large yield. It is understood that much stress is being placed by these large buying interests on the fact that exchange in Brazil on London has been steadily rising, which, of course, means that the premium on gold has been decreasing, and in turn means, according to the arguments of those who are inclined to regard this as a bullish influence, that the planter will for his coffee crop get a decreased volume of paper money which, in his home trade, will acquire no greater purchasing value our account of the decreased premium on gold. Therefore it is argued the planter will be unable to pay his labour and will have less inducement to protect and market his crops. This view, however, is not general, as it is pointed out that if Brazilian paper money appreciates in value, and is able, therefore, to purchase more American flour, petroleum, lard, etc., as it appreciates, the Brazilian planter will soon find he is receiving a remunerative price for his coffee.

The entrance of the Lewisohn interests in the market is not particularly new, however. In fact, as far back as the Spring of 1897 they were generally credited with being free buyers and are supposed to have been buying at times quite freely since. The real reason for the attention which their purchases have recently attracted, however, seems to be the news that they have been making purchases, cost and freight in Brazil, having taken, all told, something more than 50,000 bags in this position. Mr. Herman Sielcken, of W. H. Crossman & Bro., said when questioned regarding the Lewisohn purchases:—

"The purchases by the Lewisohn Bros. are undoubtedly a good thing for the market. If they carry a part of the surplus crop as they have been doing in the past three years, it will certainly benefit holders and more especially Brazil. As this crop is turning out more than 1,000,000 bags in excess of general expectations, the taking of the 300,000 to 400,000 bags in this country by one large capitalist is certainly a great benefit to the Brazilians. As far as values are concerned they are much higher than two years ago, and at the same time both present stocks and future supplies much larger Exchange in Brazil is now 11 1/4d. and in my hun opinion it has no significance whatsoever. Our own firm bou in 1882, with exchange at 20d. No. 7 coffee at 5c cost and frei Therefore there is no reason that the Brazilians are not getting a g price at present, when they average for the crop at present, when t average for the crop fully $10 a bag, while in the years 1882 to 1 they did not average to exceed $8·50 to $9·00, with crops than c about half what are being turned out now. The Brazilians certa are getting good prices in good money—that is English sterling. they do not get as much poor (paper milreis) as they did when change was 7d. they get more than double in paper money t they got from the years 1882 to 1886.

"I cannot reason that a crop is not sufficiently remunerative if Brazilians get a full price in gold, as the price they get in pape naturally a relative one. If a Brazilian milreis of to-day ha larger buying power for American flour, for American petrole lard and lumber, it necessarily must have a larger buying po for the produce at home. If this is not so the world ought to t Bryanite, as Bryan's theory of currency would then be indor I can only say the over-production continues and the coffee co tries get the full prices for the quantities they produce."

THE STRONG POINTS IN FAVOUR OF COFFEE.

"The strong points in favour of coffee," said another very minent member of the coffee trade, "are primarily the improvem of the position of the Brazilian Government's finances by reaso which the premium on gold has steadily declined since 1898, an now 140 per cent. premium against 370 per cent. in that year. currency prices obtained by the planter are lower now than a time when coffee in Europe and the United States was from 1 to 2 cents lower than to-day's prices, so that the Brazilian pla is worse off now than when coffee in New York sold at the rec low prices of 1899. Well informed people are of the opinion t the ruinous prices realized by the planter seriously affect his abi to pay, comparatively speaking, the high rates of wages colon demand, and that the exodus of labourers which began last Sept ber is likely to continue. At any rate few people believe t colonists will enter Brazil unless assured of as good cash wage they can readily obtain in the Argentine Republic. It is not reasonable to suppose that the condition of distress of a fair portion of the Brazilian planting interests will seriously affect caretaking of existing plantations and the proper harvesting their yield."—*New York Journal of Commerce*, March 4th.

NOTES FROM BRAZIL.

(From the *Brazilian Review.*)

Exchange.—*April 6th*, 1901.—Ninety days' Bank rate on Lon opened on Monday 1st at 7/8d. and closed this evening at 11 2 to 11 15/16d.

When we wrote this time last week the market seemed und plethora of ready bills to be ready for a new rise, that was expec to carry the rate over the sticking point 12d. *en route* for altitu corresponding to the more or less vividness of imagination. cause of the unexpected weakness is explained by the large cou demand that springs up immediately the rate gets close to 1 and the requirements of a large jobber who is said to have ta £200,000 during the week and to be now trying to sell again. Santos it is reported that there has also been heavy taking, an the market can stand it all without more reaction, it must be pretty good way.

Coffee continues to go forward in a wonderful manner, last we clearances here and at Santos being worth £327,977 as aga £131,943 last year, and the value of the total shipments for crop amounting to £16,370,009 as against only £12,483,894 year. Nor does there appear to be any prospect of their falling as before the end of the current month washed coffees of the crop may be expected. Offers of bills from Pará have also b considerable, £200,000 having been done on Saturday at 1 whereby it seems that rubber cannot be so exhausted as imagined. It is, however, extremely difficult to get any relia information from that market and, though we have repeate attempted to start a regular correspondence, hitherto it has alw been a failure. We are, however, at present in negotiation wit fresh party and trust before long to be able to supply our read

ith reliable and prompt information with regard to that important narket.

Market—In spite of the week ending April 4th having comprised nly four working days this year instead of six, as last, joint entries at Rio and Santos were 51,755 bags greater than for the corresponding eek last year, and 52,904 bags less than for the previous week. Up to the 4th April entries for the current crop were 1,222,941 bags ver last crop's and since 1 January 845,262 more than last year.

The Rio Market was weak throughout the week, prices ruling rom 7$900 to 7$500, but closing somewhat firmer on Saturday at $600 to 7$700 for No. 7, New York type. American enquiries were rincipally for low grades, No. 7 upwards, for European account better rades being chiefly in demand and colory coffees for N. Orleans t a premium of 200 reis, which, however, are scarce and somewhat ard to find. We quote 6·70 to 6·74 cents cost, freight and commission, at which orders were somewhat difficult to fill, sellers aving apparently made up their mind to resist a further fall. usiness for Europe is reported dull, only old or small new orders eing completed at 30s. 6d. to 31s. 6d. c. f. and comm.

The demand which previously was entirely for inferior grades entres at present chiefly on finer qualities. Reports from the interior of Minas and Rio could not be better, the rain having stopped, he weather is now almost perfect and no complaints are heard ven from districts such as Cantagallo, which were always dissatisfied with something, either too much rain or too much drought. he quality of the coffee in most of the Minas and Rio districts is lso expected to be good and of full weight. During the week nded 5th April sales declared at Rio amounted, in spite of the two olidays, to 138,000 as against 152,000 the previous week and 82,000 or the same week last year.

The market at Santos was generally weak, but steadied on Wednesday with a fairly large business doing at slightly higher prices. We quote :—

Primes	...	...	..	...	4$900	to 5$000
Superior	...	...	...	...	4$700	„ 4$800
Good	...	..	...	..	4$400	„ 4$600
Regular	...		...	...	4$100	„ 4$300

Medium qualities were in demand, lower grades being neglected. uropean offers ruled 30s. for good average at which probably arge orders could be executed. Sales were effected at 30s. 6d. to 1s. 3d. for *good average* and 31s. 6d. to 32s. 3d. for *superior*. Americans are out of the market, only one big roasting firm buying rom time to time; otherwise orders are for grades lower than for urope. Entries in consequence of Passion week were much maller, but still very considerably in excess of last year's, whilst les were double.

Reports as regards the weather in the interior of S. Paulo are onflicting. Shipments fortunately continue as heavy as ever and ocks are consequently slowly falling.

The Weather.—The Agricultural Commission of Sao Paulo reorts that during the month of February the temperature ruled wer than usual. Winds were abnormal blowing chiefly from E. hereas those usually prevailing at this time of the year are .-W. and S.-E. This possibly accounts for the extraordinarily eavy rainfall, 60mm. having fallen in two hours on the 6th February nd 57mm. between 3 and 7 p.m. on the 18th. The total rainfall for he month was 235·7 as against the normal average of 202mm. In 891 the fall was 45mm. greater. Rain fell at S. Paulo on 12 days uring the month of February.

At Campinas the average temperature ruled somewhat higher han at Sao Paulo, 21·99°, being 1/2° below the normal.

The prevailing winds were S.-E. and N. to N.-E. Rain fell during 8 days but the quantity was only 0·2mm. over normal.

The Inspector of the 1st district reported plantations looking xtremely well, the evenly distributed rains having been most beneicial and caused no damage except in a few districts where hailones happened to fall. Great scarcity of labourers is felt in some istricts, such as Mogy-Mirim and Leme, and it is possible that arvesting may suffer in consequenee. Some old plantations in he Campinas district show a splendid bearing in consequence of areful cultivation and manuring with coffee husks.

From the 3rd district the Inspector reports that in spite of money nd other difficulties the appearance of the crops is excellent and romises a yield at least equal to the current season's. Notwithanding in several districts, especially in the *terra roxa* region, it as been observed that coffee is ripening without reddening, but asses directly from green to ripe yellow. This appears to be an indication of empty, hollow fruit known as *café chocho*. If this anticipation be realized a considerable reduction, perhaps of 1/3 may be looked for in this district

From the 4th district the Inspector reports that the general state of plantations during February was satisfactory, the fall of fruit from the trees in some sections being compensated by the exuberance of the newer, so that the coming crop is expected to be good and to commence about June. At São Carlos the trees are generally less loaded than last year but the fruit seems to be excellent.

At Araraquara on the contrary the fruit is ripening unequally and there is great lack of labourers. At Jaboticabal the fruit ripened prematurely, but the quality seems to be superior. At Brotas conditions are good and the crop is expected to exceed this year's, but at Annapolis it is said to be premature and poor; whilst at Jahú the coming crop is expected to be about the same as the current one.

The Inspector of the 5th district states that crops of all kinds seem satisfactory with promise of abundant harvest at S. Manoel, Tieté, and Botucatú. At S. Roque plantations are somewhat backward as well as at Campos Novos de Paranapanema, where planters, however, complain bitterly of the cost of transport.

OLD "THREE-DECKERS."

H.M.S. "Rodney" ploughed the sea into two broad ribbons of white foam, as she gathered weigh on her journey out to the Cape of Good Hope, in days when the Boer War was undreamed of and ships like this old "three-decker" ruled the waves supreme.

Nine hundred men manned her, and prominent among them was Corporal Eccles, one of the "boys of the old brigade."

Corporal Eccles, who spins this yarn to me, is now hale and hearty at 65, and he has served Her Majesty 21 years as a Royal Marine—"soldier and sailor too."

"'Twould take me days to tell you all my experiences during the 21 years I spent on the old 'three-deckers,' H.M.S. 'Dragon,' 'Camellian,' and 'Rodney,'" said the bluff old Corporal, shifting his quid, "but that storm off the Cape in the 'Rodney' was the worst bit o' weather I ever experienced.

"Nine hundred men on board her, and 150 men disabled or wounded in the hurricane. Casks broke adrift from their lashings, thundering against the bulwarks until they started a plank. Sheep, caught by hills of incoming green seas, were swept down the hatches like corks in a mill-race.

"I carry a wound on my thigh to this day that was caused by a table hurled against me when scrambling into my hammock. Aye, m' lad, a sailor-life is full of adventures and *tests of endurance.* During the whole 21 years of active service I never had a day's illness. That's a pretty good record!

"When my term was nearly completed, I was transferred to H.M.S. 'Pembroke.' She had just been taken off active service and was being fitted out for a work-ship. During the alterations, as she lay at her moorings dismantled, her ports wide open, I had to take my turn on sentry duty, rain or snow.

"Mid-winter it was, and the weather cold and raw.

"Pacing about 'tween decks," said the Corporal. "exposed to the worst of weathers, I caught a severe cold, and I couldn't shake it off. My record was broken.

"It settled on my chest, hard and fast, making my breathing awfully bad. I couldn't walk uphill. I was too wheezy. You could hear me breathing, like a tug, twenty yards off. I did manage to struggle through my work, though.

"Then indigestion set in. After eating, my stomach became swollen with wind, making *a disagreeable rumbling noise* and causing great pain. Several doctors tried to help me, but their medicine didn't hit the mark. I got worse and worse.

"The old 'Pembroke,' now lying at Chatham, is something like the hulk I then was. My cough shook my body through and through. For months I slept propped up with pillows. After a fit of coughing, perspiration rolled off me, soaking my linen. My body seemed on fire.

"Like the sharp stab of a cowardly knife did a long breath pain me. I got alarmed and nervous, for *things were looking ugly.*

"Though this day is the 20th of April, 1900," said the gallant Corporal, "I yet remember that aching pain that caught me in the back, on the right side, and that my bowels were very costive. Altogether, I was in a bad way. My wife, when the doctors had

failed to help me a sheer hulk—insisted on giving me Mother Seigel's Syrup, to pull me round.

"I had no faith in it, *because* it was an unprescribed medicine, but I *swear* by Seigel's *now*. My first bottle sharpened my appetite, improved my breathing, and loosened my cough.

"The improvement continued week by week until I was completely restored to health. Cough, pain, and weariness were *swept away like chaff before the wind*."

"Corporal Eccles," of 9, Southill Road, Chatham, says Mr. H. Woolgar, "is personally known to me. Unquestionably, Seigel's Syrup saved his life. Now he is getting younger every day."

"Aye," continued the old seaman, who, by the way, is proud of his medal for "long service," "Mother Seigel's Syrup put life, power, and 'go' into my almost lifeless hulk. I am now sixty-five, still young and full of life and energy—all due, mark you, Sir, to Seigel's Syrup. If you think others will try its powers, you may publish this."

Such was the Corporal's stirring narrative, and its truth is vouched for by Mr. G. W. Philips, of the Chatham High Street, number 312, who writes: "I can verify every word that Mr. Eccles has said. Mother Seigel's Syrup has made a new man of him. *No man* acquainted with Mr. Eccles's case *could* doubt the efficacy of Mother Seigel's Syrup for all disorders of the stomach and liver."

H.M.S. "Rodney" no more ploughs the deep, but she lies in peace and quiet at Chatham; yet *you* who are sailing in stormy waters because there is trouble within you—mutiny among your digestive organs, in fact—can follow in the steps of the gallant Corporal, and can attain, in this way, to the same hale old age.

MARKET REPORT.

[*Per Mail advices of 3rd May* 1901.]

COFFEE.

The London Commercial Record says:—There is a little improvement to note in the position of this market, although a larger proportion of the offerings sold than of late, but the preponderance of unattractive qualities causes prices for such descriptions to show a further decline. A few packages of Ceylon realised extreme figures. For East India the demand generally has been dull at a reduction of fully 1s per cwt. for the bulk, but fine colory kinds, suitable for home trade, have quite maintained their value. The higher grades of Costa Rica and Central American are quite steady, but other qualities are rather in favor of buyers. The market for futures opened firm, and prices subsequently advance 1s 6d per cwt. on a rise in Exchange and moderate receipts, but latterly the tone has become easier, and closing rates are about 1s higher for the week; business yesterday was done in May delivery Santos at 31s to 31s 1½d, Septembers at 31s 10½d to 32s 1½d, and December at 32s 6d to 32s 7½d per cwt. Catalogues to-day consisted of 2 tierces 1 cask 6 barrels 4 bags Plantation Ceylon, 1,827 bags East India, 2,127 bags Costa Rica, 452 bags New Granada, 681 bags Guatemala, 96 bags Salvador, and 184 bags Colombian. The sales went off with slow demand and prices unchanged. Good qualities made full prices.

London ...	... Santos ...	July delivery	...	31s 6d.
New York	... No. 7 Rio...	,,	...	5·60 cents.
Hamburg...	... Santos ...	,,	...	31½ pf.
Havre ...	... Santos ...	,,	...	38¾ francs.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	19,767	18,253	20,486	17,117
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	7,277	6,506	8,342	7,101

The preceding figures exhibit—

	Tons.
In the Imports an increase this year of ...	3,369
Home Consumption an increase of	771
Export an increase of	1,241
Stock an increase of	1,514

Auctions this week have gone off as under:—

Ceylon—*Plantation*.—5 casks 4 barrels 2 bags sold—smalls 45s, good middling 90s, bold 102s, peaberry 62s.

East India.—6,514 bags partly sold as follows:—*Mysore*, smalls 35s 6d to 46s 6d, fine ditto 62s 6d, low middling to middling 49s 6d to 48s 6d, good middling 51s 6d to 58s, fine middling 76s 6d to 77s 6d, bold 71s to 79s 6d, fine bold 104s, peaberry 46s to 85s 6d; *Coorg*, smalls 35s to 43s 6d, low middling 42s to 44s 6d, good middling 55s, bold 50s 6d to 69s, peaberry 46s 6d to 62s; *Neilgherry*, smalls 33s to 43s, low middling to middling 39s to 47s, bold 50s to 56s, peaberry 43s 6d to 54s 6d; *Nelliampathy*, smalls 32s to 39s, low middling 39s 6d to 42s 6d, bold 54s, peaberry 46s 6d to 51s; *Wynaad*, smalls 39s to 42s, low middling 42s to 44s 6d, bold 54s 6d, peaberry 55s. *Shevaroy*, smalls 41s, middling 44s 6d, bold 53s, peaberry 55s 6d. *Nelliampathy*, smalls 36s. *Naidoobatum*, bold brownish 65s.

Costa Rica.—Of 7,301 bags catalogued about 5,8 0 bags sold, smalls 30s to 45s, good ordinary brownish 37s to 38s, low middling to middling 41s 6d to 49s, good middling 49s 6d to 62s 6d, bold 60s to 78s, fine bold 86s 6d, peaberry 45s to 85s 6d.

Guatemala.—Of 2,271 bags offered 1,600 bags sold—smalls 34s to 40s 6d, good to fine ordinary 35s to 40s, low middling to middling 41s to 48s 6d, good middling grayish 55s, bold 57s to 73s 6d, peaberry 39s to 58s.

Vera Paz.—14 bags sold, bold greenish 59s.

Salvador.—742 bags partly sold, low greenish 41s to 43s, good middling blue 48s 6d, good bold 62s, peaberry 46s to 54s 6d.

Colombian.—243 bags sold, smalls 31s to 32s 6d, fine ordinary 37s, low middling to middling 41s to 47s 6d, bold 48s to 52s, peaberry 40s to 54s.

Mexican.—86 bags sold—goood middling blue 47s, bold 64s, peaberry 56s 6d.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	2,516,000	3,064,000	2,805,000	3,906,000
Santos ...	7,404,000	5,415,000	5,095,000	5,803,000
Total...	9,920,000	8,479,000	7,900,000	9,709,000
Crop ...	—	8,391,000	8,772,000	10,461,000

Rio Exchange 1s $1\frac{7}{16}$d, previous day 1s 1½d.

Havre, *May* 2.—Good average Santos May opened barely steady at 38¼f. and closed steady at 38¼f., September opened at 39¼f. and closed at 39¼f., December opened at 39¾f. and closed at 39¾f., March opened at 40¼f. and closed at 40¼f.

Hamburg, *May* 2.—Good average Santos May opened quiet at 30¾pf. and closed steady at 30¾pf., September opened at 32pf., and closed at 32pf., December opened at 32¾pf. and closed at 32¾pf., March opened at 33¼pf. and closed at 33¼pf.

New York, *May* 2.—Closing prices of No. 7 Rio were as follow:—

		May.	June.	July.	Aug.	Sept.
May	2...	5·40	5·50	5·60	5·65	5·70
May	1...	5·30	5·35	5·45	5·65	5·70

TEA.

China.—At auction yesterday the small supply of 1,995 packages of Moyune nearly all sold at steady prices. Gunpowder 6¼d to 1s, Imperial 3¾d to 6¼d, Foong Mee 8d to 1s, Sow Mee 6¾d to 1s 4½d, Young Hyson 4⅝d to 7¾d, Hyson 3⅛d to 8d per lb.

Indian.—Public sales were rather lighter, totalling 22,600 packages, against 25,100 packages last week and 26,100 packages in 1900.

Competition was less keen, except for the most desirable parcels which as a rule, held their own. Common and medium sorts, both leafy and broken, were irregular, with a downward tendency specially marked in those with mixed appearance.

For 20,000 packages on Estate Account 6½d per lb. was obtained, contrasted with 7¾d per lb. for 19,000 packages, and 8⅞d per lb. for 6,500 packages in the two preceding seasons.

Deliveries for April were 10,917,000 lbs., compared with 7,813,000 lbs. in 1900 and 12,793,300 lbs. in 1899.

Ceylon.—Auctions comprised 25,600 packages opposed to 32,700 packages previously and 31,800 packages a year ago.

Bidding was languid, these reduced supplies even being in excess of immediate requirements and a good deal was withdrawn owing to inadequate support from the trade. Pekoe Souchongs and Pekoes at and under 6d per lb. in many cases fovoured buyers

to the extent of ¼d and ½d per lb., while above that price much unevenness was noticeable, offers for Pekoes and Orange Pekoes often falling 1d per lb. below former quotations. Ordinary Broken Pekoes did not show much alteration in value, but the better ones were more or less neglected and a considerable quality was bought in.

April clearances were 7,740,000 lbs. in 1900, and 6,280,000 lbs. in 1900, and 6,806,000 lbs. in 1899.

The average is 6⅝d per lb. On the 25th instant, it stood at 7 d per lb., and 7¼d per lb. in 1900.

JAVA.—About 2,500 packages passed the hammer. A dull tone prevailed for inferior descriptions, and a large proportion failed to find purchasers. The few attractive lines, however went off fairly well.

Deliveries.—The clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 30th April, 1901	... ...	14,974,780 lbs.
Do. do. 1900	... ...	10,462,977 ,,

During the fortnight the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	17,956	4,680	22,636
Ceylon	18,761	6,851	25,612
Java	1,243	1,205	2,448
Total ...	37,960	12,736	50,696

Also 411 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated May 3rd, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1900-1901	1,621,503	1,208,077	58,827
1899-1900	1,615,552	1,125,599	60,093

23,057 *pkgs.* INDIAN
25,641 ,, CEYLON
2,448 ,, JAVA
} Total 51,146 packages were offered in public auction this week.

Movements of tea in London, as shown by the Tea Brokers' Association, are given below.

Reduction of output.—As it does not now appear practicable to to reduce the output of Tea in accordance with the scheme brought forward by the Indian and Ceylon Tea Associations, it seems probable that many Planters may individually go in for finer plucking. There is no doubt that fine plucking. if generally resorted to, would do good, by reducing the total output; but at the same time it would tend to over-supply the market with fine and good medium Teas. What the Trade is really suffering from his over-production of all grades, and unless considerably less Tea is produced, the consequences may again be serious.

INDIAN.—Although only a small quantity was brought forward, rates were easier, the decline being most pronounced in good-medium, and find kinds.

The Official wire gives exports for month of April as 195,000 lbs., against 400,000 lbs., same period last year.

Week's average of Tea sold on Garden Account 1901, 20,065 pkgs., av. 6·48d. 1900, 19,000 pkgs., av. 7·72d.

Total Tea sold on Garden Account 1st June, 1900, to date, 1,341,189 pkgs., av. 7·22d. 1900, 1,278,232 pkgs., av. 8·26d.

CEYLON.—The heavy auctions which have taken place since Easter have proved too much for a market in which buyers have already over-supplied their requirements. For better class Teas, prices were frequently 1d per lb. and even more under valuations, while medium and common sorts were a farthing to a half-penny lower.

The official telegram gives exports to U. K. for April as 9,000,000 lbs., against 9,500,000 lbs. in April, 1900, making exports from 1st January to end of April 38,000,000 lbs., against 39,000,000 lbs., last year. It estimates the quantity for May as 9 to 9½ millions, against 10,500,000 lbs, shipped last May. Average for week 6·63d., against 7·16d. in 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 444,867 pkgs., av. 6·66d. 1900, 416,345 pkgs.. av. 7·51d.

JAVA.—Javas sold with some irregularity, prices frequently showing a slight decline.

Bank Rate 4 per cent. Exchange on London three months' sight:—Calcutta 1/4 5/32. Colombo 1/4 3/16.

COCOA.

A rather better tone prevailed for West Indian at the auctions last Tuesday than has been the case for some time, but other growths still remained flat. Of 1,067 bags Trinidad catalogued 730 bags sold at full prices—very fine red 72s, good to fine 69s to 71s, middling 67s 6d. 563 bags Grenada mostly found buyers at 64s 6d to 66s 6d for good to fine red, and 60s to 62s for common to fair, which shows a rather higher value for the better lots. 183 bags Dominica partly sold at 59s to 62s. 6 bags fine St. Vincent brought 64s 6d. 158 bags Jamaica about half sold at 61s to 63s 6d for fair to good fermented. 358 bags fair Samana realised 57s 6d to 59s for fair to good, and part of 25 bags Colombian 62s 6d for pale red. Of 886 bags Guayaquil catalogued 320 bags were placed at 37s 6d up to 52s 6d for blacks, &c. Of 481 bags African about a fourth part sold at 63s 6d to 64s. Ceylon does not improve at all in demand, and of the 519 bags offered only about 50 bags, fire and water damaged, sold at 44s to 50s per cwt. 16 bags St. Lucia, 19 bags Puerto Cabello, and 50 bags Venezuelan passed the hammer unsold Privately sales embrace 200 bags Trinidad at 66s to 69s 6d, 100 bags Bahia at 63s to 65s 6d, 500 bags Guayaquil at 63s to 64s for Caraquez and 64s 6d for Machala, and 200 bags Ceylon medium red at 70s per cwt.

PEPPER.

BLACK.—The market is dull in tone, and no sales are reported for arrival; 6 7/32d buyers is the quotation for Singapore March-May shipment, and 6 1/16d for fair Singapore on the spot.

At auction on Wednesday 295 bags Tellicherry sold at 6d to 6⅛d for fine small heavy brown and 5⅞d to 6d for good fair brown. 10 bags good heavy brown Ceylon realised 6¼d. 40 bags Aleppy bought in at 6d, and 109 bags Lampong at 5⅞d per lb.

The shipments of Black Pepper for the month of April compare as follows:—

	1ST-HALF.				2ND-HALF.			
	1901.		1900.		1901.		1900.	
	Tons.		Tons.		Tons.		Tons.	
U.K.—Sing. ...	80	100	40	140	20	140	130	360
,, Penang ...	20		100		120		230	
Continent ...	150		40		110		110	
United States ...	170		20		340		820	
Total ...	420		200		490		1,290	

WHITE.—Is in good demand, and fully 200 tons have changed hands for arrival, *viz.*, Singapore May-July shipment at 9 11/32d, July-September and August-October at 9¼d to 9⅜d; Penang, June-August at 8 11/16d to 8¾d, July-September 8¾d, September-November at 8 13/16d.

At public sale on the 1st instant 20 bags Singapore bought in at 10½d; also 34 bags Penang at 8¾d, and 86 bags Ceylon at 8¾d to 9¾d per lb.

To-day. Firm—Black Singapore sold on the spot at 6⅛d for fair, and buyers.

25 tons Tellicherry have been sold for arrival at 56s 6d per cwt. c.i.f. New York per May-June (s.).

White pepper in demand and dearer; 9 15/16d paid for Singapore August-October shipment; 8 13/16d for Penang June-August and 8⅞d July shipment. 100 tons sold.

The shipments of White Pepper for the month of April compare as follows:—

	1ST-HALF.				2ND-HALF.			
	1901.		1900.		1901.		1900.	
	Tons.		Tons.		Tons.		Tons.	
U.K.—Sing. ...	20	20	30	50	*nil*	*nil*	20	50
,, Penang ...	*nil*		20		*nil*		30	
Continent ...	90		*nil*		90		*nil*	
Total	110		50		90		50	

GINGER.

COCHIN.—Is very quiet. Catalogues embraced 75 cases 230 bags, all of which passed the hammer unsold—washed rough at 40s per cwt., and cut at 56s up to 75s. Privately fair washed rough has sold to a fair extent at 37s 6d to 38s 6d and cut B's at 70s per cwt.

BENGAL.—100 bags offered and 25 bags sold at 34s per cwt. for good fair.

JAPAN.—100 bags plump limed, mouldy, bought in at 34s per cwt.
JAMAICA.—435 barrels nearly all sold at generally lower prices—fair to good bright washed 51s 6d to 63s, middling 46s to 50s, common to good common 43s to 43s 6d, Rhatoon 36s 6d to 38s per cwt.

CINCHONA.

The Amsterdam correspondent of the *Chemist and Druggist* writes on April 25 that 1,482 bales Ledgeriana hybrid and 375 bales 119 cases Succirubra bark, weighing 170,720 kilos., have been added to the auction to be held on May 9, so that the total amount to be offered on that date amounts to 5,593 bales Ledgeriana, officinalis, and hybrid, 1,694 bales and 228 cases Succirubra, totalling 684,263 kilos., and containing 30,806 kilos. quinine. The average percentage of manufacturing bark is 5·10 per cent, against 5·58 per cent. for the March auction.

The exports from British India during the six months ende September were :—

	1900	1899	1898
Lbs.	1,525,617	1,379,508	818,283

For the ten months ended October the exports from Hollan were :—

	1900	1899	1898
Kilos.... ..	4,002,000	4,712,000	4,050,000

The imports for a similar period were :—

Kilos.... ...	3,799,000	4,783,000	4,235,000

QUININE.

A dull and featureless market is reported in second hands, an prices have again slightly receded. The small business done in cludes spot at 1s 3d to 1s 3⅛d, August at 1s 3½d, and October 1 3⅞d, per oz. The demand from the trade is fairly good.

(AVERAGE FOR ALL INDIA 6·48d., MAY 3RD.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings. Dust and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price.
Neilgherry	**448**	**5·45**												
Culloocoray ..	77	4	44	4¼	...	...	...	...	...	...	33	3½ 4	...	...
Davara Shola ...	34	5	5	6½	6	4¾	8	5¼	15	4¼	...	...	..	...
Mount Gordon ...	39 p	4¾	25	5¼ 5½	8	4	...	...	...	...	...	...	6½c	2¾
New Hope ...	136 p	5¾	63 p	7	35	5½	...	...	38	4½	...	...	...	..
Prospect ...	126	6	20	8	62	5¾	27	6	...	...	...	..	17	4¼
Seaforth ...	36	6¾	17	7 7¼	12	5¾	7	8	...	...	...	...	...	..
Travancore ...	**1989**	**4·86**												
Ashley ...	31	5½	...	...	...	...	31	5½	...	...	...	...	...	...
Balamore ..	80½c	4¼	...	...	56½c	4¼	22½c	4½	...	...	2½c	2¾	...	..
Belford ...	72½c	3¾	...	...	46½c	3¾	19½c	4¾	...	...	6½c	2	1½c	2¼
Bonaccord ...	26	3¼	...	...	...	...	...	...	26	3¼	...	...	...	..
CMR ...	128½c	3½	...	...	75½c	3¾	46½c	3¾	...	..	7½c	2¼	...	...
Corrimony ..	100½c	4¾	...	...	42½c	4½	38½c	5¾	15½c	3¾	2½c	2½	3½c	2¾
Fairfield ...	62	6¼	15	7	23	5¾	13	8	11	4¾	...	...	...	...
Home ...	32½c	4¼	...	..	22½c	4	10½c	4¾	...	..	..	..	...	...
Invercauld ...	80 p	3¾	13	5	27	4	...	...	12	3¾	18 p	1¾ 3¼	10 p	2½ 4
Kan Dev H Co. A...	43 p	5	...	...	...	...	...	..	...	...	11	3½	32½c	6
„ Munaar ..	392 p	5½	45	6½	94	5	60½c	9¾	116	4¼	...	..	77½c	5½
Mahandragherry ...	48½c	3½	...	...	43½c	3¾			...	...	5½c	2½	...	...
Merchiston ...	122 p	4½	20½c	5½	46	4 4½	30½c	5½	...	...	16	2½ 3¾	10½c	3
Poonmudi T Co B.	154 p	4¾	...	...	49	5	34	6	27	4¼	24	3¼	20 p	3 5¼
„ Braemore ...	133 p	4¾	30	5½	50	3¼ 4½	20	5¾	18	3½	7	2½ 3	8½c	3
„ Poonmudi ...	71 p	5	16	6½	27	5¼	...	...	14	4¼	5	3 3½	9 p	2¾ 4
Sthn Ind T Co KK	155	5½	70	5½ 5¾	...	...	40	6½	29	4¼	...	...	16	5¾
Sth Trav Co Nag ...	33 p	3	...	...		...	...	...	...	...	11	3¼	22 p	2¾ 3
„ Venture ...	161 p	6	...	...	49	5¾	49	6½ 8¼	48	5	...	...	15½c	4
Trav T Est Co MM	66	4¾	22	6 6	31	4½	...	...	13	3¾	...	...	...	...
Wynaad ...	**280**	**5·38**												
Pootoomulla ...	97 p	5¼	...	...	25	5¼	36½c	6½	23	4½	13	5	...	...
Richmond ...	58 p	4¼	25½c	6½	7	4	...	...	26	3¼	...	...	...	...
Wynaad T Co Per	125 p	6	30	6¼	...	..	55½c	6¾	35	5½	...	...	5½c	5

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 7th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad. *May 21st.*—*Weather*—Strong winds from the S.-W., and much thunder with vivid lightning, occasional rain. *Works*—Borer and manure. *Plant diseases*—There is little leaf disease about now, it was hard on several places last month. *Supplies*—have not done as well this year as could he wished, the showers in March and April causing a good deal of mortality amongst them. *Interesting item*—The range has been open at Saklaspur for the last fortnight under the supervision of Serjeant Pearce from Polli Betta.

Munzerabad. *May 28th.*—*Weather*—Strong south-westerly gales with heavy showers; temperature very variable—one day cloudy and cold, the next sunny and hot. *Works*—Manure still occupies the chief position, borer a good second. *Plant diseases*—Borer severe, but estates are looking well. *Health*—indifferent throughout the district. *Interesting item*—Hailstones measured ½ inch in diameter fell to-day.

THE TEA PROBLEM.

What is the Tea Problem? There have been so many Tea Problems. The problem of tea cultivation, the problem of tea manufacture, the problem of competition with China, the problem of opening up new markets. And at last we find ourselves confronted with a problem that has either lurked in the background or strayed into the foreground for a moment or two, all the time. It is the chief problem of all. Solve the others how we may, we must find a satisfactory solution to this, or tea must go to the wall. We have sought it in activity and enterprise, we have dreamt of it in "rest." Yet it eludes the grasp. Various authorities have told how it should be worked out, yet there has been a fatal flow always. True, some have made tea "pay;" many

have done so; but circumstances have changed, and at the present time the best grown tea does not, generally speaking, pay the producer. It is a double-barreled problem that is before us: how to make tea in the most efficient and economical manner, and how to sell it to best advantage. On the former point, one of the latest *dicta* is that of Mr. EDWARD ROSLING, Chairman of the Planters' Association of Ceylon. This gentleman asserts that if a man cannot make coarse plucking pay he must pluck finer. But this is a mere assertion, it by no means shows that fine or "finer" plucking will always pay. The simple fact is that production is largely dependent upon selling price. A low rate encourages fine plucking; a rise in the market causes men to sacrifice quality to quantity, and down go the prices again.

As to the "rest" scheme, Mr. ROSLING, remarks that Ceylon was not in any away to blame for the failure of the joint scheme. The scheme that has failed was not the Ceylon original scheme, but one which had been accepted to meet the views of those in London, and which was adopted simply on the principle of following the line of least resistance. The Home proprietors and London directors were responsible for the scheme falling through, and they alone. India had to get ten millions, seven of which was at once found at Home, leaving only three millions for India. Ceylon had eight millions to get, of which one and a quarter millions only could be found at Home, leaving six and three quarter millions for the Island. In Ceylon practically four millions were found, so that in that respect Ceylon has done as well if not better than India. No reproach, therefore, can attach to Ceylon. There has, according to this gentleman, been a good deal of misunderstanding about the proposal, which was only intended to be for one year in order to stay planters' hands whilst they reduced the stock. We find no fault with Mr. ROSLING for thus trying to make the best of what he has found to be inevitable, but what he says sufficiently shows the hopelessness of the joint "rest" scheme. Are we to expect anything better from an Indian "cess" scheme? There Mr. ROSLING appears to see no indication of a desire for joint working. He recently said that his view was that if they could in India get a cess and would devote that cess to the opening of markets which Ceylon did not touch, it would do India good and would not do Ceylon any harm. The cheap Indian pekoe of the same liquor as Ceylon pekoe had a better appearance, and, as on the Continent of Europe they valued appearance greatly, the tendency was for those Pekoes to oust Ceylon pekoes. Ceylon had spent a great deal of money in pushing its tea on the Continent of Europe and in America, and it really was not the business of the Ceylon people to urge in favour of a cess for India, which would help her to become Ceylon's greatest competitor in those markets. He would not go so far as to oppose a cess for India, but he certainly could not become one of its advocates. If an Indian cess was used for the pushing of trade in Persia, India, or where the geographical position gave facilities which Ceylon had not, it would be a most excellent thing.

The one thing that pleases us in these remarks is that they contain an admission that the interests of Ceylon and Indian teas are not under all circumstances identical. This is what we have urged for months past. It is all very well to classify them both as "British-grown," but this does not touch the point that they are also largely "British-consumed" teas. That is the true crux of the present problem. The British consumer, or rather, the British distributor of tea has th advantage over the British grower. The large blender com mands the market. He regulates the price at which he buy the price at which he sells. The producer gets not too muc the consumer has to pay more than a fair price, compare with the cost to the distributor. Increase of consumption thus checked, and the producer finds himself face to fac with losses where he ought to find profits. New markets ar desirable certainly, but above all things it is desirable tha the producer should be able to command a fair price for h teas in proportion to what the consumers pay, so that th maximum of immediate advantage to the planter may be ac companied by the maximum of stimulus to demand. This the line along which we should like to see Indian tea-planter direct their advance movement. They have millions capital behind them, there is no lack of influence, but th present organisation is defective.

BRAZILIAN COFFEE AND FINANCE.

The Brazilian Congress opened on 3rd May. In his offici message the President states with respect to coffee that th crisis in that trade occupied the attention of the whole natio The Government has reduced the rates for carriage on th State railways and also on private railways by agreemen with the companies. The Message mentions the grea development that has taken place in the working of the mine and recommends the construction of the port at Rio de Janeir by private enterprise, with Government assistance. In th important paragraph dealing with finance detailed informatio is given regarding the crisis in the affairs of the Bank of th Republic, which had absorbed 260,000 contos in emission in the period from 1892 to 1898. The Government refuse absolutely to authorise fresh emissions, and the Bank, unde official control, has paid its creditors, after having alread redeemed 34,000 contos. The Message affirms that th Treasury will resume its gold payments at the time whic has been agreed upon with Great Britain. It has alread £2,300,000 deposited, and it is probable that by December wil have encashed £1,800,000 more, whereas payments during the second half-year amount only to £1,200,000. As a guarantee for future years the Treasury will have a reserv of £4,000,000 per year, without reckoning £1,000,000 allotte to the paper-money guaranteed fund. The financial year 190 shows a surplus in the Budget of 69,000 contos, and the firs quarter of 1901 shows an increase under every head o revenue as compared with the corresponding period of 1900 Several old debts have been liquidated, and the Treasury ha no debts now in circulation—a thing which has not happene for years.

THE ENCYCLOPÆDIA OF SPORT.

By arrangement with the *Madras Times* we are able t offer to our readers copies of **The Encyclopædia of Sport** a work that deserves the attention of every sportsman. It i a well-written book, admirably illustrated, and well bound It is, what it professes to be, an Encyclopædia that gives a mas of information regarding sports in all its branches. Our con temporary has manifested considerable enterprise in offering the book to its subscribers, and we trust that our supporter also will avail themselves of the opportunity to enrich thei respective libraries.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

Erratum.

In issue of 18th ultimo, the last sentence of suggestion No. 6 of the Hon'ble Mr. Acworth should read :—"They should be headed by some attractive *device* such as a peacock."

NOTES.

Colombo Tea Sales. The sale on 22nd ultimo was comprised of a large proportion of unattractive teas—as usual at this season—and buyers showed a disinclination to buy except at lower rates. Prices therefore again gave way for all but flavoury kinds, of which there were very few offering.

The "Resting" of Tea. We observe that our Calcutta contemporary, *Indian Gardening and Planting*, claims to have been the only opponent of the "resting" scheme some months ago. We are glad to be able to state that we opposed the scheme *ab initio* and that South Indian planters, almost without exception, did likewise.

Not Low Enough! According to the *American Grocer* one of the oldest jobbers of coffee says he will be willing to buy options when 4c. is reached, but 5c. coffee has no attraction. Deliveries have been light. Late sales of Brazil were on the basis of 6c. for No. 7 Rio, spot, and 7¼c. for No. 3 Rio. Options fairly active.

The Coming Brazilian Coffee Crop. The *Rio Claro*, published at the city of that name, says that a person who visited twenty different plantations in the Araraquara, Mattao, Ribeiraozinhc, Jaboticabal, and Dous Corregos districts found only three to be maintained in proper order, a fact that, if true, cannot but exercise a serious influence on coming crops.

Coffee in Uganda. Less than five years ago the first coffee seeds were introduced into Uganda by missionaries. Now there are extensive crops under cultivation. Last year 100 tons were exported from Uganda, and this year this amount will be greatly exceeded. The quality of Blantyre coffee is said to be the best in the world, superior even to the famous Mocha.

The Nyassaland Coffee Company. An extraordinary general meeting of the shareholders of the above Company was held at the offices of the Agents and Secretaries Messrs. Carson & Co., at noon on the 25th ultimo when the previously passed resolution was confirmed winding up the affairs of the Company and appointing Messrs. W. Shakespeare and E. R. Williams as Liquidators.

The Packing of Coffee. Sr. Gregorio Gonçalves de Castro Mascarenhas has invented an *in-volucro*, by which, the *Brazilian Review* presumes, is meant some new method of packing in a patent barrel, bag or something, which he says will be of the greatest value. He asks for a reduction of 1% on all coffees exported by his method. He thinks that the State can easily afford it as it has a large surplus and can besides clap on an extra duty on something else!

Para Rubber. The following statement shows the total yearly crop of Pará Rubber from the Amazon Valley (including Bolivia and Peru) during the years 1877—1900.

	Tons.		Tons.		Tons.
1877	7,598	1885	12,696	1893	19,730
1878	7,898	1886	13,390	1894	19,470
1879	7,926	1887	15,690	1895	20,981
1880	8,635	1888	15,990	1896	22,315
1881	9,492	1889	13,300	1897	22,257
1882	10,018	1890	16,890	1898	25,374
1883	11,158	1891	18,430	1899	25,374
1884	11,782	1892	18,990	1900	26,693

Black Pepper in Sylhet. A correspondent of *Indian Gardening and Planting* writes :—The cultivation of this plant, although in the very embryo of existence in South Sylhet, has every prospect of becoming one of the recognised products of the district. Although the plant is indigenous to Assam, it is not grown in any of its districts as a commercial product. It is to be seen growing in the villages in Upper Assam, but only for home consumption. It is never grown, as far as I can find out, for even the local markets. It is to be seen growing in some of the South Sylhet villages, but only rarely, and never is grown for sale.

Vanilla in the Seychelles. The next year's vanilla-crop promises to be a very good one. The rains in November, however, prevented it being the bumper crop it then appeared to promise. The owners of the mountain-vanilla estates were the heaviest losers owing to the rain. It came down steadily just a day or two before the great flowering days, the result being that thousands of flowers were not fecundated. The area under vanilla in the Colony is steadily increasing. There are a good many diseased vines about all over the islands, but now, owing to each vine being kept distinctly separate from its neighbour, the fell vanilla-disease cannot cause the ruin of our plantations as it did in 1889 and following years.

The Dutch Cinchona Auctions. The auctions of cinchona-bark held at Amsterdam, on May 9, consisted of 7,515 packages, of which 7,378 packages sold at an average unit of 10c. per half-kilo., against 8·95c. per half-kilo. paid at the auctions on March 28. The following were the approximate quantities of quinine purchased by the principal buyers :—English and American factories, who purchased the equivalent of 13,346 kilos. ; the Brunswick factory, 4,420 kilos. ; the Mannheim and Amsterdam factories, 5,180 kilos. ; the Frankfort-on-Main and Stuttgart factories, 4,340 kilos. ; and various buyers, 3,115 kilos. The prices paid for the manufacturing bark ranged from 13c. to 111¼c. per half-kilo., and druggists' bark from 12¾c. to 107c.

The London Tea Market. The special telegram, dated, 23rd ultimo, from Messrs. Gow, Wilson & Stanton to Colombo reports that the market generally is steady, and that the market for medium liquoring Pekoes and Broken Pekoes, as well as for Common Pekoes and Broken pekoes is also steady. The price of fair liquoring Ceylon Pekoe Souchong is 5d. (same as last week) and the average

price of Ceylon tea sold on garden account this week was 6⅝d. (a farthing up)—as against 6d. and 7d. respectively in the corresponding week last year. Reuter reports that the tone of Ceylon tea is generally steady. Pekoe Souchongs are quoted at 4⅝d. (⅛d. down) and the average for the week at 6⅝d. (¼d. up) as against 6⅜d. quoted for Indian tea. 25,000 packages of Ceylon tea were offered for sale, of which 22,000 were disposed of; while of the 12,000 packages of Indian tea offered, 11,000 found purchasers.

Tea in Holland.

The larger part of the supply of tea in Holland during 1900 was as before from Java, the total importation, nearly exclusively to Amsterdam, amounting to 81,337 chests. The receipts of China tea were again insignificant, and though the quotations were low it becomes more and more difficult to find buyers for this quality. Ordinary Java tea was imported in such a quantity that the price, especially of inferior descriptions, was much depressed. Good marks were in fair demand at remunerative figures. Of Assam tea only 200 chests were taken to this market. Prices ranged as follows :—

	Per lb. From		To	
	s.	*d.*	*s.*	*d.*
Java, Souchong, and Pekoe	0	4¾	0	6½
Orange Pekoe	0	5½	0	10½
Java Flowery Pekoe	0	8¼	3	4

The "Leeming" System.

We understand that the "Leeming" system of planting coffee has proved a success on the Shevaroys. We note that a South Sylhet correspondent of a Calcutta paper writes :—"Planting widely apart and leaving them to nature has been tried repeatedly and has always failed. The system produces a large amount of weakly and unripened wood which, besides exhausting the energy of the plant uselessly, overcrowds those branches which are really strong enough for fruit-bearing and prevents them getting that ripe, short-jointed firmness which is absolutely necessary before a satisfactory fruit crop of any kind can be looked for. Besides the crowded bush has no chance of having the full benefit of air and sunlight which makes it peculiarly liable, according to all authorities on the subject, to leaf disease." The mistake here is in "leaving them to nature." Whether planted near or far apart, coffee-trees are all the better for a fair amount of pruning and handling.

A Mysore Planter in Ceylon.

Mr. E. C. Bolton is the subject of the following kindly notice in the *Times of Ceylon*:—We received a visit this morning from this gentleman, once a Ceylon planter, but who left for Mysore many years ago, it being some eighteen years since he was last in Colombo. Shortly before he left he was on Wattakelly, Madulkele, and formerly in Ambegamuwa being there a near neighbour of Mr. R. S. Atkinson, once of Morlands, of whom he was anxious to hear news, as well as of other old friends. He gave a poor description of coffee prospects in Mysore, stating that his prices, which had formerly left little to be wished for, had, from Brazilian competition, fallen to a figure that no one could possibly have anticipated. He left for India to-day, being on his way out again after a trip home. Necessarily he sees great changes here, not the least of all in the offices of the *Times of Ceylon*.

The Agitation for an Indian Import Duty against Ceylon Tea.

The *Times of Ceylon* remarks :—"We do not say we have heard th last of this; but the reply of th Calcutta Committee to the Centra Travancore Association is rather a damper. It transpire that there is an import duty already—though it is a sma *ad valorem* one—and, as we have said all along, the Bomba Government will not go in for a protective duty at th expense of the inhabitants of that Presidency in order to giv our friends in South India an easier time. Mr. Deane ha singled out Ceylon tea especially, in calling for a high dut against "foreign" teas, and he will find his proposal any thing but popular. Our tax is a genuine one against chea Chinas, and is not upheld as against Indian teas at all; no could Indian teas hope to compete with Ceylon teas for co sumption in Ceylon, if they cannot successfully compete no in India!" What our contemporary means by saying th the Ceylon tax is not "upheld" against Indian teas is Gree to us. The tax is, at any rate, *levied* on Indian leaf.

The Proposed Indian Tea Cess.

The following remarks by Ceylon planter are instructive :—I s nothing more important to tea plan ers at this time than the establishment of an Indian Te Cess. And yet "what a world we live in." Even the matt of raising funds by a Cess in India is viewed with mixe feelings, if not alarm, by men whom one would suppose wou only be too glad to see even Indian tea introduced into eve country where it has not yet become a necessary of lif Every pound of Indian tea held back from the Londo market, by the aid of the Indian cess finding markets for in other countries, is so much in our favour. Have we n been crying out because India has not hitherto been payi a fair share of the cost of pushing its tea in America and foreign lands, as it could not but reap the benefit of o mission work? Why, then, should there be any feeling distrust as to the result of double the expenditure employe in making known British-grown teas? In my opinion will be a sad day for many of us if by any chance Ind were looked on as a rival to Ceylon.

A Remedy for Over-production.

Mr. A. Cooke, the well-know Chota Nagpur tea planter, has fo mulated the following scheme f the welfare of the tea industry, and which he is anxio should be adopted, is briefly this:—Assuming the yield Indian tea this season to be 187 million lbs., let there be Government Tea Cess of 2 pies per lb.; this will produ Rs.19,48,958. The actual cost of plucking, manufacturi packing, and forwarding to Calcutta of one pound of tea estimates at 2½ annas per lb., or Rs.12 per maund. Inste of making 10 million pounds of tea less, as arranged for the reduction of output scheme, make the full amount b sell the extra 10 million lbs. to the Tea Distributing Agen at Rs.12 per maund for distributive and exploiting purpos in India and foreign markets. Instead of getting nothi the growers will get Rs.15 lakhs (which will be the cost 10 million lbs. at Rs.12 per maund), and the Distributi Agency will have Rs 4,48,958, more or less, as a worki capital. If this scheme is adopted, Mr. Cooke says th there can be no more over-production.

Indian Tea for Burma.

The *Rangoon Gazette* says :—Wi the present complaints of over-p

duction of tea in Ceylon and India, and the attempts made to find new markets for their produce, it might be worth while for planters to see if they cannot find a remunerative business in supplying pickled tea for Burma. The article is consumed in almost every house in the Province, except by Europeans and natives of India. It is now made principally in the Shan States, and if Indian planters were to send experts to see how the process is carried on they perhaps might find a paying outlet for a portion of the cheaper varieties of tea produced on their estates, which they now find so difficult to sell. Tea is also largely drunk by the Burmese ; and even itinerant vendors in the larger towns are said to make from Rs.2 to Rs.3 a day selling a very miserable decoction sweetened to excess at two pice a cup. Travellers by train in India find no difficulty in getting a good cup of tea at most Railway Stations at four annas a cup. This is too costly to be a popular drink. But at very few places in Burma can good tea be bought by the cup, though, we believe, the sale would soon be popular if it were introduced along our railway lines.

Examination for Tea-making.

A planter writes to the *Ceylon Observer* :—Referring to the subject of an Examination for Tea Makers by "an old Planter," brought up by a local paper recently. In anticipation :—(1*st*) To observe from whom it is that the Tea-makers who know nothing about tea hold the best testimonials ? (2*nd*) What pay will be given for the passed candidate to start with (ans.—Rs. 50 to start). (3*rd*) To what extent the pay is limited (ans.—to 250). (4*th*) Pension, retired allowances, and gratuities (ans. 70 to 100). (5*th*) Providing for the granting of Pensions to Widows and children of deceased Tea-makers (ans. 25 to 50). (6*th*) Tea-makers to be encouraged with his free will for tea-making process. (7*th*) No Ceylon expert to hold the examination, as Ceylon tea seems very low in the market. Hope this would give more privileges to Ceylon tea to be high in the market. As our contemporary remarks, "The above is from a tea-maker, but appears to be rather a catalogue of existing professional conditions and reforms wanted by tea-makers, than questions they would be required to answer in an examination." After all, what is needed is not Examinations, but Education !

The London Coffee Market.

The *Produce Markets' Review* of the 4th ultimo says:—The Brazilian receipts have shown some signs of falling off, and as in addition the exchange has advanced another ½d, the terminal market has been decidedly firmer, and quotations have advanced 1s 3d during the week, but part of this been lost. The weight of coffee in all consuming countries and the heavy stock in Santos is altogether against any material rise, and, in addition to this, in about a month the new crop may be expected to commence being marketed. At the auctions a full supply has been offered and sold, prices being rather better for medium Guatemala and Salvador, which had fallen rather below their value. Of Costa Rica the bold sizes have not maintained the high values current during the last few months, but the medium sizes have sold without change. East India, particularly the A and B sizes of Mysore, continues to sell at prices which have not been seen for many years past, and a large business has been done. There are already some signs of merchants withdrawing such coffees from the market, as it is hardly likely that quotations can remain on such a basis when the arrivals begin to fall off, as is generally the case during this or next month.

Coffee Freights.

Now that the Freight question from Brazil has again come to the front it may interest some of our readers to note the advantage that Brazilian coffee has over India in the matter of the cost of transit from port to port. The following are given by the *Brazilian Review* as

CURRENT COFFEE RATES FOR THE WEEK ENDING APRIL 6TH.

	Rio.	Santos.
Antwerp 1,000 kilos.	35/ & 5%	30/ & 5%
Alexandria	60 frcs. & 10%	
Algoa Bay	50s. & 2½%	
Bremen	35/ & 5%	
Bordeaux, 900 kilos.	40 frcs. & 10%	
Buenos Ayres per bag, 60 kilos. ...	3$000.	35 frcs. & 10%
Beyrouth	75 frcs. & 10%	
Copenhagen	37/6 & 5%	32/6 & 5%
Cape Town, *viâ* Engl. 1,000 kilos ...	50s. & 2½%	
Constantinople	55½ frcs. & 10%	
Delagoa Bay	57s. 6d. & 2½%	
East London	57s. 6d & 2½%	
Fiume	45s. & 5%	40s & 5%
Galveston *viâ* N. Orleans ...	50c & 5%	
Genoa, 1,000 kilos.	40 frcs. & 10%	40 frcs & 10%
Hamburg	35/ & 5%	30/ & 5%
Havre, 900 kilos.	30 frcs. & 10%	30 frcs. & 10%
Lisbon	30s.	
Liverpool	35/ & 5%	
London 1,000 kilos.	30/ & 5%	35s. & 5%
Marseilles, 1,000 kilos.... .	40 frcs. & 10%	40 frcs. & 10%
Montevidéo, per bag, 60 kilos. ...	3$000	35 frcs. & 10%
Mossel Bay	57s. 6d. & 2½%	
Naples	48½ frcs & 10%	
New York, Liners	50 cents & 5%	50 cents & 5%
N. Orleans Liners	50 cents & 5%	50 cents & 5%
Odessa	62 frcs. & 10%	
Port Elizabeth, 1,000 kilos. ...	50s & 2½%	
Port Natal	57s 6d. & 2½%	
Punta Arenas	60/ & 5%	
Rosario, per bag, 60 kilos. ..	3$000	
Rotterdam	35/ & 5%	30/ & 5%
Smyrna	55½ frcs. & 10%	
Southampton, 1,000 kilos. ...	30/ & 5%	30s. & 5%
Talcahuano	45s. & 5%	
Trieste	45/ & 5%	40s. & 5%
Valparaiso	45/ & 5%	
Venice	50s. & 5%	45s. & 5%

The Cost of Coffee.

A correspondent writes to the *Brazilian Review* from New York as follows :—"There has always been a decided difference of opinion among the coffee trade as to the actual cost of producing coffee. The writer having spent five (5) years in Hayti carefully figured same on the basis of 25c. a day, gold, for the ordinary negro labour, making the actual cost of production, after testing same carefully for several years, 2c. per lb. for manipulation, and 2c. for bagging, freight to Europe and return of proceeds. Cultivation varied so much that I was unable to figure accurately as to that. I presume like circumstances exist with you, but would say 2c. a lb. should cover it. Of course this does not include export duty and therefore I made the total cost of production to be 6c. a lb. With me I found that washed coffee would cost but little more than the unwashed on account of the greater ease with which the former was dried and manipulated. Will you kindly let me know, as near as possible, what the cost is in Brazil ?" The editor of our *Rio* contemporary comments thus :—There is great discussion as regards the cost of production in this country, which varies considerably with the district, being lowest in Sao Paulo where the yield per 1,000 trees

is more than double that of the State of Rio de Janeiro and parts of Minas. We should put down the bare cost of production and delivery of Sao Paulo coffees at the port of Santos, exclusive of interest on capital or rent, at about 4$000 per *arroba* of 15 kilos., which, reduced to American money at 12d. exchange would give 96 cents per lb. The gold cost will naturally increase as exchange rises, because plantation expenditure, being paid in currency, scarcely varies, or, at least, very slowly with the rate of exchange. It would, therefore, be very difficult to say what the sterling cost of production is, except momentarily, but in milreis it is probable that 4$000 per 15 kilos. covers working expenses and transport on most well-managed estates within the area of average distance from the coast. If any of our readers can supply reliable information on the subject, we shall be pleased to publish it.

LETTERS TO THE EDITOR.

COFFEE PRUNING.

SIR,—In a letter published in *Planting Opinion* some few weeks ago, I endeavoured to show that the real reason for pruning is to be found in the necessity of having a succession of wood for the purpose of bearing the crop following, that in the embryo, at the pruning season. I will now go a step further, and add as a rider to the above proposition, that when enough old wood has been taken off, to ensure a good supply of fresh wood for the following season, that enough has been done; and that anything more than that is extravagance and a waste of steel, and the only parties who derive any advantage from it are Messrs. Rodgers & Son, Mappin & Webb, and other makers of pruning knives. They like it no doubt; for a knife with an inch-blade is whettled away to the back-bone in a very short time in heavy pruning.

Heavier pruning than that mentioned above only makes the tree throw out far more wood than is required, which has to be handled off again, and if not quite so bad as overbearing, must still have an exhausting effect on the tree, without the corresponding advantage gained by a heavy crop. It may be said that so many back growing and cross shoots are produced, that unless you have much more wood than is wanted, you have no choice, but to leave wood in the wrong place. This, in my opinion, is due principally to carelessness in leaving "stobs," from which shoots spring at right angles, in towards the stem. If, in pruning, the branches are cut off close, nearly all the new shoots will be found pointing in a proper direction, and if only sufficient pruning has been done to bring out a little more than the required quantity of wood, the handling will be much simplified.

When a tree has on it enough wood for the following year, there is no danger of its not ripening its crop. The trees which do not bring fruit to maturity, and which are so exhausted after crop, are those which are ill supplied with foliage from too light pruning, or neglect of the operation altogether. They have no leaves, or scarcely any, wherewith to imbibe moisture; and, consequently the fruit in ripening drains the very life blood of the tree. There are only two sources open to the coffee tree from which to obtain nutriment,—from the earth by its roots, and from the atmosphere by its leaves. The first course, the earth may be considered dried up during December, January, and February, and therefore the only means it has of maturing its fruit is by what it takes in by its leaves and the sap already in the tree.

While supporting and maturing its fruit, chiefly on th moisture and gases absorbed by its leaves, a tree ma be compared to a man spending his income; but whe through lack of leaves, the fruit matures on the sap the in the tree—its vital juice—it may be likened to the sam man spending his capital—killing the goose which lays th golden eggs. Another light in which heavy pruning ma be viewed is, that of its improvidence. Enough wood and no more, is left on to give an average crop in a favou able season; if unfavourable blossoming showers are exper enced, the crop is short. Not so with the medium prune he leaves a margin for the failure of blossom, and in case no failure, I imagine, a little more than his estimate is better mistake to make than a good deal less. In pruning as in most other things the "Golden mean," should be strive for. As "Shakespeare," says "They are as sick th surfeit with too much, as they that starve with nothing it is no mean happiness, therefore, to be seated in the mea which is to say in other words, that you may have too mu of a good thing.

HEROBOLLOLLOS.

May 19*th*, 1901.

THE TRAVANCORE TEA ESTATES CO.

SIR,—"The remarks of a Home Writer" on the Trava core Tea Estates Co. in your issue of 18th instant are obviously written in ignorance of his subject, that I sha feel obliged, if you will insert the following explanation the difficulties of T. T. E. Co.:—

The Company was started some five years ago or so, whe tea was booming, with a nominal capital of £150,000. A the time of the flotation of the Company the Directors onl issued £75,000, considering there would be no difficulty getting the remainder of the capital taken up as require In this, however, they have been disappointed, for just capital was required to complete the equipment of the factories and to bring a large area of young tea int bearing, the tea depression set in. Hence the difficulties the Company. It is no wonder, that capital cannot easil be raised for a new concern like the T. T. E. Co., whe shares of old-established concerns in the North, concern still paying good dividends, can only be disposed of at great sacrifice. The T. T. E. Co. own some magnificent pro perties, and it is a mistake to suppose, as a "Home Writer remarks, that "tea-growing in South India under presen conditions is attended with great difficulties." This is not a all the case. We are suffering just as other tea producer are, but if planters will stand together now and combine to se this crisis through, we shall pull through, just as I hope the will both in Ceylon and North India.

I hold no brief for the Travancore Tea Estates Co. an do not own a single share therein. My object in writing to disabuse the mind of the public as to the difficulties of tea growing in South India. There are none; in fact there ar probably greater facilities in South India than in most othe places. There are thousands of acres of magnificent land both in Travancore and Wynaad, which merely requir capital to develop. Land such as I speak of, and which know well, will grow tea of the finest jât and will yield any thing from 600 to 1,000 lbs. per acre, according to climate.

PEERMAAD,
25*th May*, 1901. } GRANVILLE L. ACWORT

GENERAL ARTICLES.

THE TEA TRADE IN THE U. S.

The amount of tea held in warehouses increased 11,647,091 pounds in twelve months says the *American Grocer* of 24th April, 1901.

It is unaccountable that the American people are so indifferent to the flavour of tea. Most consumers are satisfied if the tea served is a warm beverage. The very few find as much delight in tickling the palate with an exquisitely-flavoured tea as the connoisseur with rare wines. For this reason it pays to serve tea in the store; not necessarily free, but at a nominal charge per cup. Unfortunately many dealers do not know how to properly brew tea; neither do they appreciate the distinctions in flavour. Many are like the average consumer—satisfied if they can taste the tannin. They would be as well satisfied with tansy or catnip tea as with a fine Moyune or delicate Formosa.

The late Theodore Child—an epicure, and author of "Delicate Feasting," says:

"The points to be insisted upon are that the tea should be freshly made, and not left to 'brew' for an indefinite period.

"Tea should be prepared daintily, in small quantities, and drunk immediately. If it be needful to prepare tea in large quantities, the infusion should be decanted in a warmed earthen teapot as soon as it has acquired the appropriate strength.

"The object of decanting the infusion is to prevant the liquid from becoming impregnated with tannic acid and other acrid and noxious principles which the tea-leaves contain.

"The infusion of tea made as Audiger directs is a suave drink, soft to the palate, and tasting only of the delicate aroma of the tea-leaves. The time required for the infusion can only be determined by experience and individual taste. The equivalent in modern parlance of Audiger's 'two or three paternosters' would be five to ten minutes. Remember that the longer the tea is infused the more acrid it becomes, because the leaves give forth more and more tannic acid.

"For tea-making and for all delicate cooking operations the water should be caught at the first boil. Nickel or silver pots are unobjectionable, provided they be kept scrupulously clean; but ordinary porcelain or earthen pots are preferable on all accounts.

"If the tea be good, the addition of milk spoils the taste. Furthermore, the tannic acid which is contained both in tea and in coffee changes the nature of the albuminous part of milk, and, so-to speak, tans the globues of the milk, and renders them indigestible. Tea and milk are difficult to digest. Pure cream is less objectionable, because pure cream is really butter or grease, and contains very little of the albuminous part of milk."

At last Wednesday's auction, prices showed a further decline. Moyune tea sold as low as 6½ to 7 cents per pound, in bond; Foochow Oolong at cents, in bond. The prices obtained were the lowest since the imposition of the tax.

THE PROPOSED TEA CESS AND HOW TO EMPLOY IT.

"A. C." writes to the *Pioneer*:—

By getting a Government "cess" placed on all tea everyone would be compelled to subscribe. The yield of Indian tea is 187 millon pounds and this amount at 1 pie per pound would produce a revenue of Rs.9,74,479—and at 2 pies per pound would produce Rs.19,48,958. Indian tea estates have already promised to restrict 10 million pounds of tea and Ceylon has so far promised to reduce about 3 million pounds. The estates which do actually refrain from making a proportion of their tea will gain Rs.12 per maund of 80 lbs. This is the cost of plucking, manufacturing, packing, and forwarding to Calcutta of 1 maund of tea. The cost of 10 million pounds (125,000 maunds) at Rs.12 per maund would be Rs.15,00,000 (15 lakhs). I have shown that a cess of 2 pies per pound would produce 19¼ lakhs and this would leave 3¾ lakhs for working expenses. The idea is that instead of refraining from making the tea, the estates shall be asked to make their usual quantity and sell a percentage to the Association at cost price, *i.e.*, Rs.12 per maund, which is about 2½ annas per pound. This scheme will give the producer the upper hand, he will be able to withdraw 10 million pounds from the regular markets, and he will be able to place it wherever it is most wanted. It will not be necessary to withdraw the full 10 million pounds and the amount to be withdrawn can be regulated by the prices offered at the usual sales. When too much tea is offered prices go down, and if we could promptly withdraw from 5 to 10 per cent. from the next sale, prices would go up and the tea withdrawn could be held in reserve, or sent to open out new markets. It could be landed in those new markets at cost price. The producers of the tea would be repaid the cost price, 2½ annas per pound, on only a small proportion of their teas, but they would benefit by keeping up the prices for the whole year to a paying figure. What we have to do is first to consent to the imposition of a cess, which will supply a fund of from 9½ to 19½ lakhs of rupees. This is only a fraction of the loss entailed from giving up the command of tea-selling. Then we have to consent to allow a proportion of our teas to be withdrawn at any time on condition that we are paid the cost price, 2½ annas per pound. We shall then be able to command the tea sales, and to regulate the price at which we sell our teas. If this scheme is adopted there can be no over-production. Over-production means that the supply of tea is greater than the demand, but if we *withdraw* the surplus we can keep the supply always level with the demand.

The present is the most serious crisis which has ever been faced by the tea industry, and consequently is the best time for proposing and establishing a radical reform, and the shareholders of tea companies are naturally those who can effect the most if they will wake up and make themselves heard. The revenue from a heavy cess on all tea will enable us to avert many dangers. Agents employed at home might have gained us sufficient votes to have reduced the duty to 4d. or 5d. as a compromise. The Chancellor is undoubtedly right in supposing that we can pay the full 6d. duty, he must know that we are willing to reduce our output, and that this reform is considered by tea owners a *sufficient* safeguard. He has it from our own mouths that over-production and *not* the extra duty is the cause of our distress, he would be only too glad to use our random speeches against us. And to think that leader of home rule, was the only one found to speak for us! The Associations appointed to watch our interests have proved insufficient. Shareholders should now establish a new form of Association with 18 to 20 lakhs of rupees per annum as a capital to work with. It is the apathy of the shareholder that has ruined the tea trade.

CINCHONA IN JAVA.

The condition of cinchona cultivation in Java is, says the *Chemist and Druggist*, not altogether that of an open book, at least so far as knowledge in the London market is concerned, for it is a prey to all sorts of rumours, especially as to cultivation being on the decline. We have during the past ten days had the opportunity of getting authentic information on the matter from two gentlemen who are not primarily interested in cinchona production. One resided in Java for nearly ten years, following a scientific pursuit, and the other spent nearly two months in the island investigating the cinchona question. Both agree that cinchona cultivation is on the up grade in Java, and that the cultivation of ledger trees there may be said to be in its infancy. Everything is giving way to ledger trees, which are all planted as graftings upon succirubra seedlings. These compound plants flourish exceedingly in the well-cultivated soil, which is kept as clean as any Surrey market-garden. There is no sign of any plantations going out of cultivation; rather the contrary, as the whole tendency is to get bark of high quinine percentage. Much interest is taken by the planters in the Bandong Quinine-factory, and as the planters can with advantage get their highest-yielding barks worked up there, they do not export the best barks. The factory is now the only one in Java, and it is slowly making its influence felt on the market. Last year it sold 900,000 oz. of quinine by auction locally, the bulk of it going to the United States. We may note that the exports of quinine from Germany to the United States decreased 1,000,000 oz. last year. It has often been asserted that the Java planters have the quinine situation in their own hands if they would come to some agreement to restrict the output or control the supply of bark. This is just what they cannot, or will not, do. On the contrary, they ship larger quantities every season. For instance, the shipments for 1898-1900 have averaged over 11,000,000 Amsterdam lbs. per annum, against an average of 9,000,000 for 1895-1897. During the first four months of

this year the shipments also show the large increase of nearly 1,000,000 Amsterdam lbs. To this fact, taken together with the heavy London stock of quinine, is attributed the recent depression of the market and want of confidence among speculators. During this week there has been a slight revival, but it is thought to be merely a "move" with the idea of giving a fillip to the bark auctions at Amsterdam, at which the quantity offered is again large, representing nearly 1,080,000 oz. quinine in the bark, or over 30 tons. The result of these auctions will be found in our Trade Report, and will be eagerly awaited by quinine speculators and dealers generally, for upon it depends the immediate course of the quinine market. According to the drug statistics there was a stock of 3,330,000 oz. of quinine in the London warehouses at the end of April, and although this is slightly less than the stock at the corresponding period of 1900, it has none the less disheartened speculators. The deliveries for April were only 37,000 oz., while the imports reached the respectable total of 218,480 oz. The above stock is a heavy one, and the figures since the beginning of the year, month by month, show that it is normal in recent history :—

	1901	1900
	oz	oz.
January	3,300,000	2,800,000
February	3,100.000	3,090,000
March	3,150,000	3,320,000
April	3,330,000	3,430,000

We may repeat in regard to the heavy shipments of cinchona from Java that they are not a matter of uprooting trees or anything of that kind, but are simply the natural outcome of a culture which is carried on with excessively cheap native labour, and under the best possible scientific conditions. There is no evidence, as far as we can gather, that this is done at a loss to the planters, and they are not in the slightest interested in what will suit quinine speculators.

INDIGENOUS MARKET FOR TEA.

"J" writes in *Capital* :—

There is possibly nothing that ought to absorb the attention of all those connected with the tea industry so much as the capture of the Indian tea market; the greatest outlet for our common teas, for, undoubtedly Ceylon growers will exploit it if those of India do not. It seems of course to those who do not know, very easy to lay down reasons, for the present depreciation in prices, and for imposing a compulsory cess to be used for opening outside markets, but, to those who have carefully gone into the matter, it is a very much more difficult task in India than in Ceylon to get these things carried through. To begin with tea, in the huge empire of India, is but a small drop in the ocean of revenue, whilst, in Ceylon, it is close upon 60 per cent. of the total, a fact which explains the easy way in which taxes and cesses can be imposed and collected. Although, as far as the collection goes, we cannot think that would be difficult in India. A compulsory cess could be levied at the Kidderpore Docks without any extra establishment, and very little extra trouble, and, unless the Government of Bengal wishes to see tea in the same plight as indigo, it will come to the rescue and collect the tax. If we remember rightly, there was but one dissentient to the cess, and even he gave in, rather than see the proposal frustrated, so that the Lieutenant-Governor should see his way now to begin and collect the tax as from 1st January last. It seems to us, that this is the only fair way to raise a fund to exploit the market in foreign countries as well as in India. Whilst on the subject of cesses, it seems to us, that we ought to have an import tax on all teas of China and Ceylon in addition to the present 5 per cent. *ad valorem* duty. Why should we collect a cess to open up a market amongst the native populations of this huge country if Ceylon is to be allowed to come in and reap the benefit? Charity begins at home, and the Tea Industry, Tea Association, and Chamber of Commerce should be up and doing. There exists an import duty in Ceylon, why then should there not be reciprocity? In fact, unless this is done, it is simply offering a premium to Ceylon to pluck coarse tea again, and flood the home and all other markets with rubbish. India, for the Indians, Ceylon, for the Sinhalese. Our planters in Travancore and other parts of Southern India are no doubt keenly alive to their own interests, and would readily help any movement or agitation of this kind. We are sorry to hear that a certain amount of lukewarmness has already manifested itself in Calcutta amongst those most interested in the pushing of the distribution of commo teas to the native population in North-Western India, due, n doubt, to the hope which has sprung up within the last month o so, *viz.*, that, owing to the extraordinary drought that has prevaile throughout nearly all the tea districts the crop would be a shor one, and prices were bound to rise. We sincerely hope this is no the case, for surely the report of the last fortnight's sales b Reuter is not very cheerful reading. Last week's average of 6½ for all Indian tea brought to auction spells ruin to 90 per cent. gardens, and the sales we refer to should surely impress (if an thing was required to do so) the gravity of the present situatio unless some united action is taken up and vigorously carried ou With the lessons before our eyes of the West Indian sugar industr and, to come nearer home, of indigo—are we going to sit still as body, and make no united effort, content if a few fit ones survive Are we going to allow 50 to 60 per cent. of concerns to go to th wall, for the want of a little combination and energy? It seem almost marvellous that so little unanimity exists among Te proprietors, Agents, Secretaries, or even among planters them selves, and we are afraid another term of adversity is the onl remedy to cure this undying jealousy; that is the canker eating the whole industry, which prevents the fructification of man schemes bound to succeed, if carried out even half-heartedly, bu which are simply condemned as failures, without even a fair tri at all because of the jealousy referred to. In some of the annu reports of companies which have been published this year, th present depression is referred to as only temporary; but, w entirely fail to see what grounds there are for such a statemen Latest advices from home indicate heavy stocks, and a declinin market, or, to use the broker's expression, a "languid tone pr vailed" and this too, in spite of there being no dearth of repor regarding the drought and the poor outlook for the season telegraphic advices received since the mail left make it certai that there is more than sufficient tea on the market for prese wants, and dealers are not afraid of the situation, even in th face of a short crop. All praise to the Tea Association fo its action in trying to exploit the Persian and Russian market but there should be at least a dozen schemes like this runnin side by side on the chance that some of them at any ra would be successful and create an opening for our teas. W want to get rid of 50 to 60 million lbs. before we can say the situa tion is a sound one, and this with combination and money can b done in India, if Ceylon is barred, and the Calcutta Agents wil throw themselves vigorously into the breach, but there must be n half-heartedness as at present, and no lack of money, to provid which a small cess only is required.

CHARGES ON BRAZILIAN COFFEE.

At a meeting of the Sociedade Nacional de Agricultura Sr. Hy gino Costa, partner in the Commissario firm of Duarte Dav & Co opposed the formation of a co-operative society for direct exportatio and sale of coffee. In the course of his speech Sr. Costa showe that at present charges on coffee were as follows :—

10 %	Export duties.
15 %	Railway freights.
2 %	Cartage.
6 %	Sacking.
2 %	Eventual.
35 %	from the plantation to delivery aboard.

At present Sr. Costa says that exporters make the nice littl profit of fcs. 8·20 on every bag exported; but how it is that the don't all become millionaires instead of busting-up as they usuall seem to do; or why every one don't turn exporter with so brillian a perspective before him is one of those things that Sr. Costa doe not condescend to explain. His account is as follows :—

Purchase of 10 bag of 60 kilos. at 10$000 per arroba ...	fcs.	42·0
Freight		2·8
Eventuals		1·0
Total ...	fcs.	45·8
Sale f.o.b. at 45 fcs. per 50 kilos., duties paid by buyer ...		53·0
Profit		8·2

But if the retail trade is included, matters are far worse and th

manner in which unfortunate planters are defrauded is still clearer. Sr. Costa's little account then comes out as follows :—

Cost of 60 kilos. coffee at 10$000 and 10 1/16 dv	fcs.	42·00
Import tax		81·60
Loss of weight 20% on roasting		24·80
Roasting and packing		12·30
Other expenses 30%		36·30
Total ...		197 09
Sale		360·00
Profit	fcs.	163·09

No doubt a great deal may be done by co-operation and the elimination of unnecessary middlemen, but that they can ever be dispensed with altogether as Sr. Costa seems to imagine, is as unlikely as the discovery of the philospher's stone or of perpetual motion. The fact that such a Society is proposed by Sr. Costa is requisite in evidence of the contrary.—*Brazilian Review.*

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange.—*April 13th*, 1901.—Ninety days' Bank rate on London opened on 8th at 11 5/16d., rose to 12 3/8 on Friday, and closed this evening undecided at 12 7/32d. . . . the statistics of imports and exports show unmistakably the balance of foreign trade to be in favour of the country. Leaving aside the month of January, for which the statistics of imports are incomplete, those for February show a balance in favour of our trade of £1,424,936, and though imports are certainly increasing, there is every reason to believe the results for March will prove equally satisfactory, and that, judging from the shipments of coffee and rubber, their value will, in all probability exceed that for February. It is true that as exchange rises an increase of imports must be looked for, which may succeed in turning the balance against us once more. Indeed, this movement seems to have already commenced, as the number of consular invoices received at the Commercial Statistics Bureau has risen from 7,301 in February to 10,105 in March.

Shipments of rubber are also likely to fall-off considerably in the course of this month or next, whilst coffee entries may likewise diminish for a time under the pressure of extremely low prices. But even so, with the enormous stock of coffee already in hand, that must be shipped at any price, there seems every likelihood of exports being maintained well ahead of imports right through this, the generally slackest time of the year, and into the busy season when the new coffee crop will commence to flood the market with bills once more.

It is true that the situation in the coffee market is rapidly approaching a crisis when something must give way. The cord if overstrained, says the proverb, will part at its weakest point and, sooner or later, either sterling coffee prices or exchange must yield, one down or the other up, or coffee will cease to be marketed. As exchange rises coffee prices fall proportionately and before long the limit of currency prices must be reached, if it has not been already, when no more coffee will be sent to market. Naturally either sterling prices or exchange or, perhaps, both would then react; the question being which would of the two give way first? With the enormous stock of coffee in hand and prospect of an early and record crop, hopes of improvement of sterling prices must be faint indeed; the probability, therefore, being that exchange will be the first to feel the pressure and to give way. Before that can happen, however, there remain over a million bags of coffee to be disposed-of that with new entries, however small, may be counted on to keep the market supplied for a month or two with bills. Should the foreign markets, meanwhile, for any reason take to "bulling" coffee, instead of a weakness of exchange there would be, perhaps, another and a monumental rise.

All is but conjecture, because the future of coffee is itself uncertain, depending, as it does, not only on immediate and easily recognizable factors but on others yet in embryo, as to which no calculation can be made. A sharp frost in June or July, a further heavy fall of currency prices, or even a rig in American markets might change the whole prospects of coffee and of exchange with it. Still, at present, the situation is not healthy, and sooner or later something must give way.

Coffee.—Entries during the week ended 12th April reacted once more, being 45,465 in excess of the previous week's and still nearly four times those of the corresponding week last year. At the commencement of the week entries were on so small a scale as to inspire the liveliest hopes that the long predicted falling-off had indeed come, that, however, were quickly destroyed again by the animation towards the end of the week. In spite of prices having fallen to a point that was generally considered prohibitive, coffee continues to pour in and to falsify all predictions. At the same time there must be a limit at which it is unprofitable to send more coffee to market, and this some people pretend is already reached at Rio, and that, unless prices react, little will arrive under 7$ per arroba.

Since prices fell under 7$500, commissarios state that very few way bills have been received from Minas, and Rio and look for a decided shrinkage in entries from these districts and however the present stock may be marketed, it seems likely that under 7$000 little new coffee will be sent down from the plantations.

The market opened at Rio on the 8th with good hopes of American houses entering to cover previous supposed sales, which, however, were disappointed and sales were very limited at prices ranging from 7$600 to 7$300 per arroba. Desirable high grades were scarce, those offering ranging from No. 7 down. A few samples of new crop washed coffees were offered and the crop at Rio and Minas is expected to be early whatever may be the case in S. Paulo. We quote cost, freight, and commission at 31s. 3d. on the basis of 7$600 per arroba, and 12d. exchange, but understand that offers for future delivery have been made on the basis of 6$900 and refused.

Declared sales at Rio during the week ended April 4th were 32,000 as against 37,000 the previous week and 28,000 for the corresponding week last year. *Embarques* or shipments having been 57,549 as against 49,562 the previous week and 31,127 for the corresponding week last year.

THE COFFEE TRADE IN THE U. S.

The *American Grocer* remarks :—

Coffee should be a prominent and distinct feature in every retail store, if it is made, what it ought to be, one of the most profitable articles handled.

Grace Greenwood, when requested to write in an autograph album, penned the following lines:

Says Juliet from her balcony, "What's in a name?
All I have of fortune and of fame is in my name."
—*Grace Greenwood.*

And the retailer should be able to say:

"Of all the things the grocers sell,
'Tis coffee makes the profits tell."

There's Padang and Sumatra Java, with a range in the price of the green bean from 17 to cents; Maracaibo, Rio sorts, and the milder Santos; Mexican and Central American, some marks of which have superior body and exquisite flavuor; "Blue Mountain" Jamaica, which the writer is using with great satisfaction; Mocha and peaberry of various growths; Laguayra, the big bean; heavy-flavored Liberian, and lots of other kinds. The expert who buys for drinking or cup quality is enabled to pick up green coffee at very low cost, that will roast as well and give the same or better satisfaction than sorts and marks that are in popular favor, and therefore command a price higher than is warranted by intrinsic merits.

Probably nine-tenths of the retailers are not in a position to buy green coffee; neither have they sufficient knowledge of sorts and grades to warrant their doing so if their trade warranted large purchases. Such retailers should make connection with a thoroughly reliable jobbing house that carries a large and varied assortment and has its own roasting plant, and thereby enabled to furnish fresh-roasted coffee of uniform grade and in quantities as wanted. Thus the buyer has at command the requisties of having coffee fresh-roasted every day, and is in position to urge consumers to have it ground as wanted and fresh made.

Study the wants of your customers, and note the peculiarities of their palate. The coffee which one set of people pronounce superb is not relished by another set, but have each customer always served with the same kind, and not switched from one sort to another. It is therefore advisable to have your own designation for the different grades of coffee in stock and also to avoid changing the price, in order that patrons will associate a name and price when ordering coffee.

If downtown buyers drop into Callanan's for coffee, the chances are they will ask for No. 41, and they will learn by experience that No. 41 is always uniform in quality. Let your individuality find expression in the selection of names. See to it that you obtain a generous profit. You are entitled to it.

A prominent coffee importer describes Porto Rico coffee as being a large bean, without much body, but of good flavour. Some years ago considerable of it was brought to this country, but latterly most of it goes to France, where the bean is very heavily roasted—almost black. It may not be generally known that varying degrees of roasting make varying qualities and flavours of the same kind of bean. So much is this the case that counterfeits of the better grades can be made by this roasting process.

A very good story was told the writer by the coffee importer. He had a very "cranky" customer, who doted on Bogota. Sent for a lot. The finest was forwarded, but he wasn't pleased with it, and said it made poor, very poor, drink. The shipper knew there was no better Bogota in market, so under another brand sent him the same coffee, slightly differing in roast, which failed to suit. The third and fourth time same coffee was sent, differing a little in roast, but under different brands; but no go. Then Mr. Coffee Importer took a sample of same coffee, and made a personal call. He named it after the vessel that brought it, added ¼ cent. to the price, and told "crank" he was sure he had the right coffee at last. A test was made; the "drink" was "perfect." An order was given; everybody was happy, though the fifth lot of Bogota coffee was the same as the first. Taste, like the brain, has imagination. The mind cure resides largely in the tongue.

The leading expert in this city on mild coffee, in answer to the question, "What are the characteristic differences between Bogota, Mexican, and Padang coffee?" says: "Bogota has more body than the others; Mexican more acidity; Padang but little body—is light-wasted, but sweet. If one is looking for fine, delicate flavour, without regard to strength or body, Padang would likely suit." Mexican is not an agreeable drink, if taken alone; it needs to be blended, especially with Bogota. The older blends, still run by some of the best and older grocers of New York, are made by mixing Java, Maracaibo, and Mocha.

The general condition of the coffee situation is, according to one of the best-informed and long-headed coffee-houses of the Metropolis, decidedly "bearish." The vast increase of coffee area in Brazil, the improved methods of culture, the perfecting of coffee machinery, the increasing rail-road facilities, are flooding the earth with a caffeine deluge. So huge is it that, according to the law of supply and demand, the prices are bound to decline to about what they were two years ago.

At the present moment ruling prices are to a considerable extent artificial—the result of a speculative mania. Deliveries are being made under old contracts, and are not a correct index of actual values.

The new crop, which is beginning to move in Espirito Santo, is simply immense—in the neighborhood of 11,000,000 bags—making a total world's supply for the coming year of some 15,000,000 to 16,000,000 bags. This gigantic heap of the fragrant bean is too big for the world's annual mouthful, so, of course, prices must fall. The output of the milder coffee countries, especially those in the East, is limited and rapidly declining; but, as the Brazilian product, especially Santos, is and has been gaining in quality as well as quantity, the slight diminution of Padang, etc., makes no impression whatever. Santos coffee possesses a remarkable adaptive quality, which, through a varying roast and other manipulation, can be made to assume the appearance and characteristic taste, even, of almost any brand.

Given a surplus of cotton, it is not so bad, because new uses may be, can be, found for the raw material. But with coffee it is different; as a drink only can it be used, and unless the coffee-drinkers will increase their potations by 50 per cent., there is no way of immediately disposing of the surplus; hence, as remarked before prices must fall.

In answer to the question, "What marks of coffee are in demand by the best class of grocers in fancy blends?"

Creighton, Morrison & Meehan named the following: Java, Mocha, Washed Bogota, Washed Guatemala, Washed Caracas, Fancy Maracaibo, Fancy Santos, Washed Costa Rica, Washed Mexican, Washed San Salvador.

The sorts most in demand are: First, Washed Bogota; second, Washed Guatemala; third, Fancy Maracaibo. The base of a blend is usually about 40 per cent. of Santos. Pretty much every gro has his blend hobby, and mixes the proportion of brands acco ing to his fancy.

Of late years the tendency has been to the lowering of standard—due mainly to fierce competition and consequent cut prices. The result has been disastrous to trade permanen Scores of concerns that once enjoyed large patronage on a spe brand are now *minus* the demand and *blus* a conviction that, a all, "Honesty is the best policy."

The above remarks, coming from a veteran coffee impor should have weight with the hundreds of retail grocers and co dealers, who, to secure a present trade, destroy their chance a future business by minimizing quality and maximizing cut pri 'Mid the general "fall from grace" in the quality of special bra we take pleasure in noting that our well-posted informant rema ed that there was at least one notable exception—that Arbuc Brothers had persistently maintained quality; maintained it, in the face of a distinctive "cut and kill" competition that wo have busted the commercial integrity of a less sturdily hou house.

If in business you'd succeed,
Make truth and honesty your creed.

Samuel Wilde's Sons feel quite positive that it would not pr a good investment for jobber or retailer to carry a full stock coffee, in view of the over-supply and heavy new crop prospe They are confident, however, that the consumption of coffee in United States and the world generally is increasing, which w tend in some small degree to lessen surplus.

TEA PLANTING IN INDIA AND CEYLON.

Against the 392,000 acres now under tea cultivation in Ceylo with 30,000 acres not yet in bearing,—we may, says the *Cey Observer*, put the area of tea in all India at not less than 535,0 acres, of which as many as 100,000 acres have been planted fr 1897 onwards and cannot therefore be considered to repres mature trees or fields in bearing. There is therefore altogeth 130,000 acres of young tea which must be taken into account, order to emphasize the absolute necessity for both countries fig ing for new markets in Russia and the Continent of Europe gen ally, as well as in America. The case stands thus for the Brit tea-growing industry:—

Total.	Acres in bearing.	Young tea, acres.	Tea crop 1890—lbs.	Estimate cro when all in bearing with fine plucking
India ...	435,000	100,000	187,500,000	220,000,000
Ceylon ...	360,000	32,000	148,400,000	160,000,000
Totals ...	795,000	132,000	335,900,000	380,000,000

[India has had planted over 250,000 acres with tea since, 1885, and greatest areas by far in single years were in 1896—37,000 acres; and 1897, over 36,000.]

Now, we do not think there is anything to frighten us in a to output—say three years hence—of 380,000,000 lbs. of British-gro tea; and we are prepared to give good reasons for our hopefulne In the first place, let it be remembered that China is still by the largest exporter of tea. During 1899 she sent away altogeth no less than 217,467,000 lbs. of tea and for 1900, we do not think figures can be less. This includes overland supplies to Russia Asia (in fact Central Asia altogether) as well as to Russia Europe. By sea China sent away 8 million lbs. more in 1900 than in 1899-1900. This should make up for any shortage ov land. In fact, China and Japan together still supply the wo with no less than 270 to 280 million lbs. of tea, distributed to Nor

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, oth have no effect, and none do good. Sugar and water, or a little glycerine, gi relief when the throat is inclined to be dry; this applies to persons whose thro are affected by the weather. About a third of a teaspoonful of Condy's Fluid a tumbler of water, if used as a gargle every morning, will clear the throat brace up the uvula, which, in some singers, is so long that it interrupts the p emission of the voice, and introduces a grating undertone, while it also tend make a tremolo on the upper notes."—*The Idler*, February, 1900.

America, Europe, Australasia, Central Asia, etc. Now we see no good reason why British-grown tea should not by 1904, supersede the teas of China and Japan to the extent of 45 million lbs. of tea, apart from the natural growth of the world's consumption of our staple. This presupposes of course, that the campaign on the Continent of Europe on behalf of both Ceylon and India will be carried on energetically for the next three years, and that the "sinews of war" will be supplied by an Indian, as well as by a Ceylon, Tea Cess.

It may be of interest to learn that Travancore (and Cochin) in all its divisions has now about 27,000 acres under tea of which 11,000 (together with 1,700 acres of coffee, 660 cinchona, and 300 cardamoms) are reported for Sir John Muir's Kanan Devan and Anglo-America Companies in North Travancore—all being of course, comparatively recent plantings.

CEYLON *vs.* JAPAN TEA IN CANADA.

Messrs. Tarrant Henderson & Co., have sent to the *Ceylon Observer* the following letter from their Canadian Agent :—

TORONTO, 14*th March*, 1901.

CEYLON *v.* JAPAN TEA.

DEAR SIR,—In view of the statement, made by Mr. Shimiau (Japanese Consul) to the representative to His Majesty's Goverment at Ottawa, that Canada is the second largest consumer of Japan tea in the world, it will be of interest to members of the Tea Guilds in Japan to know that Canada cannot any longer be depended upon as a consumer of Japan teas on the parity of last year's prices, owing to the improvement already made in the quality of Ceylon green teas—the fact that a *bonus* of two cents per pound is paid upon all green teas by the Ceylon Tea Planters' Association—and that the teas can be purchased at a laid down cost in Canada of fully five to six cents per pound under the corresponding quality in Japan teas. If it be not already known, and, if the trade of Canada is of any importance to Japan, it should be demonstrated that the Canadian market cannot be held for Japan unless teas of good quality can be laid down in Canada at a maximum price of sixteen cents per pound, for the simple reason that the staple tea in all descriptions—China, Japan, or British grown is purchased by the "*consumer*" at twenty-five gold cents per pound—to realise which it must pass through the following hands :—

1. Wholesale grocer pays 16c, less 3 per cent. for cash; 2. Retail grocer pays 18c, less 3 per cent. for cash; and, unless this can be done, Ceylon teas will assuredly take away within three years the whole of Canada's trade in Japan teas because to-day equal quality in Ceylon Greens can be supplied to :—

1*st.* The wholesale grocer at 14c.

2*nd.* The Retail grocer at 18c.

and since upon the Ceylon tea the wholesale grocer can make a profit of 4c. per pound—all his inclinations and energies are concentrated towards the sale of the teas which pay the largest percentage of profit.

In 1900 Japan teas of suitable quality cost :—

1*st.* The wholesale grocer 18½c to 19c.

2*nd.* The retail grocer 19c to 20c.

Consequently neither wholesale nor retail grocer made any money and the effort to make the consumer pay 30c. or 35c.—instead of 25c.—proved a dismal failure, and consequently so, with every other tea grown, offering freely at a price which enabled both wholesale and retail grocers to make a handsome profit and yet permit the teas reaching the consumer at 25 gold cents per pound.

It is probably true that, owing to the advance in cost of production, Japan teas cannot be laid down in Canada at 16c with profit to all through whose hands the teas have to pass before reaching the distributor here, *i.e.*, the wholesale grocer.

That it will pay better to let Canada's trade pass, and to cultivate silk or other products instead of tea—and the wisdom of the decision will rest upon those interested—but it is abundantly evident that, so far as Canada is concerned, the tea growers, the Tea Guilds or the Government of Japan must take prompt measures to meet the competition from British grown teas—or step down and out of Canadian trade. It is not within the writer's province to suggest measures. It is sufficient to draw attention to facts—which cannot be denied, modified, or altered.

Yours faithfully,
(Signed) VERBUM-SAP.

CACAO CULTIVATION IN CEYLON.
(MAY, 1901.)

In July 1898 the estate returns showed a total of 21,260 acres under Cacao; and in May 1901 the aggregate worked out, amounts to 23,696 acres, or an increase of 2,436 acres. But this is apart from native gardens of 50 acres each and less, of which a special separate list has been compiled, showing a total in cultivation of very nearly 9,000 acres. We have therefore a grand total under Cacao Cultivation in Ceylon, of all ages and conditions, equal to 32,600 acres. Seeing that our heaviest export hitherto has been 42,745 cwt. it is quite clear that a large proportion of the acreage must be very young or in very poor bearing; for we should hope that when all the trees are mature, and the fields and gardens properly cultivated, our export should reach to 100,000 cwt. This would not average much more than 3 cwt. an acre, which we suppose can be readily harvested from every properly planted and cultivated plantation. There are, however, enemies to reckon with, and successfully overcome; as these may be under the Cryptogamist's directions, we do not suppose that the bumper crop we refer to can be anticipated for five or six years to come.

One thing seems very clear, that Ceylon can never be a leading Cacao-growing country,—can never attain, for instance, the position of Trinidad, which is officially credited with a yearly crop exceeding 200,000 cwt.; and still less that of Ecuador, which annually exports 500,000 cwt., or nearly one-third of the world's requirements. Ceylon Cacao planters have, at least, the consolation that their product is not likely to be overdone in this Island, in the sense in which Tea is supposed to be already overproduced. What they have to do now is to maintain and improve the high reputation of their product; to perfect their methods of curing; to apply (in Mr. Carruthers' words) "more sanitary methods of cultivation" and gradually to improve their varieties of Cacao by selection and other means so as to increase the profit from their fruit trees.—What the Cacao tree is capable of may be judged from the solitary specimen of the Caracas variety growing on Keenakelle estate, Badulla, to which we have so often referred in our Hand-book. Mr. Carruthers has found that the tree is about 17 years old, over 22 feet high, with a spread of 30 feet; and for the last five years it has given an average of 434 ripe pods per annum; this is at 3,800 feet above sea-level. Of course, it would be absurd to assume what a plantation could be made to do, from this solitary, well-cared for tree; but still this experience affords some idea, we trust, of what many of our Cacao planters may anticipate as their trees, planted in good soil, grow older and fully matured.—Dumbara, the Matale's Panwila, Kurunegala and Galagedara, and Monaragalla are the leading Ceylon Cacao-growing districts, and we do not suppose the Government, if their officers were so instructed and tried their best, could sell another 5,000 acres of Crown land, really well adapted to the cultivation of *Theobroma cacao*—which requires not only rich, deep soil but shelter from wind and good drainage. —*Ceylon Observer.*

DISTRICT ASSOCIATIONS.

KANAN DEVAN.

Minutes of Quarterly General Meeting held at Munaar Reading Room, 4th May, 1901. PRESENT :—Baron Von Rosenberg (*Chairman*), Messrs. P. R. Buchanan, J. A. Richardson, F. J. Graham, S. L. Robertson, R. Harley, A. J. Wright, W. D. Martin, W. O. Milne, W. Hendry, J. S. Patterson, W. S. Milne.

Minutes of last Meeting.—Read and passed.

Address by the Chairman :—

GENTLEMEN,—The year which we now close has not been a prosperous one for this District. For two of the products we cultivate it has been marked by extreme depression in the markets and the third has also experienced a fall in value, though now showing signs of recovery. Signs are not wanting that we may hope for better times, with regard to two vigorous measures are being concerted to assist the rehabilitation of the markets. In these your Association has not been behindhand. It has joined in the demand for a compulsory cess to further schemes for increased consumption and

it has expressed its willingness to co-operate in schemes for exploitation of Indian Markets. You will be glad to hear that a beginning in this direction has been made and that a telegram has been addressed to the Indian Tea Association informing them that South Indian planters are desirous of pushing a local scheme amongst themselves asking for support if the compulsory cess is enforced.

This scheme forms one of the subjects on to-day's agenda and I trust that it will be seriously and fully discussed. Beyond this we can only work towards giving the District a good name in the markets by making good teas and I am glad to see that this is being earnestly taken in hand. Some prejudice against Travancore will have to be overcome but that is merely a question of continuity in effort.

In the Coffee market we will have to await issues on a larger field, we cannot hope to influence it much from India. Something is however being done by a Company which is now pushing sales of Indian coffee in India in a cheap and marketable form.

This may in time reduce the exports of Indian coffees and with smaller supplies in the Home markets, they may fetch higher prices just as Ceylon coffees by their variety still command exceptional prices.

But even from a wider view the position seems to me more hopeful.

In Brazil the bottom of possible production, especially in view of a higher exchange, seems to have been touched. It is more than probable that this District will again have decent crops, let us hope that they may meet a better market.

I regret to say that my efforts to induce the Travancore Government to help coffee planters by a reduction or abolition of the export duty during the present period of stress has met with a direct refusal, on the grounds that we pay a lighter assessment than coffee planters in other Districts. I have asked for other rates of assessment through the U. P. A. S. I. but have not yet received a reply. When it comes I trust my successor will again bring the matter before the Government. I think it will be possible to show that our export duty and assessment combined do not come to less than 3 to 4 rupees per acre.

You will have seen that the import duty on tea into England has not been increased and that the decision in the House of Commons on a proposal for its reduction, though not carried, showed considerable support and induced the Chancellor of the Exchequer to state that he could not reduce it this year. In this statement lies a grain of hope that if the campaign against it be vigorously pushed he may see his way to doing so next year.

I need hardly point out how important it is that every effort should be made in this direction by those interested in tea both out here and at home.

While on the subject of duties, you will see, among the circulars on the table, a proposal from the Central Travancore Association that an import duty be imposed by the Indian Government on foreign teas. This is specially aimed at Ceylon and is doubtless designed to force her to remove her import duty on Indian teas. Personally I am not in favour of this proposal. I am opposed to all duties on teas whether in Colombo or elsewhere. If Ceylon tea is consumed in India it means so much of it deflected from other markets and if Indian tea planters cannot beat it on their own preserve with a fair field and no favour more shame to them. To urge the abolition of the Ceylon import duty in every other and legitimate way is another matter and would deserve our cordial support. It seems far more important to me that rubbish, whether from Ceylon or China, be stopped altogether and that Government be approached to investigate such teas in the customs entries and have them destroyed.

Turning to this Association affairs more particularly I regret to have to state my opinion that in influence and power it has lost ground to a remarkable extent. I have no hesitation in saying that its status was more commanding when it represented 2,500 acres than now that it is supposed to represent 17,000. It received closer attention to the events of the District at the hands of the Travancore Government, its desires even when not granted received thorough investigation and prompt reply. That is no longer the case, I need not particularise, you will see it from the correspondence that comes before the meeting. The reasons to my mind are not far to seek but it is undesirable to go into them, let us rather hope that with energy and perseverance matters have not gone too far to be remedied. But it will require conspicuous zeal on the part of the office-bearers and lively interest on the part of membe to do so.

From the balance-sheet before you, you will see that we ha some funds in hand. But these will be depleted or nearly so by t calls likely to be made on account of the Kundale River bridge a extra expenditure on roads. It is to be hoped that Governme may still be induced to refund us our expenditure on roads duri the second half of last year, at all events to the extent of the pr mised Grant-in-aid which to date has been withheld.

You are aware that a local Memorial in the shape of a chur (undernominational) is being subscribed for to perpetuate th memory of the late lamented and revered **Queen-Empress.**

I feel certain that I shall be voicing your wishes in proposi that the Association, as such, subscribe towards a monument respect and gratitude.

In conclusion, let me advise the Association to neither apply f nor agree to any further more Grant-in-aid. It represents a bod of men who are giving their best to render this District of Tr vancore a flourishing one. Taxes and duties are levied upon the and Government may well be asked to attend to the necessities communication, of health, of education. It cannot be said to do thi when it does not grant sufficient to cover the upkeep of a sing exit from the District even in the shape of a bridle path when i Medical Grant is less than a tithe of that expended, when requests us to build bridges and gives us a Grant-in-aid conside ably below their cost, and when, with a large population, three not a single educational establishment.

(Signed) JOON ROSENBERGH.

Proposed by Mr. P. R. Buchanan that the Chairman's report b accepted and printed in the proceedings but that though it migh be as well not to particularize in open meeting the causes of the los of influence referred to by the Chairman it was a matter that th office-bearers should enquire strictly into. Seconded by Mr. J. S Patterson and carried.

Proposed by Mr. S. L. Robertson that the accounts for past yea be passed. Seconded by Mr. F. J. Graham and carried.

Baron Von Rosenberg having stated that owing to pressure o work he did not offer himself for re-election as office-bearer. M P. R. Buchanan asked him to reconsider his decision and propose to the meeting that Baron Von Rosenberg be re-elected Presider and that all possible facilities be given him to aid him in his work a such. Mr. Hendry seconded this stating that it might show wan of moral courage for Baron Von Rosenberg to refuse office at a tim when as he had stated the Association was decadent. The matte was then put to the ballot and the following were elected.

ELECTION OF OFFICE-BEARERS.

President.—Baron Von Rosenberg.

Honorary Secretary.—J. S. Patterson.

Committee.—Messrs. P. R. Buchanan, J. H. Hunter, W. M. Taylo W. Hendry.

Volunteer Movement.—Mr. Milne asked whether the Associatio would pay the expenses, a sum of Rs. 10, incurred by Mr. Tolle mache but subsequently withdrew the motion.

Mr. Patterson was added to the Committee in conjunction wit Messrs. Milne and Graham.

Scheme for furthering Tea Sales in India.—Read telegram t S. T. A. proposing independent action of S. T. Planters and askin for a subvention in proportion from a compulsory tea cess, i enforced.

After a lengthy discussion Mr. Richardson proposed and Mr Graham seconded that Mr. Buchanan and Baron Von Rosenber form a Sub-Committee to discuss this question and formulate scheme to be brought before the next Committee Meeting.

Medical Grant.—Dr. Kerr stated that although he had sent in th required forms duly filled in he had received none of the promise Grant-in-aid. He proposed applying for a portion of Grant-in-ai shortly which, if granted, should be altered to the Surianallee Devi kulam portion of the District.

Export Duty on Coffee.—Chairman proposed that on receipt of in formation from the Secretary, U. P. A. S. I., giving the land cess i other planting Districts of S. I. the matter be again brought befor the Dewan and H. H. Government be asked to reconsider thei decision.

Roads and Bridges.—The Chairman stated that after an unpro fitable correspondence with the late Chief Engineer on the subjec of Grant-in-aid for second half year, 1900, upkeep of Munaar Mettu

Road of which a total of Rs. 29 had only been paid, he had submitted the matter to the Dewan and asked that if the matter could not be settled otherwise, Mr. Sealy, the Magistrate, be applied to for information as to whether the Association had repaired the road in accordance with the Grant at the time of inspection. The Dewan had however referred the matter back to the Chief Engineer and Mr. Sealy was leaving for England.

Proposed by Mr. Wright and seconded by Mr. Martin that all the contractors be written to and told that they are limited to Rs. 19 per mile per half year and that if they have occasion to exceed this amount the Honorary Secretary be written to and permission obtained, otherwise this Association will not hold it itself responsible for the payment.

Harbour on West Coast.—Read four letters from U. P. A. of S. India of February 11th, 21st, March 6th and 15th.

Proposed by Mr. Buchanan and seconded by Mr. Hendry that Calicut would be the most convenient Port.

Proposed presentation to Honorable Mr. Buckingham. Proposed by the Chairman that a vote of thanks be passed to the Honorable Mr. Buckingham for the services he has rendered to the Planting Community.—Carried with acclamation.

The Meeting closed with a vote of thanks to the chair.

Circulars and letters on table.—Planters' Labour Bill, Ports, Queen Victoria Memorial Fund, Registration of Tea Acreage, Paris Exhibition, London Representation, The French Tariff, Reduction in Output of Tea, Adulteration of Coffee, Tea Shop at Paris, Proposed Tea Cess, The Tea Crisis and the Proposed Tea Cess, Ceylon Tea Cess, Proposed Coffee Cess, Import Duty on Foreign Teas, Medical Rest-House at Bodi Mettu, Mettu Bungalow, Bodi Mettu Bungalow Bill, Land Tax, Copies of Indian Planting and Gardening, and Planting Opinion.

J. S. Patterson,
Honorary Secretary.

UNITED PLANTERS' ASSOCIATION, F.M.S.

Extracts from Report for 1900 :—

There have been three General Meetings and three Committee Meetings held during the year, which have, on the whole, been well attended. The experiment has been tried of holding one of the General Meetings at Sungei Ujong, which was well supported by Negri Sembilan planters; distances are so considerable that it is obviously impossible for more than one or two members to attend from the State in which the meeting is not held.

It is much to be regretted that the Perak Planters' Association has now apparently become defunct, and that the planters have not been able to nominate, at any rate, one of their number to represent them. We have during the year only been supported by one member from Perak.

Experimental Gardens.—Mr. Stanley Arden has been sent out from Kew Gardens, and after a period spent in Ceylon acquainting himself with the methods in vogue over there, visiting the various Malay States with their Botanical Gardens, and becoming known to the planters, has now been entrusted with the opening of an Experimental Garden At the time of writing this report the locality is still under discussion, though probably one of the blocks situated near Sungei Rengau will be the situation selected. The head-quarters of the Manager, locality of the Garden, products to be treated, etc., have all formed the subjects of correspondence between the Government and the Association.

The Labour Question.—The Association learnt with some surprise from the late Acting Governor (Sir A. Swettenham) that the sum of only $50,000 had been spent on the recruiting of labour in Selangor during 1899; but it can be taken for granted that during the past year a very much larger sum has been spent, as large gangs of coolies are still pouring in to the extension works.

Various questions as to the stamp of coolie required, and the method of treating them on arrival here, have formed subject for discussion at a special Commission upon which your Chairman was privileged to sit.

Legislation re Abandoned Estates, etc.—The British Resident of Negri Sembilan, in consequence of a severe outbreak of the caterpillar pest, proposed to the Resident-General the necessity for legislation to enable the Government to arbitrarily destroy abandoned estates, or estates that were choked with weeds, where the caterpillars appeared, it being understood that such a proposal would have met with the approval of the planting community. The question was very fully discussed both by your Committee and at a meeting held in Seremban, with the result that a resolution was passed negativing the proposal of the British Resident, Negri Sembilan.

Export of Coffee to Europe.—For some considerable time the question of finding a better market than Singapore has been before the Planting Community; various solutions were suggested. A bonded warehouse where coffee could be stored to enable it to mature has been and is still under discussion. An assessment of all estate to enable the Association to advertise has also been proposed. During the past year, and very largely on the recommendation of Mr. T. Heslop Hill, who has taken infinite pains in London to discuss the question, samples were sent home to Messrs. Sanderson & Co., of Mincing Lane. These samples were on the whole favourably reported upon, and the prices quoted were distinctly higher than those then obtainable in Singapore. The Association, on receiving guarantees of over 100 cwt., a month from various members, decided to try the experiment of monthly shipments. A special Committee of Selangor and Negri Sembilan Planters was elected, but owing to various initial difficulties the first shipment has only recently been forwarded, the result of the sale being still unknown. It may be of interest to the Association to learn that the small retail business initiated by one of the Selangor Estates, under the name of the Kajang Coffee Co., is progressing favourably, and though at one time it was thought possible that the venture would have to stop, recent reports go to show that the monthly output though small is an increasing and to a small extent a paying venture.

We understand that a similar concern is working successfully in Edinburgh. The fact that at various Temperance Exhibitions the Kajang Company's stall has earned bronze and gold medals proves that if properly treated our Malay coffee finds favour.

An interesting experiment is also being tried: Some 12 pikuls of coffee have been bought from the Port Dickson Coffee Curing Mill by the Association, five pikuls of which have been sent to Aden and the remainder kept at Port Dickson, with the object of testing the system of storing coffee in a dry place before putting it on the market. Six months was the period decided upon and this has not yet elapsed.

Agricultural Bulletin.—At the instance of the Resident-General the proposal has been made that an "Agricultural Bulletin" be started, in which all matters of interest to the Planting Community might be discussed. The idea was very favourably received by our Association, and Mr. Ridley, of the BotanicalG ardens, Singapore, has prepared a draft programme which, though perhaps rather too scientific and technical in some respects, is exceedingly comprehensive. In response to a circular letter issued to the members, promises of support have been received. Such a Bulletin, your Committee feel, will eventually prove extremely valuable and be the means of ventilating ideas and facts at present not generally discussed, and concerning which it is extremely difficult to get information.

Agent in Singapore.—The following resolution, forwarded by the Selangor Planters' Association has been fully discussed, both by your Committee and the Association:—

"That, with the increasing production of coffee in Selangor, it would be to the interest of the Association to appoint an Agent in Singapore, but that this Association is of opinion that further enquiries should be made, and that in the meantime the United Planters' Association should be asked to take the matter up."

Messrs. Barlow & Co., of Singapore and Manchester, have been addressed, and the Honorable J. M. Allinson of that firm has been in personal communication with several leading members of the Association, and it is confidently hoped as an outcome that the system of public auction which works so successfully in Ceylon and other Colonies may be inaugurated, and that much of the present dissatisfaction may then disappear.

Singapore is at present the greatest commercial centre in the Far East, and the establishment of fixed auctions, as in Colombo, will probably do much to attract buyers and competition from various buying centres—*e.g.*, New York, London, Hamburg, Melbourne, etc.

The increasing production throughout the Native States, as evidenced by the accompanying figures, explain the action of the

Association in endeavouring to obtain a recognised local market in which all sales ars effected by public auction.

Terms of Engagement of European Employees.—As there appeared some doubt regarding the term of notice applicable to Europeans, in the absence of any agreement, upon the termination of their engagement, your Chairman had some correspondence with the Judicial Commissioner, resulting in the Association passing the following resolution, which, it is hoped, will in the future facilitate the settlement of any differences of opinion upon this question :—

"That in the opinion of this Association the usage as regards the termination of engagements between European employers and employees in the absence of any agreement should be fixed at one month's notice on each side, that period being the most convenient in the interests of both parties."

PLANTING PRODUCTS.

Coffee.—In an interesting Report the Selangor Planters' Association show that in the principal European countries and the United States of America, the consumption of coffee during approximately the last 10 years has increased from 1,101,146,000 lbs. to 1,495,296,000 lbs. and that the rate of consumption per head of the total population of the same countries has risen from 2·83 lbs. to 3·59 lbs. These figures are obtained from a return supplied to the House of Commons, dated 3rd August, 1900, and may therefore be regarded as absolutely reliable. It is explained that accurate returns of production were not obtainable, owing to the ignorance of "statistical science" on the part of producers, principally in the Central and South American States, so that it is to the London Brokers' Reports that we have to refer for statistics regarding the balance of production over consumption; in other words, for the world's stocks; and these we find by latest advices to amount to 1,449,000 bags (a bag being approximately a pikul) as against 659,000 bags a year ago.

The Director of the San Paulo Agricultural Institute has compiled a valuable report upon the existing condition of the estates in Brazil and their future prospects, and, without quoting from it at any length, it is sufficient to say that most estates are burdened with heavy mortgages, that they require much greater attention, especially as regards manuring, than they are receiving, whilst the rise in the value of the milrei from $8\frac{13}{32}$d. to $11\frac{19}{32}$d. in the last year (Rucker and Bencraft's Circular of 21st March) cannot exercise other than an extremely deterrent effect upon that industry. The Brazils (Rio and Santos) produce such an enormous percentage of the worlds supply, that an even partial collapse in that country would undoubtedly result in greatly improved values. The date of the San Paulo report is not known, but when it was written the milrei was $6\frac{1}{2}$d., and we find it stated that "with exchange at $6\frac{1}{2}$d. and coffee at $15 in Singapore [*i.e.*, Mexican dollar value] $3\frac{1}{2}$ per cent. interest could be paid on the capital"; again, "if the Brazilian planter had to pay his labourers in gold he would have been ruined long ago," but he *sells his coffee in gold* which he reconverts into milreis, and the consequent effect of a rise of $3\frac{3}{16}$d. in one year and of $5\frac{3}{32}$d., since that report was written, must be disastrous in the extreme. There is no denying, however, that the world's stock of coffee has increased over 100 per cent. in the last year, and the only conclusion to be drawn is that mortgagees have foreclosed and resold to a large extent, and that estates, at consequently a much lower capital value in other hands, are still capable of being worked at a profit. Your Committee have endeavoured to obtain statistics of coffee exported from Selangor, Negri Sembilan and Perak, the following figures have resulted from their efforts:—

	1898.	1899.	1900.
Selangor ...	22,948 pikuls	26,407 pikuls	34,295 pikuls.
Negri Sembilan...	3,163 ,,	4,541 ,,	6,199 ,,
Total ...	26,111 ,,	30,948 ,,	40,494 ,,

We have not been successful in getting any returns from Perak, but from this State and other sources it is probable that the total production in 1900 amounted to at least 50,000 pikuls, or say, roughly, 3,000 tons. That we have not been idle in endeavouring to get our coffee, straight from the plantations, brought prominently before the public will be seen from reference to the subject elsewhere in this report, but it must be admitted that we are far from being satisfied with our curing, though year by year no doubt the quality improves. There is a growing feeling that possibly a more acceptable coffee may be produced by sun-drying the cherry, and your 1901-1902 report will undoubtedly supply you with the result of several systematic experiments which are n being undertaken.

Rubber (*Hevea Braziliensis or Pará*).—This variety of rubb continues to come on exceedingly satisfactorily, the average grow of trees from nine months upwards amounting to about 1 foot p mensem, whilst at three years their average circumference at 3 fe from the ground is about 16 inches. This far exceeds anythi reported from Ceylon and other countries where Para is bei planted, and we consider that Mr. Curtis's description, in the 19 Annual Report on the Botanical Gardens of the Colony, of t tapping of the 15-year-old Pará tree in the Gardens at Penang, conclusive evidence of the contention of the writer "that in th cultivation lies a source of wealth of the greatest importance." two years $12\frac{1}{2}$lbs. of dry marketable rubber were procured "witho any apparent injurious result to the health of this tree," and t conditions under which it is growing are reported as anything b favourable. It appears, in the opinion of the different Directors the Botanical Gardens, that the size of a tree more than its a indicates its fitness for tapping, and probably a circumference 30 inches 3 feet from the ground is the limit at which attempts extract the rubber should be commenced. Reports from Lond show that prices for Para have of late declined, one reason alleg being the falling-off in the demand for bicycles, but in Para rubb we have undoubtedly the most valuable and highest quality rubb in the world, and your Committee feel that the large number trees, amounting now to several millions, planted in the Federat Malay States, must, in the not very distant future, prove a source revenue which will largely recoup the planters for the losses whi they have sustained through the decline in value of Liberian coff

Ficus Elastica (*Gutta Rambong*).—The only interesting fact th your Committee have to report over and above the continue luxuriant growth of this tree is the wonderful result obtained Mr. R. Derry, of Perak, of 25 lbs. per tree from two 19-year-o trees at Kuala Kangsar in one tapping. In your Annual Repo for 1899-1900 it was regarded that some Ficus Elastic rubber whi was sent home by Mr. Derry was valued at 3/6 per lb. as again 3/10 for the Para rubber sent to London for sale by the san gentleman. Assuming then, that the F. Elastica rubber resultin from the abovementioned tapping in any way approximates in val the quotation for the former shipment, it is clever that, in th variety also, planters will have a valuable source of revenue. M Derry's conclusions on the subject of tapping Ficus Elastica a that trees may probably be first worked when from four to fi years old, and that the average yield should amount to $\frac{1}{2}$ lb. f every of the tree's age, the cost of collection, both with Pará an Ficus Elastica, being from 30 cents to 35 cents—*i.e.*, $7\frac{1}{2}$d. to 9 per pound.

Cocoanuts.—During the past year many reports have come to han of trees planted as seedlings, about 2 feet high, from two years an ten months, to three years and three months ago, throwing o bunches of spike, and blossom which has set well, and now for sturdy bunches of young nuts. These coconuts are the comm variety which have hitherto been supposed only to commen flowering in their fifth to sixth year, and there can be no dou that, as with both kinds of rubber, the growth of our coconut tre also is quite abnormal. There are thousands of acres of alluvi land in the Malay Peninsula capable of being converted in flourishing rubber and coconut properties, and your Committee fe that when the investing public know and realise this agriculture the Malay Peninsula will receive a stimulus which will lead infinitely more extensive operations than we have had any exper ence of in the past.

Sugar.—Your Committee hear that great success has attende the sugar industry in Perak during the past year, and that eno mous extensions are being contemplated. Unfortunately, howeve Perak takes little interest in our Association, and we are not in position to supply you with any data.

Insect Pests.—The season under review has, on the whole Selangor, been free of severe attacks of insect pests, the bee haw moth caterpillar has broken out rather badly on a few estate but no damage to speak of has been done, the eggs, cate pillars, chrysalids and moths having been promptly collecte by hand and destroyed. In Negri Sembilan, however, a ba outbreak is reported, which led, in one instance, to the cuttin out of all the coffee on a large Chinese estate, and caused son considerable damage to a neighbouring property. Various cate pillars and borers have been found on rubbr trees of both kind

te ants have continued to do a certain amount of damage and panut beetles have had to be regularly collected; but remedies ll kinds have been tried, generally with some measure of success, the discovery has been made that a decoction of "tuba" roots, lied to the base of affected trees is apparently so efficacious that white ant known as "Termes gestroi" is completely kept under it. Such a simple remedy, involving as it does only the plant-up of an acre or two of this quick-growing creeper, which is ily procurable and equally easily propagated by cuttings, is a st valuable discovery, and there seems no reason why, by tinued and intelligent effort, this, the worst and most destructive t known to us at present, should not be completely mastered l eventually cease to give us any trouble.

Labour.—The supply of Tamil coolies during the past season been sufficient, and your Committee think that our present tem of free labour leaves nothing to be desired, either in theory or ctice. We do not feel disposed in this report either to defend that tem against the numerous attacks to which it has been subjected, to correct publicly the many ridiculous misconceptions that exist h regard to it; the fact that our own men go over to India and ng back, to the same life that they have themselves adopted, ndreds of their relations and fellow-countrymen, appears to us supply a sufficient answer in itself to the attacks of those who not in sympathy with us. The Government have imported me thousands of "free" coolies during the past year, and it must admitted that the experiment has by no means proved an un-alified success; but it is a rare experience for any departure m the beaten track to be attended with *no* initial difficulties or sappointment, and your Committee are convinced that the vernment are now dealing with the question in such a thorough nner, that, in the absence of unnecessary and unjustifiable structions being raised by those whom the advocates of "free" our have themselves always been content to abstain from criticis-g, signal success must result.

The membership, as evidenced by subscriptions, is slightly minished—

angor	... 69	... as against	...	67
gri Sembilan Planters' Association	... 22	... ,,	...	26
rak	... 1	... ,,	...	1
rth Borneo	... 1	... ,,	...	1
	93	... ,,	...	95

P.S.—Since the passing of the Report by the Annual Meeting, the gures of coffee exported from Perak have been received; they are nsequently now added together with those from other States—

		1894.	1895.	1896.	1897.	1898.	1899,	1900.
langar	.. pkls.	2,588	4,532	unknown	12,491	22,948	26,407	34,295
Sembilan	.. ,,	unknown	unknown	unknown	1,071	3,136	4,541	6,199
rak	.. ,,	1,362	1,937	2,209	2,759	2,837	932	4,269
Total	.. ,,	3,950	6,469	9,255	16,321	28,948	31,880	44,763

MARKET REPORT.

[*Per Mail advices of 10th May* 1901.]

COFFEE.

The London Commercial Record says:—There is no material change report in the market for the past week. Demand continues thout any activity, the higher grades alone meeting with brisk mpetition. The bulk of the supplies of East India has not been tractive, and prices are occasionally in favor of buyers, but ving reached so low a level there is not quit so much pressure sell, and privately moderate sales have been made at steady rates. o important alterations can be quoted in the value of Costa Rica d Central American descriptions, colory kinds selling readily d less desirable qualities moving slowly. The market for futures s been quiet, and prices at the close shew a little ease. Yester-y business was done in May delivery at 31s, July at 31s 6d to 31s d, and December at 32s 4½d to 32s. Auction supplies to-day nsisted of 2,684 bags East India, 25 barrels Jamaica, 812 bags lvador, 285 bags Colombian, 188 bags Guatemala, and 1,962 bags osta Rica. The sales went off slowly without change in values.

ondon	Santos ...	July delivery	...	31s 4½d.
ew York	... No. 7 Rio...	,,	...	5·50 cents.
amburg...	... Santos ...	,,	...	31 pf.
avre	Santos ...	,,	...	38¼ francs.

At the Dutch Trading Co's auction to be held at Rotterdam on Tuesday next, 17,200 bags 20 cases will be offered. Good ordinary Java is valued at 31¼d cents.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ..	21,084	18,930	22,788	18,608
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	7,537	6,290	9,067	7,526

The preceding figures exhibit— Tons.

In the Imports an increase this year of ...	4,180
Home Consumption an increase of	647
Export an increase of	1,541
Stock an increase of	2,154

Auction this week have gone off as under:—

Ceylon.—*Plantation.*—6 casks 5 barrels 6 tierces sold—middling brownish 70s to 71s, bold 93s to 104s.

East India.—3,329 bags partly sold as follows:—*Mysore*, smalls 34s 6d to 43s, mdidling 45 to 48s 6d, good middling 57s 6d, bold 54s to 57s, good bold 71s to 76s 6d, peaberry 49s to 72s; *Coorg* smalls 34s 6d to 39s. low middling 40s 6d to 42s 6d, good middling 51s to 51s 6d, bold 55s to 60s, peaberry 47s to 57s; *Travancore*, smalls 33s 6d, low middling 41s, peaberry 47s; *Nelliampathy*, low middling to middling 42s to 44s 6d, bold 54s, peaberry 50s to 52s; *Wynaad*, smalls 37s 6d, low middling 42s.

Mocha.—30½-frazils withdrawn

Nyassaland.—117 bags sold—pickings 31s, smalls 29s 6d to 30s, low middling to bold 36s to 39s 6d, peaberry 42s to 44s 6d.

Jamaica.—8 tierces 5 casks 175 barrels 33 bags mostly sold—ordinary to fine fine ordinary 34s to 43s, low middling to middling 46s to 55s, bold 57s to 61s, peaberry 42s to 45s 6d

Costa Rica.—6,553 bags offered, 4,850 bags sold—smalls 32s to 45s, fine ordinary to low middling 41s to 46s, middling to good middling 48s to 58s, fine middling 61s 6d, bold 58s to 74s 6d, fine ditto 76s to 83s, peaberry 41s to 80s 6d.

Guatemala.—Of 2,734 bags catalogued 2,000 bags sold, smalls 29s 6d to 40s, good ordinary to fine ordinary 39s 6d to 41s, low middling to middling 42s to 50s, bold 50s 6d to 58s 6d, peaberry 44s to 58s.

Vera Paz.—15 bags sold, good to fine bold 83s to 101s, peaberry 86s.

Salvador.—682 bags mostly sold, smalls 33s to 34s, low middling to middling 40s 6d to 44s, good middling 47s 6d to 49s, peaberry 48s to 54s.

Nicaragua.—57 bags sold, bold dingy 36s 6d, good middling blue 50s.

Colombian.—516 bags sold, smalls 25s to 32s 6d, ordinary to good ordinary 31s to 38s, fine ordinary 43, middling bright greenish 44s 6d to 46s, bold 47s to 51s, peaberry 38s to 44s 6d.

Mexican.—439 bags partly sold, smalls 33s, low middling 43s, bold 52s 6d, peaberry 52s.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	2,547,000	3,090,000	2,36,000	3,959,000
Santos ...	7,463,000	5,436,000	5,131,000	5,864,000
Total...	10,010,000	8,526,000	7,967,000	9,823,000
Crop ...	—	8,391,000	8,772,000	10,461,000

Rio Exchange 1s 0⅞d, previous day 1s 1d.

Havre, *May* 9.—Good average Santos May opened barely quiet at 38f. and closed quiet at 37¾f., September opened at 39f. and closed at 38¾f., December opened at 39½f. and closed at 39¼f., March opened at 40f. and closed at 39¾f.

Hamburg, *May* 9.—Good average Santos May opened quiet at 31pf. and closed flat at 30¾pf., September opened at 32pf., and closed at 31¾pf., December opened at 32½pf. and closed at 32¼pf., March opened at 33¼pf. and closed at 33pf.

New York, *May* 9.—Closing prices of No. 7 Rio were as follow:—

	May.	June.	July.	Aug.	Sept.
May 9...	5·40	5·40	5·50	5·60	5·65
May 8...	5·45	5·55	5·60	5·70	5·75

TEA.

CHINA.—1,371 packages Moyune green were offered at auction yesterday and sold at steady rates, except Hyson which was decidedly cheaper. Gunpowder realised 4½d to 1s 1¾d. Imperial 4⅛d to 5½d, Foong Mee 8¾d to 1s 1¼d, Sow Mee 7d to 1s 4d, Hyson 2¾d to 3¼d, Young Hyson 6½d to 8d per lb.

INDIAN.—There was a further reduction in the quantity brought forward, which totalled 15,330 packages contrasted with 22,600 packages previously, and 20,000 packages at the corresponding period last year.

Not much change occurred in the case useful and brisk liquoring lots which met with competition, but parcels with red and stalky appearance were not in request, and for these lower prices had to be accepted in order to effect sales.

About 1,360 packages from South India, several invoices possessing better flavour, were included in the catalogues, and occasionally rather higher quotations were recorded.

For 13,600 packages on estate account 6⅛d per lb. was obtained compared with 7½d per lb. for 14,100 packages, and 9d per lb. for 11,000 packages in the two foregoing season.

Exports from the United Kingdom during the last month were nearly double those of twelve months since, and four times larger than 1899.

CEYLON.—Public auction were lighter, *viz.*, 18,800 packages against 25,600 packages on the 30th ultimo, and 38,700 packages in 1900.

A more general demand prevailed although a good deal of irregularity was noticeable. Common to fair Pekoe Souchongs and Pekoes in many instances again went in favour of buyers. Medium grades both leafy and broken were fairly supported, particularly when drawing full flavoury infusions, while fine and finest lines were not very well represented and sold somewhat slowly.

The average is 6½d per lb. On the 2nd instant it stood at 6⅝d per lb., and 7⅛d per lb. on the 9th May a year ago.

JAVA.—Slightly under 3,800 packages, principally ex *Jumna* offered "with all faults," passed with a quiet tone.

Deliveries.—The clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 30th April, 1901	... ...	2,319,114 lbs.
Do. do. 1900	... ...	3,071,448 „

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	12,321	3,001	15,322
Ceylon	16,841	1,980	18,821
Java	1,502	289	1,791
Total ...	30,664	5,270	35,934

Also 145 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated May 10th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1900-1901	1,636,994	1,227,585	60,618
1899-1900	1,635,727	1,164,304	60,093

15,491 *pkgs.* INDIAN
19,508 „ CEYLON
1,791 „ JAVA
} Total 36,790 packages were offered in public auction this week.

The production of Indian and Ceylon Tea during last year exceeded the world's consumption by about 20 million pounds; in the previous year the excess was about 14 millions. There is, therefore, abundant reason for the present severe depression in prices.

	1900.	1899.	1898.
Export from Countries of Production	334,072,942	302,590,293	276,437,473
Total Consumption	314,230,316	288,695,931	279,031,828
Surplus Production ...	+19,842,626	+13,894,362	—2,594,355
	1897.	1896.	1895.
Export from Countries of Production	268,865,989	253,141,438	233,834,519
Total Consumption... ...	261,875,872	246,607,478	227,806,249
Surplus Production ...	+6,990,117	+6,533,960	+6,028,270

Now that the proposal of the Indian and Ceylon Associatio the reduction of output has fallen through, it is more nece than ever that the importance attaching to the above figures s be fully realised by planters.

If we are to go on increasing our surplus production on th sent scale, the price is likely to be still further reduced.

Exports from India and Ceylon with consumption in no ducing countries are shown below:—

EXPORTS OF TEA FROM INDIA AND CEYLON DURING THE CALENDAR YEARS.

	1900.	1899.	18
From Calcutta	182,141,303	169,696,137	153,6
„ Travancore, etc. (about)...	3,500,000	3,000,000	3,0
„ Ceylon	148,431,639	129,894,156	119,7
Total lbs. ...	334,072,942	302,590,293	276,4
	1897.	1896.	18
From Calcutta	150,211,422	142,600,026	133,5
„ Travancore, etc. (about)...	2,600,000	2,400,000	2,3
„ Ceylon	116,054,567	108,141,412	97,9
Total lbs ...	268,865,989	253,141,438	233,8

CONSUMPTION OF INDIAN AND CEYLON TEA DURING THE CALENDAR YEARS.

	1900.	1899.	18
In United Kingdom... ...	230,495,035	219,156,865	215,9
In other non-producing Countries	82,835,281	68,739,066	62,4
For Ship's Stores (about) ...	900,000	800,000	7
Total lbs. ...	314,230,316	288,695,931	279,0
	1897.	1896.	18
In United Kingdom... ...	210,027,748	203,235,573	190,3
In other non-producing Countries	51,148,124	42,671,905	36,7
For Ship's Stores (about) ...	700,000	700,000	7
Total lbs. ...	261,875,872	246,607,478	227,8

INDIAN.—Only 15,491 packages were brought to auction ag 23,057 last week. In spite of the smaller sale no improvemen be recorded in the market, although buyers seemed perhaps a more ready to operate at the decline established last week.

Week's average of Tea sold on Garden Account 1901, 13,815 p av.5·97d. 1900, 14,974 pkgs., av. 7·43d.

Total Tea sold on Garden Account 1st June, 1900, to date, 1,33 pkgs., av. 7·21d. 1900, 1,293,206 pkgs., av. 8·25d.

CEYLON.—The auction was rather smaller, comprising 1 packages against 25,641. Prices were again somewhat irreg especially for medium whole leaf Tea which was occasionall to ½d. easier, although there was perhaps more bidding tha week.

Average for week 6·55d., against 7·17d. in 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 46 pkgs., av. 6·65d. 1900, 453,314 pkgs., av. 7·48d.

JAVA.—The market was inclined to be rather weaker.

Bank Rate 4 per cent. Exchange on London three months' sigh Calcutta 1/4 7/32. Colombo 1/4¼

COCOA.

At auction on Tuesday 1,539 bags were offered, but there very little demand, and only 920 bags sold. Of 555 bags Trin catalogued 470 bags were placed at 67s to 71s for middling to red. 53 bags Grenada realised 64s 6d for good and 60s for com 234 bags African sold at 60s to 63s. 314 bags Ceylon about sold, at 28s 6d up to 69s for smoke-and-water damaged. 8 Jamaica. 15 bags Colombian, and 360 bags Guayaquil ret Private transactions are restricted to 500 bags Trinidad—fi 70s to 71s 6d, and good red at 67s to 69s, and 700 bags Ma Guayaquil at 61s per cwt.

PEPPER.

BLACK.—An active speculative business has been done da the week at higher prices, but the tone at the close is q About 400 tons have probably changed hands including Singapore on the spot at 5 1/16d up to 6 3/16d, fair Tellicherry at to 6 3/16d, and grayish to fair Alleppy at 5 15/16d to 6d; for arriva best prices realised have been 6 11/32d for Singapore March-

shipment, 6⅜d for May-July, 6 7/16d for June-August and July-September.

At auction on Wednesday 127 bags Trang bought in at 6¼d; of 340 bags Aleppy 200 bags fair sold at 6d. 19 bags good heavy Ceylon realised 6¼d per lb.

WHITE.—Is also dearer with large transactions. About 300 tons reported sold, *viz.*, fair Singapore on the spot at 9¼d to 9 5/16d, June-August shipments at 9½d, July-September at 9½d, August-October at 9½d; Siam on the spot 9¼d, near at hand 9¼d, May-July shipment at 9¼d; and Penang on the spot at 8¾d, June-August shipment at 8 15/16d, July-September at 8 15/16d, and September-November at 9 1/16d.

At public sale of the 8th instant. of 3 cases 168 bags Singapore 3 cases fine bold sold at 1s. 241 bags Penang bought in at 8¾d, while of 57 bags Ceylon 21 bags sold—fine 10½d, fair mixed blacks 8⅞d, small part shrivelled 8½d per lb.

100 tons Tellicherry sold to-day *viz.*, April-May to Havre 56s 6d c.i.f. delivered weights; May-June, June-July, and August-October 56s 9d c.i.f., optional port.

GINGER.

COCHIN.—Washed rough realised an advance of 1s per cwt., and other kinds are very firm. Of 96 cases 340 bags offered 180 packages sold—medium and small roughly cut and scraped, limed, 65s, small part medium ditto 49s, smaller ditto wormy 45s to 47s 6d, good slump medium and small washed rough 41s, fair cuttings 32s per cwt.

JAPAN.—200 bags bought in at 35s per cwt.

JAMAICA.—In good demand at rather higher prices. 772 barrels offered and all sold—fair to good bright washed 53s to 63s, middling to good middling 46s to 52s, common to good common 41s to 45s, dark Rhatown 37s 6d per cwt.

GREEN.—6 barrels sold at 33s per cwt.

CINCHONA.

The shipments from Java from March 25 to May 5, 1901, amount to 979,000 Amst lbs, and the total from January 1 to May 5 is 3,052,825 Amst. lbs. In auction 10 serons Crown bark offered and sold at 1s 5d to 1s 6d for the Loxa, and 6¾d for Huanoco. A bale of flat Cartagena water-damaged sold at 3d, and for 2 bales of flat Calisaya 6d is to be submitted.

QUININE.

A better feeling has prevailed in the secondhands this week, and more business has been done at firmer prices, especially for distant positions. Spot parcels have changed hands at 1s 3⅜d to 1s 3½d., June at 1s 3⅝d, August 1s 3⅞d, and October 1s 4d to 1s 4⅛d per oz.

CARDAMOMS.

Cardamoms were in fair demand, opening at lower prices, but as the sale proceeded values became irregular; the medium and lower grades sold at full-up prices generally, and fine were about unchanged. The following prices were paid:—Ceylon-Mysore, extra bold pale selected, 4s to 4s 3d; medium to bold pale, 3s 2d to 3s 4d; good medium pale (partly open), 2s 5d to 2s 7; small and medium (partly open), 2s to 2s 4d; long lean pale, 1s 11d to 2s; small pale, 1s 4d to 1s 7d; brown and split, 1s 4d to 1s 5d; seeds, 1s 10d to 2s per lb. Ceylon-Malabar, small brownish, 1s 5d; and pickings, 1s 3d.

INDIA-RUBBER.

With some pressure to realise tendered spot Rubber prices declined, and sales of fine Pará were made down to 3s 8d per lb. The pressing lots being disposed of, prices have advanced to 3d 9d spot and up to 3s 9½d paid for distant forward delivery, closing quiet. Entrefine sold at 3s 7d. Peruvian ball from 2s 4d to 2s 4¾d, slab at 2s. Negrohead lower, scrappy 2s 8d, Island 2s 2d, Cameta 2s 5d.

(AVERAGE FOR ALL INDIA 5·97d., MAY 10TH.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price	Quantity	Price	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price.
Neilgherry														
New Hope ...	59 p	5¼	26 p	6½	16	4¾	...	...	17	4	...	...	...	..
Travancore ...	**1302**	**5·53**												
Atchencoil ...	54 p	4¼		...	22	4½	14	5¼	9	3¾	2	1½	7½ c	2½ 3¼
Glenmore ...	100½c	4½	...		56½c	4	42½c	5¼			1½c	2¾	1½ c	2½
Isfield T Co Isfield ..	102 p	4⅜	..	...	41	4¾	29	5½	16	3¾ 4	...	...	15½c	2½ 3½
Kan Dev H Co. M...	299 p	6½	93	7	155	5¼	31½c	9¾	...	...	...	..	20½c	5
Penshurst ...	139 p	5⅞	61 p	6 7¾	33	5	12 b	5½	8	3¾	25 p	4¼ 5	...	...
Stagbrook ...	202 p	5½	103 p	7½ 8½	42	5¼	...	...	43	4½	14	3½ 4½	...	...
Sth Trav Co Ven ...	147 p	5¾	...	...	67	6	39	7	30	4¼	...	...	11½c	3¾
T T E Co Bon Ami	191 p	5	51	5¾	57	4½	71	5	...				12½c	2¾
,, Pambanar ...	64	5	10	6½	11	4½	15	5½	26	4¼	...	...	2	3

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PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 14th instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Coorg.

POLLI BETTA, *5th June.—Weather*—Thunderstorms, very local in their distribution, continued throughout last month and continue still. Signs of the approaching monsoon are somewhat more pronounced since yesterday. The sky was overcast yesterday morning and last night and is so this morning, and there was a strong wind from south-west last afternoon. Rain also fell last night. The burst of the monsoon may be upon us at any moment after this. *Crops*—Though what blossom opened out set, there was such a paucity of healthy bearing wood after the heavy crops of last season, that crops are bound to be light next season. Coffee is looking very fresh and healthy now and is covered with a fine growth of new wood. Borer has been bad again this season. *Labour* is ample for the time of year; and *General Health* very fair. *Works* in hand are weeding, supply pitting, and centering.

PLANTING IN THE MALAY STATES.

WE have been favoured with a copy of Minutes of a General Meeting of the United Planters' Association, F. M. S., held at Kuala Lumpur on the 25th February last. This paper throws a good deal of light upon what planters are doing in the Federated Malay States and upon the practical assistance that they are receiving from the Resident-General. A few months ago, Mr. STANLEY ARDEN, a gentleman with an excellent scientific training, went out to the Malay States to assist planters by conducting investigations and experiments. His appointment appears to be that of "Superintendent, Experimental Garden, Kuala Lumpur." His first instructions from the Acting Resident-General were that he should visit the various planting centres in Selangor—in the districts of Klang, Kajang, Kuala Lumpur, Ulu Selangor, Kuala Selangor, and Kuala Langat; that he should get "in

thorough touch" with the planters, ascertain what they required from him, bearing in mind that his present post was created at their request, and give them all the advice and information that it was in his power to afford. Mr. ARDEN was then to pay a similar visit to the Negri Sembilan States, with the same objects in view. It was thought that some place in the State of Selangor would he most suitable for headquarters; and while in Selangor Mr. ARDEN was to take the opportunity to look out for a site for his future experimental garden. Further instructions to Mr. ARDEN were that he was to confer and consult with the Chairman of the U P A. F. M. S, and submit concise reports. It was explained that what was required from him was practical work, not unnecessary official correspondence.

On the very day on which the above official instructions were issued, Mr. ARDEN sent in, as Superintendent of Experimental Plantations, a report on his visit to Penang, Province Wellesley, and Perak. In Penang he noted what was being done in the way of rubber-tapping in the Botanical Gardens. He reports:—"Although the trees here are not growing under the conditions generally recommended for Hevea braziliensis (Pará rubber)—being planted on a dry, sandy bank—it is interesting to note that the returns are very favourable; the average annual yield for the last three years amounting to rather more than 1 lb. of dried rubber. It appears, therefore, that not only does Hevea thrive under varied conditions, but that it gives a fair return, which statement does not apply to Ficus elastica, the 'Gutta rambong' of commerce" In Kuala Kangsar rubber and other economic plants in the Government grounds were inspected. Kuala Lumpur, or the immediate neighbourhood was mentioned as the most suitable site for headquarters. Rambong and Pará rubber trees in other districts were inspected. In Province Wellesley it is thought that sugar might be cultivated in some parts of the interior; and Mr. ARDEN remarked:—"This is somewhat important, in view of the fact that beet-root sugar cultivation is on the decline in Europe." After referring to fine specimens Hevea and Ficus seen at Setiawin, Mr. Arden observed:—"In reference to Ficus elastica, I would like to point out that it has been proved in Bengal and elsewhere that 'although it grows with undiminished rapidity and luxuriance in districts remote from the hills . . . it fails to produce caoutchouc.' Dr. Morris also says that, in spite of the abundance of the tree under cultivation in the tropics of both the Old and the New World, it has nowhere proved so valuable for the production of rubber as in the mountainous part of Assam. It seems, therefore, that there is a possibility of this tree failing to come up to the expectations of the planters of this country, and I would advise Government to allow me to proceed to Setiawin to experiment on these trees with a view to obtaining reliable data concerning their yield. It would be necessary to rent a sufficient number of Ficus from the Penghulu. The Pará trees are Government property."

Mr. ARDEN'S virtual condemnation of Rambong was challenged by Mr. E. V. CAREY, (Chairman of the U. P. A. F. M. S.) who observed in a letter to the *Malay Mail*:—"Mr. ARDEN'S admitted attitude has hitherto been one of extreme caution, and no one will blame him for it, but here almost at the very beginning of his first report we find what is tantamount to an expert condemnation of a product, the success or failure of which will affect not a few members of the planting community. I do not think therefore that I can be considered unreasonable if I ask that some explanati be vouchsafed. I also see that 1 lb. per tree of dried rubb is given as the average annual yield of the Pará trees in t Penang Botanical Gardens, and that '1½ lbs. per tree' r presents the yield of the Perak trees, but 'the tappings we not exhaustive.' This Mr. Arden styles 'a fair return,' b would he have us, or the thousands who read his repo believe that 1—1½ lbs. of rubber per tree is the golden harve that the future has in store for us? If so, then I can on say that he has formed his conclusion very rapidly; if no why does he not say, that with regular systematic a scientific tapping such as he is going to teach us, we ma reasonably expect a greater yield? The prospects of th country in rubber are being watched all over the worl and the utterances of a man in Mr. Arden's position mu of necessity influence public opinion to no small degree, behoves him therefore to be very sure of his groun before he commits himself to statements which admit criticism, almost as soon as he has arrived in the country It may seem a little unfortunate that at the very outs there should be a difference of opinion between the offici expert and a leading planter; but the probability is tha this will do good rather than harm. Mr. CURTIS, of th Botanic Gardens, Penang, stated in reply to Mr. CAREY letter:—"It may interest and encourage you, and th members of your Association, to know that in two years have taken from one Pará rubber tree 12½ lbs. of dr marketable rubber, and so far as I can see the tree is non the worse in health, Mr. DERRY got on an average 3½ lb from a hundred trees (the oldest seventeen years old) at single tapping, and might have got much more, but it wa feared it might interfere with the seed crop. If this is no good enough for you I don't know what you want. W have no "Rambong" big enough to experiment on, and therefore, I cannot say anything definite as to the yield o this tree. It grows slowly in the waterfall gardens, bu some, I saw in Malacca, gave me the impression that in th right kind of soil, there is money in this too." We sha probably hear more about rubber in the Federated Mala States, and we feel sure that Mr. ARDEN'S work and experi ments there will lead to useful results.

COFFEE IN DISTANT LANDS.

XXVIII.

Maranhao.—The coffee-tree grows well in this State One peculiarity, however, prevents it being grown for commer cial purposes. The fruit on the trees does not ripen all at th same time, in fact, flowers, green berries, and ripe berrie may be seen at the same time on one tree. The result o this is that the berries have to be picked one by one instead o a number being stripped from the stem by one sweep of th hand, as can be done when they all ripen at the same time This fact prevents coffee being largely planted for commer cial purposes throughout the Northern States of Brazil.

Mexico.—The latest report of the British Consul states:— The export duty on coffee is levied on the actual weigh thus a very fair idea can be obtained of the production of th country, as the consumption can be calculated, as the minimum to represent at least one-third of the amount exported, makin the consumption to be but an average of ½ lb. per head pe year. This figure of the consumption is undoubtedly ver

much under-estimated, considering that coffee is one of the staple articles of food among all classes, whether natives or foreigners, rich or poor, the latter using it at least twice a day, and the former three times a day, taking it in the form of a strong extract, and not in the diluted state used by the working classes. The consumption of this commodity can certainly be estimated at ¼ lb. per head per day, taking one class with another, which would give an annual amount of 9,750,000 cwts., the amount exported being supplied from the surplus over and above the demand for home consumption. It can, therefore, be considered that the production of coffee in the Republic could be estimated at an average of about 10,000,000 cwts. per year. The returns of production as published in the Year Book of Mexico, have so far been very incomplete (owing to the reasons given in previous reports, namely, that growers will not give the actual production of their estates for fear of being heavily taxed), consequently these figures, instead of assisting in the preparation of statistics for public information, only serve to give an erroneous idea of the prosperity of this or any other industry or product. This publication is, however, being very much improved, and there is every reason to expect that the figures contained in it will soon be very much more correct than they are at present. The exports of coffee in 1899 amounted to 357,113 cwts., as against 380,714 cwts., which though showing a smaller amount exported, cannot be considered as a decrease in the production. The formation of new plantations in the States of Vera Cruz and Oaxaca, by American Colonisation Companies has served to give an impetus to this branch of agriculture, and though at present the crops are small, each succeeding year will undoubtedly show an increase. The largest amount of coffee is sent to the New York market, which serves as a distributing centre for this article. The State of Colima, where a coffee known as "Caracolillo," and which resembles "Mocha" coffee in shape, size, colour, and flavour, is extensively grown, will be able to find new markets as soon as the new branch railway from Guadalajara to the town of Colima is finished. The value of the coffee exported in 1899 was 789,188*l*., as against 919,362*l*. in 1898. The average price in the New York market during the year 1899 for Mexican coffee varied from 5 to 15 c., according to quality ; the price for cleaned or washed coffee being 11 c. per lb.

The Bulletin of the Bureau of American Republics says—The exports of coffee from Mexico to the United States in 1898 aggregated 30,620,071 pounds, valued at $3,010,893. In 1899 the number of pounds exported was 31,657,552, worth $3,026,624. The exports in 1900 were 30,010,567 pounds, with a Customs house valuation of $2,859,690.

"Modern Mexico" states that the altitude at which coffee can be raised in Mexico depends upon the latitude of the location. The farther north the lower the line becomes at which trees will be safe against occasional frosts. The number of trees planted to the acre varies from 350 to 700, the latter figure being probably the limit on land that is not fertile, and where trees will not grow large. Five hundred trees is about the average per acre. Estimates of production made from the yields of individual trees are not safe guides upon which to figure the production of a plantation.

"Expert writers, in reports recently issued by the Mexican Government, after investigating many plantations in bearing," says the journal named above, "give it as their opinion that the average yield of coffee trees in a Mexican plantation should be figured at one-half a pound. On some of the highest grade plantations this average runs nearer to a pound, but on others it decreases to as low as two ounces to a tree, and they decide upon a half pound as a fair average for coffee trees upon good land, well cultivated. The smaller the production of coffee by a tree the better, as a rule, will be the grade."

A general estimate of the cost of raising, picking, and preparing coffee for market, the same authority states, is about $7 (about $3·50 in United States currency) per 100 pounds, presumably in Mexican currency Assuming that there are 500 producing-coffee trees on an acre of ground, and that they average one-half pound per tree the product will be 250 pounds, and at 9·53 cents per pound, the average price of the coffee imported from Mexico by the United States in the calendar year 1900, the gross returns from one acre would therefore equal $23·83. The net returns in United States currency would be $15·08 per acre.

Nicaragua.—A British Consular report for the year 1900, states that the coffee crop has been very good, and estimated at 200,000 bags ; this appears to be the largest crop ever yet obtained ; it is almost double that of 1898 or 1899 In the same report, however, it is remarked :—"With the present low price of coffee, planters and their Estates are anything but flourishing, and had the crop not been so good, many would have had to give up their Estates." Nicaraguan Coffee is shipped principally to Germany and the United Kingdom.

NOTES.

London Tea Sales. There was no tea sale in London during Whitsuntide.

Java Cinchona. The exports from Java for the first half of May, 1901, amounted to 228,000 Amst. lbs., against 481,000 in 1900, and 225,000 in 1899.

Colombo Tea Sales. At the public sale of tea at Colombo on the 29th ultimo 13,772 packages = 1,154,419 lbs. were offered, of which 10,230 packages = 872,210 lbs. were sold.

Consumption of Coffee in Brazil. Capt. Carvalho, of the Docas Nacionaes, calculates that at 5% of entries local consumption has risen from 1,600 grammes per head in 1894 to 2,000 grammes in 1900.

Java Quinine. At the quinine auction at Batavia on May 15, 3,000 kilos. (105,000 oz.) of Java make (Ed. II.) sold at an average of fl. 23⅞ per kilo., against an average of fl. 22¾ paid at the April 3 auction. The next auction to be held there will take place on June 19.

Low Grade Coffees. At a meeting influentially attended at S. Paulo it was decided to recommend planters to stop shipments of low grade coffees known as *escolhas* and to store as much coffee as possible at the plantation instead of sending to Santos so as not to swell visible stocks.

The Ceylon Tea Cess. Writing to the *Ceylon Observer*, J. W. remarks that the cess is inadequate to the requirements of the tea industry. Were the

cess double the amount, other fields and other methods of working could be taken in hand, which cannot be considered now for want of funds.

Coffee in the U. S. The Government report for March makes the imports of coffee 112,604,053 pounds, valued at $8,043,229 pounds ; total for nine months, 617,343,868 pounds, valued at $45,218,119 ; same time the previous year, 633,589,722 pounds, valued at $40,508,195. Exports during March, 4,384,674 pounds ; total for nine months, 28,056,877 pounds.

Coffee in Trieste. The union of Coffee Merchants of Trieste have transmitted a petition to the Ministry of Commerce begging that means should be taken to give coffee an official quotation at the Trieste Exchange on account of the absence of such a quotation. Trieste is in a less favourable position than Hamburg and Havre, its principal rivals in the coffee trade.

Crowded Out. The *Brazilian Review* says :—Sr. Francisco Candido Rodrigues Bueno, planter of Campo Alegre, has given notice to the employees on his fazendas that they must seek other employment as he has resolved to abandon the cultivation of coffee, owing to the low prices now ruling, which he says do not suffice to pay expenses. Sr. Bueno is said to be a man of means.

Coffee in Brazil. Irving Sprague, an authority on Brazilian coffee, is of the opinion that the advance in Brazilian exchange is making returns to the planters so small that it may not pay many of them to pick their crops. There may not, after all, be an 11,000,000-bag harvesting, even if there is to be an 11,000,000-bag ripening. Speculators better get under the trees and watch for results.

Venezuelan Coffee. Oscar Schramm reports a decline in the output of Venezuelan coffees. Exports are : 1900, 900,000 bags ; 1901, 700,000 bags. The decline has not affected price, as the totals represent so small a fraction of the world's coffee supply. There is talk of the repeal of the export duty—about 60 cents. per 100 pounds—especially as the Venezuelan is beginning to see that he, and not the " Yank," pays the piper.

Castilloa Rubber in Matale. Major Gordon Reeves writes to the *Ceylon Observer*, as follows :—" About Castilloa Rubber, this tree grows luxuriantly on suitable land, not only two miles from Matale, but on clearings opened ten miles to the North. " Year-old plants are having a growth of 3 to 4 feet. Our experiment in tapping at Wiharegama gave us a yield of about 2 lbs. per tree *good* rubber ; valuation of which has already appeared, *viz.*, 3s.6d. per lb. This was tapping from October to June. Latex does not flow in dry weather. These trees are about 10 to 12 years old and girth about 36 to 42 inches at 4 feet from ground."

Coffee Prices. The *Brazilian Review* of 23rd April remarks :—From January, 1840, to date the only occasion that quotations for fair Rio coffee ever fell below those now current was in July, 1849, when they reached 6 cents per lb. in 1882 when currency prices fell still more N. York quotations were never under 8 cents. There have been eight different periods when prices fell for some-time below 10 cents per lb. in 1840 ; 1841 to 1850 ; 1851 1853 ; 1855 ; 1868 to 1869 ; 1882 to 1883 ; 1885 to 18 and 1887 to date. Previous, however, to 1865 Americ quotations were made in currency and only after that date gold. The highest quotation ever reached was 25 cents lb. in 1874.

The Calcutta Tea Sales. The Calcutta season opened on 31st ultimo with the sale of 8,0 packages, most of which were disposed of. The sale almost entirely composed of Darjilings, Terais and Dooa Darjilings predominating ; very little tea indeed having come to hand from the other districts. The quality genera was fully up to the average ; if anything, better than year. The trade showed their appreciation by keenly co peting for all attractive liquoring kinds, which realised values. Plain, pointless descriptions were rather difficult move, except those grades showing even style and ma which were well supported. It is stated that well-ma Pekoes are wanted for Central Asia.

Ceylon Green Teas. The following figures collated the Ceylon Customs Department sh the actual exportation of green tea from Ceylon during present year :—January, 44,248 lbs ; February, 47,447 lb March, 223,964 lbs. ; April, 99,784 lbs ; making a total 415,444 lbs. The countries to which the exports have tak place are as follows :—Canada, 189,171 lbs. ; United Stat 110,981 ; United Kingdom, 88,599 ; Burma, 14,308 ; Brit West Indies, 7,150 ; China (Haiphong), 4,450 ; and Brit India, 785. In the Chamber of Commerce returns are s to be taken from manifests which are not so detailed as the Customs declarations, and do not sufficiently distingu between black and green tea exports. For the purpose the Customs Department each exporter has to furnish detai particulars of his export, which enables accurate totals be kept.

Coffee in Holland. The total importations of cof into Holland in the year 1900 w about equal to those of the previous year, reaching 1,563,3 bags, of which 624,666 bags came from the Dutch E Indies, and 939,730 bags from Santos and Central Ameri etc. The last-named importations continue on a very lar scale. At the beginning of the year there was some appe ance of a rise in prices, owing to the diminished stock, quotations soon began to give way and the tendency duri the whole of the year was downward. Good ordinary Ja opened at 6¼d. to 6⅜d. per lb. in January, gradually recedi to 6d. and 5⅞d. per lb. in December. Good average Sant on the other hand, which opened at 3¾d. to 4d. per lb. January advanced in July and August to 4½d. and 5d. lb., closing in December at 3⅞d. to 4d. per lb. Liberi coffee, in consequence of the improvement in its appearan and quality, was in fairly good demand throughout the ye though at a low figure.

Japan Tea in Canada. The course of the Canadian mark for Japan teas since Christmas h says the *Canadian Grocer*, been difficult to understand. spite of a very material diminution in the amount of impor and in a face of the evident fact that the market was bare low-grade teas, prices rather weakened than stiffened. Th may have been due in its entirety to a slow demand country account, which affected other products such as cann

goods. But there are those who have other reasons which may account for the strange turn events took. They attribute the dull market to the three forced sales, all of which were important inasmuch as they involved the property in teas of three very important Montreal houses. The insurance companies alone put $60,000 worth of tea on the market, and while this would not have done the market harm if prices had been held, yet, the throwing of this large quantity of damaged goods into retail trade at low prices injured the sale of reasonable priced goods.

Cacao Pods.

"C. P." writes to the *Ceylon Observer*:—Since writing my first report on Cacao pods and seeds, I have received a pod said to be a new variety called *Puerto Cabella* and sold by one planter at 30 cents per pod. I have been asked to say whether that pod was anything like the pods I gave an account of. This pod was 7½ inches long, 10½ inches circumference, weighed 1 lb. in all; seed 12 roundish and 28 flattish; weight of wet seed 4¼ oz. and colour of pod, shape and seed when cut open as near as possible to what I described as No. 2 Cundeamor. This latter was the name attached to the original plant received by me from Trinidad in 1878 and there is now many trees of that variety in Ceylon, planted from seed of that original plant. The pod I described was larger, more in weight, number of seed, etc. Another pod has been sent to me, this is from a Ceylon cacao estate and is also a *Cundeamor*, but grown on poor soil, weight of pod ¾ lb., 41 seed 2⅜ oz. only (wet).

Coffee.

Although the deliveries during April both in Europe and the United States were quite equal to the average rate, the arrivals were rather heavier than last year, says the *Produce Markets' Review* of 11th ultimo, and the stocks showed on the 1st instant a slight increase. On the other hand, the world's visible supply was reduced in the same period by about 5,000 tons against 7,000 tons last year, the total stock being now given as 432,300 tons against 364,440 tons last year. This heavy weight continues to press on all markets, and must do so until there is some prospect of the production being checked. The auctions have continued with the same heavy weight of Central American and East India growths, but the very low rates have attracted more attention, and there has been some recovery. Medium and fine Costa Rica are from 1s. to 2s. dearer, and Guatemala also is about 1s. higher. East India cannot be quoted dearer, and some remarkably cheap parcels have been sold this week at prices which have certainly not been seen for the last twenty years. The present low range must attract buyers both from the home trade and from the continent, and we hardly think that rates can be maintained long on this basis.

The London Market.

Latest advices by mail show that as regards coffee the low prices have attracted attention and a good business has resulted, prices improving 1s. to 2s. per cwt. At the Dutch sale on the 14th ultimo 17,202 bags Java sold at rather below the valuations, the price of good ordinary being 31 cents. A quiet tone has prevailed in the market for Futures and prices are slightly easier for the week. Santos on 17th ultimo opened at 31s. for May, 31s. 3d. July, 31s. 6d. September, and 32s. for December—Indian tea has experienced little alteration. Common red leaf kinds were quitted at low rates, and medium sorts showed no improvement; the best Broken Pekoes, on the other hand, were generally well supported. Recent reports from India point to the output being materially retarded by drought in the Dooars, Darjeeling, and Assam.—Ceylon tea, at the auctions, ruled irregularly and previous prices were barely supported. The spice market has been quiet. Black pepper is dull and easier; of Singapore sales of fair have been made on the spot at 6$\frac{3}{32}$d., July-September shipment at 6$\frac{7}{16}$d. down to 6$\frac{13}{32}$d., and May-July at 6$\frac{5}{32}$d. White is quiet, and no sales for arrival reported; Penang July-September shipment offers at 8$\frac{15}{16}$d., and Singapore distant shipment at 9½d. Ginger, dull of sale.

Ceylon Tea in Germany.

Mr. J. H. Renton has sent the Planters' Association of Ceylon the following statistics:—

TEA ENTERED FOR HOME CONSUMPTION IN GERMANY.

	1899. Kilos.	1900. Kilos.
From Great Britain ...	302,300	322,500
British East India ...	370,500	235,100
Ceylon	included in India	116,700
Holland	123,100	104,000
Dutch East India ...	300,200	380,800
China	1,828,700	1,831,200
Elsewhere	34,100	63,200
	2,958,900	3,053,500
	Say 6,509,580 lbs.	Say 6,717,700 lbs.

Ceylon has only been kept separate from India since September, 1900.

EXPORTS.

	1890. lbs.	1900. lbs.
From Colombo ...	346,959	402,717
Do. Calcutta ...	704,877	861,780
	1,051,836	1,264,497
Against Imports for Home consumption ...	704,000	773,960
What has become of the balance of... ...	347,836	490,537

Costa Rican Coffee in Frisco.

Consul-General Joseph M. Tinoco, of Costa Rica, residing in San Francisco, charges that certain unscrupulous dealers are taking advantage of the similarity of Mocha and Costa Rican coffees to charge consumers a higher price for the Central American product. In his opinion the public needs instructions concerning coffee. During the last four years the world's consumption has increased at the rate of about 1,000,000 bags per annum. In twenty-five years the world's demand for coffee has just about doubled. The *New York Journal of Commerce* observes:—Mr. Tinoco referred yesterday to the report of J. B. Calvo, Minister for Costa Rica at Washington, which has just been published in English by the Bureau of the American Republics, for figures. Minister Calvo writes: "Costa Rican coffee when passing into third hands, is sold under the denomination of Java or Mocha, its resemblance to these products being evident. While this is considered to be flattering to the Costa Ricans, it is to the interest of Costa Rica that its coffee should be known under its proper name to the general public, and particularly to the consumers, just as it is known to the importers and the general wholesale coffee merchants." Consul-General Tinoco has received a copy of Minister Calvo's report. In calling attention to it he thinks that the prime purpose of showing that the Costa Rica coffee is not as widely known under its own name as it ought to be, is likely to be subserved.

GENERAL ARTICLES.

SOME CONDITIONS OF COCOA.

ATTENDANT ON THE GROWING OF SUCKERS.

The following is a paper on the above subject read before the Uva Cocoa Committee on the 11th May by Mr. L. Haweis :—

MR. CHAIRMAN AND GENTLEMEN,—There can be little doubt that, if canker had never made its appearance, the question of growing suckers on cocoa had never cropped up; therefore, at the outset, sucker-growing should be regarded as a method of defence against canker, and in no other light. Incident on the growing of suckers, however, it has been noticed how, generally speaking, the spread of a tree may be increased and its height curtailed, and as this introduces quite another element into the question, the original motive for their cultivation is apt to be lost sight of, and even sacrificed to what at existing distances must be the very uncertain advantage of growing a broader tree. This advantage, or possibly disadvantage, I will not dwell on here; suffice it to say that sucker-growing for purposes of yield is contrary to all tenets of fruit-culture, and we have yet to learn that these do not apply to cocoa. I allude to the fact that fruit-trees bear best when kept to the primary branches; and if "spread" is the objective, the means must be sought not in sucker-growing but in pruning.

There is an idea that the less the knife is used upon cocoa the better. It is obvious that any excess of its use must be deleterious, but to avoid excess it is not necessary to go to the opposite extreme; that is no logical or sensible conclusion.

PRUNING.

In the West Indies, I believe, the cocoa tree, like fruit-trees all the world over, is subject to a certain amount of pruning; and pruning, as pruning, is not confined to what in relation to cocoa we call "suckers" and "gormandisers." The reason why the opinion that it is prevalent in Ceylon is owing probably to the fact that cocoa—Caraccas, at any rate—if carefully tended from its youth up, requires very little pruning of the larger branches, and we have consequently been misled into the idea that the pruning of these larger branches is wholly unnecessary. Further, it is said that every cut in a cocoa-tree is a door for a parasite to enter, but this applies chiefly, I take it, to the older wood, and, considering the small amount of pruning needed, it is not absolutely unpractical to suggest that all larger cuts be treated with tar or some other preservative less injurious to green wood. On the other hand, the objection strikes me as being of academic interest in comparison with the immense good obtained by a judicious use of the knife: theoretically the door is open, practically it is comparatively, rarely utilised, except possibly by white ants—(and white ants do not like tar, or a kerosene emulsion)—while borers of all sorts show no particular preference for a cut surface, put prefer rather their own insidious method of the combined gimlet-and-corkscrew variety in greener and softer wood. But it is also a fact that very old wood is often actually softer than younger wood, and this may help to explain why such old wood does in many cases actually fall a prey to all sorts of insects—scavengers and others. This brings me round to my original point, for when the old wood arrives at the stage when on account of its softness it attracts pests, it seems fairly reasonable to cut it out. And this wood it is which most planters will believe with me to be most subject to canker.

CANKER.

Canker having left its card in yellow leaves and impressed its seal of the familiar claret-hue, nature's first impulse is of reproduction. This effort may take the form of fruit or "suckers," or both. When the process of dying is rapid the tree has time for no exhibition of this kind; but when it is long-drawn-out. fruit or suckers, or both, may appear, according to the virility and general condition of the tree. In the case of suckers, as in the case of fruit, they mature according to the extent they are unaffected. If affected badly, the pods turn black, and the tips of the suckers droop and follow suit; but the suckers rarely die back in this way unless the process of dying is going on fast.

The process of dying, however, may be delayed and, under certain conditions, arrested by proper treatment, when the life of the suckers is saved, and we get new wood from the old root. It often happens, too, that the old tree recovers, and, if not too many suckers are allowed from the base, continues to bear as formerly. But if the tree is aged, the old wood gets weaker and softer, whole of its strength being absorbed by the suckers. When this the case the old tree should be cut out to give the suckers eve chance, and then?—then we have lost all crop from that tree fo year or eighteen months, until the suckers have matured.

This, I think, is a fair statement of facts, and this it is wh has turned planters' attention to growing suckers, not merely diseased trees, but on healthy trees also, in order to be prepa for a possible attack of canker.

Now, what is the effect of canker in the old tree upon the sucke It is clear, that if the suckers are to justify their existence, th must be kept from canker. A certain sacrifice of crop may ha been, and generally is, the immediate result of growing these sucke Therefore their well-being is of paramount importance; for, sho they become diseased we shall have lost both crop and suckers, a from every point of view this is disastrous. Then comes the fa question, can we cure the canker in the old tree? If we can, must do so; if we cannot, the old tree must come away; for to k tinkering at the tree while the canker is possibly spreading to suckers is not to be recommended. The risk is too great, for o the suckers are gone our labour has been in vain. As scarcely boldest, and youngest, planter would guarantee, I imagine, to "c the canker," let us suppose the old tree is cut out. The immedi effect is probably diminution of crop, the ultimate effect the rott away of the old stump. If the old stump rots away quickly suckers are again in jeopardy. Suckers, however, if close to ground, or if the earth be heaped up around them, will throw do fresh roots, which very usually are not strong enough at first to b their own weight. Sometimes, perhaps, in the majority of ca nothing will induce them, short of props, to retain the perpendi lar, and the weight of any pods they may bear generally bri them down in spite of the props which are seldom free from wh ants. So, what are we to do? We cannot honestly trust 75 per ce of these suckers, so that the need of putting in a supply becon obvious. What is even more obvious is that the supply sho have been there six years before.

The effect of canker on a medium-aged tree is not dissimilar eminently more hopeful. There is little doubt that the best "bu cocoa," that is to say, the bush the suckers may be trained i after the old tree is cut out, is grown from medium-aged tre Their luxuriance of growth nearly always infects the old stu which is not so liable to decay, but they are by no means so apt throw down roots of their own. The case appears to be one m of adaptation to circumstances than of independent action, it is possible that on this very account, perhaps, they are more to be relied on than suckers from aged trees. A medi aged tree, then, provided that the main stem is cut out in ti has a fair chance against canker, but the suckers rarely b under the year.

"BUSH-COCOA."

It is a curious thing, and I wonder if others have noticed it, t suckers in bearing while the old tree is still alive, when it is out, do either one of two things, but rarely both; either t continue to bear putting on leaf very slowly, or they expend increased energy they obtain from the large root, deprived of main stem, in growing out into a fine spreading bush the branc of which cease bearing altogether, save for a pod or two, until t are fully matured. This applies to suckers on old and medium ag cocoa alike, and points to the fact that "bush-cocoa" can be gro only at a sacrifice of crop, illustrating the old and unexplo dictum that suckers on fruit-trees are deleterious.

But a tree in bush-form has the advantage, not of being any subject to canker indeed, but of having several more stems th nature usually supplies; so that it is often possible to cut av half or three-quarters of the bush, and still have something to sh in its place. That such bushes bear as well as the original tree n be doubted, but that they do bear at least fairly well is undisput and, possibly, under a modified system of culture, they may almost as remunerative. At any rate, experiments are encouragi

So that, as it is obvious that a young plant, in bearing, if possi should be ready to take the place of an old cankered tree, it occurs to me to ask whether it would not be desirable to be re with a tree in bush-form.

Now, the growing of bush-cocoa introduces variations on meth and results, with which we are not entirely familiar.

Anyone who has cocoa at 12 ft. by 12 ft.—and we all have—kn that well-grown Caraccas trees interlace at that distance; the

ore greater spread on our old fields we do not want. On the other and, most of us are now replanting with Forestero, of altogether arger growth, and I am aware of an instance of a proprietor having lanted Forestero at 18 ft., who complains of being laughed at. Some of you, gentlemen, at least will know of Forestero at 12 ft. nd also that 15-year old trees have an average perimeter of at east 20 feet; but I am not aware except in one or two instances of ny practical conclusions having been drawn from that significant act. On the contrary the piling of pelion on assa is common, for n a certain such field I have in my mind the V.A. ordered suckers o be grown.

If, therefore, it is proved advisable to start the cultivation of "bush-cocoa" in good earnest, the usual distance of planting is manifestly inadequate for even Caraccas; how much more so, then, or Forestero?

THE "RULE OF THUMB."

And now I am going to be heterodox. Nothing is more noticeable in the story of Ceylon cocoa than the "rule of thumb." Cocoa n Ceylon was originally planted—I speak generally—without shade. Something occurred—probably helopeltis—to show that shade was beneficial. Everyone planted shade—even planters the condition of whose estates left nothing to be desired. I will not dwell on what distances that shade was planted; everyone knows that; it was overdone. Then canker came; light was pronounced inimical to canker; the shade was cut out. Neither will I dwell on now that shade was cut out; everyone knows that, too. In many cases it was overdone. But canker has taught us something else; t has indicated that Forestero is the hardier (if less valuable) variety of the two; and as Caraccas dies out Forestero is now being almost universally substituted. And what I want to ask is whether this also does not threaten to be overdone. Unless Forestero is as remunerative as Caraccas and as at present cultivated it certainly is not, it is quite possible planters will regret the universal adoption of it. Incidentally, it occurs to me to ask what would a large majority of estates have done if, instead of Caraccas, there had originally been planted Forestero? There can be little doubt that the wonderful bearing qualities of Caraccas have done for cocoa in this canker crisis what Forestero, as known at present, can never do. There is, however, good reason to suppose, that many varieties of Forestero, hybrids, besides being hardier, (a fact which has not been indisputably established) are quite as remunerative as Caraccas. But they have yet to be sorted out and this has not been done. Moreover their great irregularity of form largely augments the difficulty of their cultivation, and it is well-known that Forestero suckers act in a very different and far more irresponsible manner from Caraccas suckers. To grow a fine bush from a felled Forestero tree is infinitely more difficult than from a Caraccas tree, so that it almost seems that suckers, if grown at all, were better started during the new clearing stage, and it has yet to be proved that suckers on new clearings, however, carefully tended, do not increase the non-bearing period a full year, or even two.

GROWING SUCKERS ON NEW CLEARINGS.

The question of growing suckers, then, is a much deeper one than on the surface appears. In the latest stage they are untrustworthy, and as canker generally attacks the oldest trees first and worst, it would be well if at the age of, say, ten or twelve years, all fields were planted up again, especially as cocoa planting is not an expensive item, and this system would be an excellent preventive against at any rate the spreading of canker, for we could well afford to cut out the old trees for the sake of the new ones. But a tree at ten or twelve years of age is at its prime—just the time when the most successful bush may be grown; the growing of it into a bush at this age in the event of canker making its appearance does not, however, obviate the necessity of supplying up.

Remains, then, the question whether planters are willing to start suckers on new clearings. I confess to a great reluctance on this point, and in view of what may be done in the way of planting up afresh and cutting out later, the matter scarcely seems worth as much consideration, except as a counter to canker, as whether Caraccas should not again be planted up rather than Forestero.

THE MERITS OF FORESTERO AND CARACCAS.

Gentlemen, it has been said, and said truly, that the wisest minds are open to doubt; and I would point out that there is even more doubt in the cultivation of Forestero than in that of Caraccas, about which latter we certainly ought to know more. Whatever advantage Forestero can legitimately claim at this present over Caraccas it is almost entirely speculative; for not even greater immunity to canker has been proved. Yet I am willing to cede this point, considering all things, and in ceding it I will quote against its height, twice and three times the yield, plus as near total immunity from canker as may be obtained by cutting out at a suitable age in favour of a younger and more vigorous tree

With regard, then, to what is going on around us, I mean the almost universal adoption of Forestero, I would ask you to decide, if possible, upon something definite. I would ask you to weigh carefully all the pros and cons, and to judge whether Caraccas has indeed merited the disgrace heaped upon it. It has done us more good than ill. Whether canker has come to stay or not, it will not do, however, to be unprepared for it; but neither is it advisable to deceive ourselves into thinking that sucker-growing on old trees is an effectual counter-policy. I have tried to point out that as a makeshift it passes muster, but that it cannot obviate the necessity of eventful supplying up. And I know of too many instances to the contrary to be convinced that sucker-growingon new-clearings is satisfactory. There can be little doubt that they delay crop, and there can be no doubt at all that should the tree be attacked by helopeltis, it suffers more through being killed back from six extremities than one. To carry the idea a little further is to introduce a possible absurdity, but it is worth noting that the abundance of extra flush may even be regarded as the finest attraction for helopeltis human ingenuity could invent.

So that, except as a makeshift against canker, I have no good thing to say for sucker-cultivation—least of all for Forestero suckers, which, after abusing every confidence and baffling every hope, not seldom remain to delude the trustful superintendent into apologising for them in the name of experiment.

On the other hand, and in conclusion, I have heard it mooted (I believe in connection with Samoa) that suckers on new-clearings actually induce the tree to bear earlier! I do not know what truth there is in this, but we do know it is contrary to all cocoa planters experience in Ceylon, and I am inclined rather to be content with those ills we have, and to make the best of them, than fly to others we may end by regretting even more.

THE CEYLON COMMISSIONER ON THE AMERICAN TEA MARKET.

The following letter has been addressed to Mr. E. Tye, the Secretary of the Indian Tea Association (London):—

DEAR SIR,—As requested by you, I send a short report on our tea business in America, as I found it during my recent visit there. Although the progress made in the introduction of Ceylon and India teas has been, I think, very considerable during the last seven years, it might have been very much more so were it not for the many unforeseen obstacles we have encountered. Four years ago "standards" with a sieve test were sprung upon us, in order that leading American houses might, by keeping out low grade teas, sell an immense quantity they had in hand. The success of this political move will be understood when I say that the value of their stocks rose from 4 cents per lb. to 10 cents, as soon as the law was passed. Then followed the 10 cents duty, which has lowered the consumption of tea in the U. S. by $\frac{1}{3}$rd lb. per head, or nearly 25,000,000 lbs. per annum. Our teas are the only kinds which have not fallen away, but on the contrary have increased year by year. Last year the war in China threw an immense surplus supply of China Congous into the States. This tea cost an average of 10 to 11 cents in New York, but owing to quantity, the price fell at once to 8 to 9 cents, and cheap as our blacks have been, they could not compete. Houses already loaded with Congous could not purchase other black teas, however cheap.

The imports to the States and Canada during eight years of Ceylon and India tea have been as follows:—

1894, 4,723,000; 1895, 7,792,000; 1896, 9,474,000; 1897, 11,361,000; 1898, 13,608,000; 1899, 16,700,000; 1900, 16,130,000. This last year shows a slight falling off, but very slight indeed, considering the statistical position of China Congous. The fall has been entirely in Indian, Ceylon showing a good increase. Can this be due to India's withdrawal of funds? Ceylon: 1899, 8,298,000; 1900, 9,173,000, India: 1899, 8,487,000; 1900, 6,958,000. In the teeth of all those obstacles, and especially considering the enormous decline in the U. S. consumption of tea generally, I think the expenditure

incurred by Ceylon and India, in introducing their teas into America, has been amply justified by results. Subscribers should not be misled by such appeals, calculated to cause discontent, as may be found inserted editorially in the *Colombo Observer*. In that paper last month, referring to Messrs. Gow, Wilson & Co.'s table of re-exports, it is said: "This record deserves the serious consideration of the Thirty Committee and all proprietors, who pay the cess. For, unfortunately, America, which has absorbed so much of the Ceylon cess during the past five years, did very little better for us in respect of her purchases of our tea from London in 1900 than in 1896—at least, if Canada has advanced, the United States have gone woefully back.

"Ceylon tea exported from London :—

	1896.	1900.
Canada	1,265,906 ...	1,820,521
U. S.	1,408,084 ...	987,500
	2,673,990 ...	2,808,031

With this, however, we should compare the direct shipments from Ceylon, Canada, and U. S. A. 1896, 502,713 lbs.; 1900, 3,980,000 lbs." What need the payers of the cess care whether the teas go from Colombo or London? If amounts fall away in one place, they grow in the other. For instance, shipments from Colombo this year to the end of March are far below those of last year, but mark the increase from London direct and transhipped:—

	1900.	1901.
Ceylon, three monhs to end of March ...	948,000	1,735,000
India, do. do. ...	888,000	1,474,000
	1,836,000	3,209,000

America buys in what it considers the best market.

The imports of Congous last year were over 19,000,000, against 11,300,000 the previous year. These figures are the shipments from Shanghai and Foochow and with, say, 16,000,000 from India and Ceylon, represent the consumption of black teas in the States and Canada. Of green teas, and partly fermented Oolongs and Formosas, the imports are about as in this table:—

	Lbs.
Green Japans	36,000,000
Green China	15,000,000
	51,000,000
Oolongs and Formosas	17,000,000

We have already got the market for 16,000,000 lbs., out of an average consumption of about 28,000,000 lbs, of black teas. Not the taste of the consumers, but his indifference to quality of tea and the vested interest in the East of the old established importers prevent us from rapidly acquiring the greater part of the remaining 12,000,000 lbs. Now as to green teas and partly fermented teas, where the field is 68,000,000 lbs., as against 28,000,000 lbs. of blacks—here again I must warn planters against the assertions of disappointed editors. The same paper above mentioned, in writing of my work with greens, says: "More black teas are consumed in America than green teas." Let the above table be proof against this statement. It also says, on April 19th: "The total export of green tea up to same date (April 16th) is given as 15,850 lbs. of which India took 3,890 lbs., and America 12,000—same as it was four weeks ago." These figures it has given several times, apparently to pour cold water on my advocacy of greens. A moment's thought or inquiry would have convinced the editor that this is absolute nonsense. To London alone more than this amount has come. There is one firm in Colombo that executes a contract with a Toronto house for 20,000 lbs. of green tea per month. This same firm landed 1,000 chests in America last week, in execution of an order entirely independent of the above Toronto firm. If only 16,000 have been shipped, what has become of the 4 to 500,000 lbs. on which duty was paid during December and January, February and March? I think there are four firms doing extensive business with Canada, who can account for most of it. I notice those editorial attacks only to show how difficult it is in the face of them to induce those interested in it to continue patiently the manufacture of green tea, until it becomes a factor on the American market. The enemy is in our own household. But, notwithstanding, I am more confident to-day of the ultimate success of Ceylon and India greens than I have ever been. I have had numberless opinions of its quality and merits from dealers able to judge, and except the coarseness and ugliness of the Pekoe Souchong, made when coarse plucking was in vogue. I have had only one complaint—that for the Quebec Province, the liquor was too fine. Of course th are very strong obstacles—the strongest being the vested inter in the East (China and Japan) of those who control the grocers brewers do "tied houses." These few firms are more united opposing our greens than they were with the blacks, because th trade in greens is so much larger. A second obstacle is difference. A Montreal gentleman, who has been pushing greens, writing a fortnight ago, says: "It is not so much pub indifference as it is trade indifference, because Japans have established sale, and for Ceylon greens missionary work is nec sary. Then the wholesale trade are showing a much more interes front in reaping out the greens; their travellers poison the groc minds against giving our teas a chance. In dealing with grocers we are not dealing with business men, but with mildew fossils, who will not draw one tea against another. If they they would be speedily convinced." Another writing me s months ago, and he had bought a few hundred chests: "The liq of Ceylon greens, in our opinon, is excellent, but the leaf of Ceylons being so different will make them hard to introduce. you not imitate the dry leaf more closely. Try to please the eye well as the palate. This is the time to push them, one dollar sp now is worth double or treble six months hence, when Japans n be cheaper, and the sentiment for British goods not so stron True, but I can spend nothing while I get nothing, I can o include "green" with "black" in advertising. A few small sub dies just now would greatly help to remove prejudice. I beli the difference in appearance of dry leaf is merely a matter machinery. A roller need not necessarily twist. Another obsta is the way business is done in America. When our teas are bou in Calcutta or Colombo they are consigned to an agent or brok say in Toronto. This agent *must* sell to a wholsesale house, no be the grocer direct. Now wholesalers in the States and in Can (French and English) have told me repeatedly they never handl new article until the grower or manufacturer has made a mar first. They will not do missionary work, their travellers object it, as while engaged in educating, another firm's travellers sell grocer what his customers have been accustomed to take. Tr ellers have to earn their wages, which depend on sales. Now had been making green teas in some quantity in Ceylon for months before I reached Toronto in March. Nearly all those t had been consigned to about six brokers in Toronto and Hamilt I had been warning the Ceylon Committee almost every mail t their bounty and the very low prices for black teas would, combin cause an accumulation in Toronto as we had no money to h to make sales and overcome the obstacle of the wholesaler, and travellers. I found it so. True some string packet tea firms w pushing the green tea, but they drew most of their supplies dir from Colombo. A few houses had bought some which were chie used in packets. But the brokers were all loaded up and had wi to stop shipments from Colombo. Things looked very blue, a the only encouraging features were that the packet people w hopeful, energetic, and full of praise of the quality, and that Jap were scarce and dear. One importer suggested to me to ge number of ornamental canisters made large enough to hold 50 60 lbs. of tea, and offer one to each wholesaler for each 100 lbs green he bought. This canister to be given to any grocer w bought 100 lbs. of green and photos of the canister to be given the travellers to show the grocers. I had 1,000 canisters ma marked "Ceylon Greens Teas" in large letters, and the accumu tion of teas was swept off in a fortnight. I returned to New Yo and when there I had letters from various Toronto brokers to effect that they had sold their stocks, and all afloat. One of th wrote:—"I wired on March 10th to double my order and on 20th instant to treble it. These canisters are standing adv tisements for Ceylon greens in perhaps 1,000 shops. In Mo real no wholesaler would listen to me as they are much m conservative there. But I hope to break through the ring th before end of this month. I have been waiting for greens to arr from Colombo, as there were none left in Canada. In New Yo I will only say that I was surprised by the favourable recepti our greens were receiving about end of March, and I ha had most encouraging news since I returned. I could give ma pages of quotations from letters from many sources, all which are encouraging. But I must confine myself to a f From New York, a fortnight ago:—"The only thing we ha to fear now is cheap inferior teas being sent from Colombo to

rices, destroy profits, and disgust our friends." This is from a trong New York tea firm. From Buffalo: "Our trade in this ity in blacks is 1,000 lbs. a week. With the same trouble we hould do 5,000 in greens. In Utica and Syracuse 'green' is the reat factor, see enclosed orders." He strongly recommends our oing something to attract attention during the Exhibition at uffalo, but, unfortunately, there is no money. From Toronto: One of our travellers sent us nine orders this morning, six of hich were for greens. Another Toronto man writes: "I am get-ng on well with the greens; had orders for 400 lbs. this morning" nother grocery firm in the country beyond Toronto writes:—"We ad 100 lbs. green Ceylon first week in January, 500 lbs. in end of anuary, 500 lbs. early in March. It is the finest tea we ever tasted, nd we have yet to hear the first complaint about it." These are amples of scores, all sent unsolicited. They may be deceiving me, ut I think not. Many grocers have ordered them a second, third, ourth, and even fifth time, while, of course, others return theirs. t seems to me there are two ways of getting the teas introduced.

1. Make a large quantity and send it over to be sold for what would fetch. If 2,000,000 lbs. were made in India and dumped in n America at 1d per lb. loss, it would cost India £8,000, which he industry could well afford. It would relieve the Engitsh narket, and be an introduction to the American one.

2 That companies should agree as to who should make the tea, hat the makers should blend the standards in large lots, and that ea instead of making a loss of 1d per lb. as in the first method, the eas should be held for paying prices, the 1d per lb. being used to rease the wheels of distribution, as I did with the canisters in oronto. Tere are many other important matters of which I do ot care to whrite, but over which I would like a talk with you.

Yours truly,
W. MACKENZIE.

P.S.—What is wanted is a regular supply of green teas for merica. Spot teas can be sold, but orders for teas to be delivered our to six months hence cannot be obtained. At present it is the upply; not the demand, that fails us. Since I wrote the above etter I have had two instances of valuable progress with those reen Ceylons. A New York firm bought 25 chests six weeks ago, he first they had handled. Within a month they had opened up 0 accounts with grocers who had not handled any Ceylon green efore, and they had increased their purchases from 25 to 300 hests. Another firm in New York bought 25 chests three weeks go—their first order. I have just learnt by wire they have ought another 150 chests.

SISAL GROWING IN THE SURMA VALLEY.

J. writes in *Capital*:—

A good deal of attention has been given lately to the subject of growing fibres in the Surma Valley delta, but, so far as we can learn, there is very little reliable information on the subject. It has been proved indeed that sisal will grow and that the fibre, if well dressed, brings £30 and upwards per ton. Beyond this there is nothing trustworthy forthcoming. We know that Mr. Joseph Chamberlain put a large area (some 6,000 acres) under plant about 10 years ago in the Bahamas, but nothing further has been heard regarding this, and there lurks a suspicion that the returns have not been what they were expected to be, or we should have heard more on the subject. The period of ten years is too long a one for any gold mine not to have been found out, the secret would have leaked out long ago. Dr. Prain, the present able Superintendent of the Royal Botanical Gardens, is of opinion, we believe, that, as an industry by itself, it would not pay, but that it might do so as an auxiliary to tea, or indigo, where there would be enough steam power on the spot, which could be utilised for the extraction of the fibre without incurring original cost for expensive plant which could not be employed profitably throughout the year, unless the plantation was on a very vast scale. A writer in *The Field* throws some light on the subject of what return may be expected, always provided our climate is equally suitable to the growth of sisal, as that of the Bahamas, or Windward Islands and there is no reason to suppose that much difference exists, for both places are more or less tropical. Judging then from what this writer says, the outturn would indicate a crop of dressed fibre of 900 lbs. per acre, or considerably less than half a ton. We have no statistics to say how much can be got from the plant in Assam, but we do not imagine that it would be safe to calculate on any larger output nor would it be safe to calculate upon £36 sterling as a price per ton. Before the Spanish War the same fibre was selling at £18 to £20 per ton, and now that peace has been proclaimed, and the ploughshare taken the place of the sword, the natural inference to be drawn is that the fibre will revert to a normal and not an inflated price, in which case, if our forecast is correct, it would be unwise to calculate on more than £25 of the dressed material, so that the nett result financially upon the abovementioned calculations would read just over £10 sterling, or Rs. 150 per acre. Dr. Prain, we believe, estimates 4 per cent. a good return of fibre to the raw material that has to be handled, so that the cartage from a large area would be a most costly item of expenditure, as only 4 lbs. of fibre would result from the handling of 100 lbs. of the raw stuff. If fibre is to be grown at all as an industry by itself, a plantation of less than from 600 to 1,000 acres would not be worth entering upon, so that taking 640 acres to the mile, if the factory were situate even centrally the cartage from the field to the factory would be a costly item; as, for every ton of fibre, about 24 tons of leaves would have to be handled, which is an enormous weight, and for cartage alone would mean a serious item in expenditure, nor, it would seem, can any product be evolved from the crushed pulp. No doubt in time some profitable use might be found for the enormous mass of pulp left at the decortication. The amount of gummy substance exuding might be utilized chemically, but, so far as we have gone in the way of experiment yet, no such discovery has been made, and we cannot therefore include this as an item of income. In fact the only one item that we can safely count upon is the £25 sterling we get for the fibre per ton. True, the cultivation of the sisal requires no expenditure after the original cost of planting is met, but there must be a gang kept on any plantation for the purpose of filling in, for this must be kept up steadily, else the supply of leaves would soon cease. Suppose a plant lasts say three years after maturity, then this means filling in the whole area in three years, but it would be out of the question to keep a continuous supply of leaves to be acted on, and it would be necessary to have 3 rows or lines of plants coming on, *i.e.*, if the sisal plant takes five years to mature before cutting begins, the planter would require to run in one row between the others a little to one side of the original one, so as not to interfere with the growth of the sucker or bulbs put in, nor with the cutting of the leaves of the mature plant; two years after the original planting had been done, and again another in the fourth and fifth years, or the source of supply would soon get exhausted. Thus, although the actual cultivation would not require many attendants, still a considerable staff would be necessary for supplying or filling in cartage and decortication. To meet this, we have an income of Rs 150, and in addition have to pay for freight, pressing insurance, brokerage, etc., so that if one considers all the different items of expenditure calmly, it makes one think Dr. Prain is right, and there is not much in the fibre growing after all the fuss that has been made over it. It may be contended that the price we have quoted is a pessimistic one. Let those who argue this way remember that we have taken an average between an inflated and a depressed market, and, we think most reasonable people will agree it is a fair way to calculate. We have purposely avoided entering into any figures with regard to cartage, etc., let those who feel inclined to invest make their own. We have put bold facts before them, and they can fill in the gap for themselves as rates differ so much in different parts of India.

MILD COFFEE.

The well-known and popular firm of James W. Phyfe & Co., whose years of experience in the East India coffees especially qualify them for accurately diagnosing mild coffee conditions, announce a shortage in production of 30 to 40 per cent. The entire crop of Java in 1900 was 542,000 piculs; in 1901, 383,000 piculs (133⅓ pounds). Totals of other East Indian brands in like proportion.

A natural influence would point to advanced prices; but several conditions are neutralizing the effect of the crop shortage. While a strictly fine Java is completely side tracked, there is a big stock of Padang Batavia, Macassar, etc., in New York.

Demand has not been quickened materially, because retailers can realize greater profits by selling mixtures (largely compounded of Stantos coffees), instead of the genuine East Indian goods. Bourbon Santos, which is a twin brother of Mocha in looks, can be bought for 10 cents per pound; Mocha (green) costs 18 cents. Best grades of green Brazilian bring 8 or 9 cents, while green Java calls for 20 to 25 cents.

It is no wonder that an old New Yorker the other day lamented that, while he was willing to pay for it, he could not purchase the fine fragrant blend of genuine Java and Mocha that gladdened his nose and cheered his "innerds" a dozen years ago. We confess the substitution of the poorer for the better is widespread, but we are sure there are yet a goodly number of retailers who can and do give their patrons the real thing.

We hope our "old New Yorker" will try again and discover the fragrance and flavour of his early love. It is to be had, but only from those dealers who conscientiously make quality the first consideration. Coffee is to be had, in this city, of exquisite body and flavour, and fully equal to that which tickled the palates of our fathers and grandfathers.—*American Grocer.*

"FOXINESS" IN COFFEE.

Mr. Howard O. Newport writes in the *Queensland Agricultural Journal*:—

The matter of "foxiness" in coffee is receiving some attention in some of the coffee-growing centres at present, where various opinions are being expressed, and theories propounded regarding its cause as well as suggestions for its prevention.

This is an important matter that has received too little attention here hitherto. I have found it necessary to emphasise this point in curing, in demonstration in the field on several occasions, and have also touched upon it in various articles, but a few connected notes may be of advantage for reference.

"Foxiness" is a term applied to coffee in its cured state, when it appears of a uniformly dull or blotchy reddish-brown colour, instead of a blue-grey or semi-transparent and clear slate. This foxy colour indicates a very material change in the flavour, and consequently considerably reduces its value.

Several ideas about the cause of foxiness in coffee would seem to be current, such as that it is caused by the adhesion of the silver skin, that the red colouring matter of the skin has sunk into the seed, that foxiness is caused purely by picking when over-ripe on the trees, etc., which on investigation prove only to be half-truths, or quite without foundation.

A careful study of the matter will reveal the fact that the reddy-brown colour of foxiness is always due to fermentation in some form or other, and is generally occasioned during some portion of the curing process. The adhesion of the silver skin may be caused by undue fermentation, and so may be one of the effects of foxiness, but it does not cause it; nor is the fact of the silver skin adhering to the bean necessarily evidence of foxiness.

The red colouring matter of the skin is exceedingly difficult to extract at any time, and will not readily sink or soak into anything, while the colour of foxiness can be readily obtained after the skin or pulp has been removed entirely. Picking when over-ripe though often the cause, is not by any means the only, or even general way that foxiness is caused.

A foxy sample of coffee may be due to any of the following causes:—1. Picking when over-ripe and fermentation has set in under the skin, when if intense, as in most hot, moist conditions, the inner bean is affected. 2. By drying in the cherry. 3. By delaying in pulping after picking, when fermentation again takes place, encouraged by the heaping of the cherry. 4. By fermenting in water, or by insufficient drainage of the fermenting vat, whereby the fermenting water soaks into the bean, mostly at the fold. 5. By over fermenting. 6. By under-fermenting, whereby the process of fermentation continues after washing, owing to the presence of small particles of saccharine matter. 7. By irregular fermenting, usually due to thin metal or wood fermenting vats; insufficient covering or protection from varying temperatures, etc., whereby the centre of the heap is over fermented while the outer parts are insufficiently done. Irregular fermenting may also be due to bad pulping and the presence of a quantity of unpulped cherry, or pieces of pulp, in the fermenting vat, around which t process is quicker than elsewhere. 8. By bad drying, especially over or under fermented coffee, the retention of dirty water washed parchment (in wet weather when drying is difficult), or dirty trays or receptacles for the newly-washed parchment, where a re-fermentation is induced.

While foxiness is thus easily, and in many ways, induced, it comparatively easy, with a little care, to avoid it. When a bat by some chance or other, has become foxy, however, it should kept separate and not mixed with the "A" or first quality parchment or clean coffee. Even a small percentage of either c foxy, discoloured, or broken beans will make an appreciable diff ence in the value of the sample. Because of some such accid the grower need not conclude that his coffee is hopelessly spoilt valueless. It is true that one foxy, it cannot be remedied, but t process of fermentation that is inducing the foxiness may be, a should be, arrested as soon as noticed. There are degrees of fo ness. The fermentation may have commenced, or proceed through or under the parchment skin, from any of the abo causes, and yet have only discoloured the silver skin, or caused to adhere to the bean, though not have affected it, or only ve slightly done so. A foxy silver skin may adhere to the bean a require careful and extra "polishing" to remove, and yet t sample not have necessarily deteriorated.

To prevent foxiness, therefore, attention must be given to picki fermenting or curing, and drying, and not to one process on for all the advantage of careful work in one direction may be l by inattention or carelessness in another.

The colour of coffee is a matter apart, and is, as I have alrea stated, rather a thing to retain than to obtain. The yellow-bro colour of coffee, too quickly dried by artificially means or "sweate must not be confused with foxiness. This colouring is due to qu different mechanical effects, and, though very similar at fi sweated coffee, sooner or later, turns white or patchy in colour.

Foxiness is one of the chief points that determine high and l grade coffees, and, as it is very necessary to produce a high-gra article, is a matter especially worthy of attention and care.

That foxiness does affect the flavour will be obvious to any grow who will take an undoubtedly foxy sample and taste the liqu produced from it side by side with that of a good-coloured samp The smell and taste so well known to growers in their pulpi houses will be apparent, though of course in a lesser degree.

The delicate differences will not be readily noticed, however, the grower, where the trained and expert coffee-taster will not o detect the slightest taint, but value the sample of coffee according to a fraction.

Coffee-drinkers may be met with who profess a preference the flavour of foxy coffee, and maintain that such coffee is in way inferior in quality. Such, however, are in the minority, a that foxiness in coffee is an evil to be avoided, if possible, growers is sufficiently shown by the fact of such coffees obtaini lower prices in the open markets.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange, *April 20th*, 1901.—Ninety days' Bank rate on Lond opened on Monday the 15th, at $12^5/_{32}$ and $12^3/_{16}$ and closed t evening steady at $12^3/_{32}$ to $12^7/_{16}$th for the market. In spite determined efforts of one of the banks to keep them down, as so as the pressure of certain large liquidations was removed ra reasserted themselves and closed firm with every appearance o further rise.

The banks are said to be acting prudently and to discountenan anything in the shape of last year's reckless plunging. Sales delivery at long dates are, therefore, discouraged and even *repo* from one month to another are not easy. Should such prud counsels prevail it is possible that exchange may rise on its o merits and, speculation being thus confined within narrow limi without serious reaction. There is no doubt whatever that up the present Exports have been ample to supply all the bills nec sary for the market's requirements; nor, unless imports shou suddenly increase, is there any reason to believe they will continue to do so for some time to come at least.

The value of coffee shipments, *embarques*, during the past week was £269,000 as compared with £328,000 for the previous week and £251,000 for the corresponding week last year and, judging from the declared sales (212,000 as against 140,000 of the previous week), will be still larger during the current week. Rubber bills seem to be failing but even so the probability seems that there will be at least 2,800,000 bags of coffee available for export up to the end of the current crop that will yield at a low estimate £1,000,000 without counting on the almost certain increment of bills that anticipation of the new crop will bring.

The value of imports during January and February, that will be payable about May or June, is known to be particularly small and, though they seem to be now increasing, the effect on exchange will not be exercised until July, when bills should be particularly plentiful.

It is likely, however, that the supply of ready produce bills will fall off for a month or so, but even so the supply will be ample to meet demand and that even of exchange do not rise, there is every probability of its keeping steady. Indeed it would be far better for everyone concerned that it should do so, as such violent oscillations whether upwards or downwards cannot but be injurious to the interest of most of the industries of the country.

It is, however, scarcely to be expected that such will be the case, and all that can be hoped is that the Banks will do their best, as they seem to be doing, to discourage plunging and maintain rates as even as possible.

Coffee.—Whether the shrinkage of entries noticeable at Santos last week really indicates the long looked for falling off is difficult to say with any certainty, but in the present congested state of the market every little helps and a reduction of 14,751 bags, compared with the previous week's, arrivals total can only be a matter of congratulation, although it. even so, represents an increase compared with last year of nearly 84 per cent. Still it is usual for entries to fall off very rapidly from now to the end of May, and, even if the crop prove as early as is anticipated in some districts, some reduction must be looked for. It must be confessed that the current crop has proved a surprise to everyone and shows that the new coffee that comes into bearing year by is a factor that, for want of proper statistics, is practially incalculable but that, nevertheless, even more than the weather, practically determines the volume of crops.

In Rio and Minas. where there are very few trees under six years, the tendency is towards a regular shrinkage of volume. This tendency may be exaggerated by unfavorable weather, as this season, or counteracted by good weather as will be the case next season, but the tendency unquestionably exists and is not appreciably affected by new coffee, which is insufficient, generally, to even make up for the loss from trees ceasing to bear that are not replaced.

At S. Paulo it is different. There, the number of young trees coming yearly into full bearing is enormous and exercises a determining influence on the volume of the crop. When to this circumstance is to be added the fact that the weather has been throughout exceptionally favourable, there seems every reason to believe that the coming crop will be at S. Paulo as in Rio, Minas and Espirito Santo, the best on record. It is possible, of course, that the present heavy crop may be followed at S. Paulo by a smaller one; but not likely, because, whatever may be the case on the tired lands of Rio and Minas, the greater part of the S. Paulo plantations are not old enough yet to have exhausted the soil in a manner likely to affect bearing.

When reports from every district in the States of Rio, Minas and Espirito Santo are unanimous in their description of the coming crop the biggest on record, it is asking too much to believe that an imaginary frontier line could exercise an influence powerful enough to reverse climatic effects altogether. It is not disputed that the weather has been unexceptionally favourable in S. Paulo as in the rest of the country, and we fail to see what grounds there are to expect that the coming crop in S. Paulo will not be as proportionately larger than the current one as in other parts of the country.

As regards weight nothing can be said with certainty. Last year the weight of coffee was certainly extraordinary, but there are no reliable indications so far that it will not be so again this year; that can only be known when the coffee is actually gathered. Whether all the crop will be marketed is another question, that depends on prices. At present prices we are of opinion that it will not; though the amazing manner in which coffee continues to be sent down especially in São Paulo, in spite of prices that a short time ago seemed absolutely prohibitive, is certainly confusing. What is the minimum cost of delivery at the coast; or is there any minimum at all? Such are the questions that are exercising and disturbing the minds of dealers here and everywhere else. One thing is absolutely certain. As soon as existing stocks are disposed of, should exchange continue to rise sterling prices must rise too.

The tendency of exchange is certainly upward. Can that tendency be preserved until sterling prices are forced upwards under the pressure of short supplies? On that practically depends the future not only of coffee but of exchange itself. Unless it be so, and if instead of coffee rising exchange have to give way under a short supply of bills, the situation might become extremely dangerous, because, though the fall of exchange would tend to stimulate exports, prices might be still further depressed abroad and a simultaneous bear speculation be started in coffee and exchange that might prove irresistible. The only hope of securing better sterling prices for coffee under such circumstances is by maintaining the balance of payments in our favour at all risks, so that the shrinkage of sterling coffee value shall be compensated by the reduction of sterling obligations.

At present there seems some danger of imports being unduly stimulated by the rise of exchange, whilst the renewal of specie payments, though remittances are not absolutely enhanced thereby, will make relief on that side impracticable. So long as there are plenty of bills, speculative or otherwise, no doubt rates will be rising and, probably, continue so until July or August, when great part of the coffee crop will have been anticipated and the reaction commence. Then the danger will begin, that may, unless provided against, become a *débacle*.

During the past week the market at Rio was weaker throughout, sales having been made as low as 6$300 for May options. On Saturday the feeling was somewhat better in consequence of a slight reaction at New York, but the sentiment of the market is of simple dismay at prices which were lately regarded as impossible. Most of the coffee now coming down here is said to have been previously bought for shipment in the interior, but, however that may be, it comes down both here and at Santos even at 6$000.

Colory coffees for Europe were scarce and commanded 200 to 300 réis premium numbers 7 to 8 being chiefly offered. From Juiz de Fora it is reported that new crop coffee may be expected in fair quantities in May, as also from some districts of Espirito Santo.

We quote 29s. cost., freight and commission.

Declared Sales at Rio during the week ended 19th April were 212,000 as against 140,000 bags the previous week and 114,000 for the corresponding week last year. Up to 19th April sales of 7,404.000 bags were declared out of entries of 9,786,410, or only 75% as against 87% last year.

At Santos the market was weak and declining throughout the weak without sign of a rally. Dealers at times were anxious sellers, being at length convinced of the uselessness of waiting for better prices with such large stocks and enormous entries. Transactions were large, as exporters got plenty of orders at each successive decline. On Friday the fall of prices seems to have stopped both in the States and in Europe.

We quote 1$200 for "superior" and "primes" 200 réis premium; "goods" 200 to 300 réis discount and on "regular" 400 réis discount.

No special demand was noticeable, as usual in demoralised markets, but "superior" seemed to be mostly wanted. Peaberry continued neglected, and receipts continue too large to admit of an advance of prices. Shipments from now onwards will be heavy, especially for Havre, the market that has lately been the principal buyer Stocks will probably be below 1,000,000 bags by the end of the month. New York with the exception of a few large lots was practically out of our market, nor was Hamburg particularly enterprising.

Sales were effected at:—

30s.	to	31s 6d	for	superior.
31s.	,,	32s 6d	,,	primes.
29s.	,,	30s 0d	,,	good average.

After a spell of good weather, rain has set in again that, if continued, must interfere with harvesting. Present low prices are said to be causing trouble between labourers and planters, as the former are getting doubtful as to their being paid and asking for guarantees. Reports regarding the empty nature of fruit are confirmed from many districts, where quality is likely to suffer in consequence.

All sorts of schemes are being put forward to relieve the unbearable situation, the most sensible appearing to be the increase of

export duties on lower grades, say down to No. 7 to pay 11% as at present; coffees like No. 8 to pay 15 to 25%; and those corresponding to No. 9 and below to pay 25% or more. Such a measure would exclude from export about 10 to 12% of the present yield and improve the value of the balance, besides raising the standard of Brazilian coffees. The scheme, it is said, will be brought before Congress and probably become law this year.

Last year joint Entries at Rio and Santos from the 19th April to 30th June amounted to 844,660 bags. At 184% of last years entries, last week's proportion, entries for the corresponding period this year would amount to 1,554,174 bags, even without allowing for the earlier nature of the new crop, which with existing stocks would give a total of 2,800,000 bags to be disposed of before the heavy entries expected in July. Can it be done? If so, exchange will rise on its own merits, as whatever sterling prices may be, the supply of bills will certainly exceed demand, and then sterling prices, abroad would be forced to rise *pari passu* with exchange, under menace of insufficient supplies. In our opinion the *crux* of the question lies in getting rid of existing stocks, no matter at what sacrifice.

COST OF COFFEE PRODUCTION.

There has been a little interesting correspondence in *The New York Journal of Commerce* in regard to the cost of coffee production. One of the most interesting letters is the following, dated Philadelphia, April 15, and signed by Daniel K. Young :

"According to the statements of the owners, the cost of producing Santos coffee on the Fazendas Schmidt and Dumont, which probably have more coffee trees than any other plantations in the world, is four cents per pound bagged, ready for shipment on the plantation; five cents per pound in Santos; six cents per pound on board the ship and six and one-half cents per pound in warehouse in New York. At this price nobody makes any money except the brokers, railway companies and steamship lines. These figures are based on the average product of the plantation, which, would probably be somewhere between numbers five and six, New York exchange standards.

"Of course, the smaller plantations cannot produce at the same price as the larger ones as the question of the survival of the coffee planter is getting to be largely a matter of transportation. Undoubtedly many coffee planters will be forced out of business from mere inability to pay their laborers for the picking of the coffee and the care of the plantation. Probably the first decrease in production will come from this reason. The planter who shipping facilities are close to a railroad can perhaps make expenses at the above figures, but the one who must cart his product five or twenty-five miles to a railroad station must go to the wall. Of course, this applies with greater force to those planters in Mexico, Venezuela and Colombia, who must put a couple of bags of coffee on a 'burro' and take anywhere from one day to five days' journey before they can reach a shipping point. All of them are at present losing money largely and it is only a question of time when they must stop.

"On the other hand those large plantations along the line of the Tehuantepec railroad in Mexico have a rate of freight of 50 cents per hundred pounds from the plantation to New York, as against 250 cents. for the planter in Sao Paulo. These Tehuantepec plantations claim that they can put washed Oaxaca coffee in New York at a cost of five and one-half cents per pound. Now suppose the Brazilian planter receives nothing at all for his coffee on the plantation. It still costs him two and one-half cents per pound in New York in actual transportation expenses. It is probable that no one will dispute the statement that washed Oaxaca will always bring at least three cents per pound more than the average Brazil coffee. Consequently while the Brazilian was getting two and a-half cents per pound for his coffee which would only pay the transportation expenses, the Tehuantepec planter would obtain five and one-half cents for his coffee at which price he could live, but not pay any dividends on his stock. There is no place in the world that can compete with him in coffee production, largely on account of his superior transportation facilities, and the superior quality of his product. Moreover, he can also raise rubber, pineap, sugarples, oranges, lemons and other products which pay a profit to reduce the cost of coffee production. A rubber tree shades his coffee tree and it costs hi five cents per pound to produce the rubber after the tree matured. The rubber sells for 65 cents. A handsome pro surely.

"Fortunately for the Brazilian the area suitable for coffee plan ing in this region is limited or the Brazilian would have hard competition than he ever had before. There is no doubt but th were there area enough in Mexico along the line of this railway other coffee planters would be driven out of business, and no o in the world could compete with such plantations as the 'Doa Rio and 'Ubero,' run by American capital on American business pri ciples, with a stable government and a railway depôt on the pla tation itself. Moreover they have two outlets, one by way Coatzacoalcos to New York and Europe, and the other *viâ* Sali Cruz to San Francisco and the Pacific Coast. This road is no being four-tracked so that it will be able to handle all the freig which is presented to it with facility, even to the extent of compe ing with a Panama canal, because the saving in ocean travel several days in favor of the more northern route.

"The practical question of decrease in coffee is: 'How long the purse of the planter?' and 'How long will he fight again what appear to be hopeless odds?' and 'How can he pay h laborers for picking his product?'"

DISTRICT ASSOCIATIONS.

SHEVAROY.

Proceedings of the Quarterly General Meeting of th Shevaroy Planters' Association, held in the Victoria Room at 1 p.m., on Monday, the 3rd June, 1901. PRESENT :- Messrs. W. J. Lechler, C. Rahm, W. Rahm, J. C. Larg S. Campbell, Gilby, C. G. Lechler, C. Dickins, E. Dickin R. Gompertz, *Chairman and Honorary Secretary, S P. A.*

1. Notice calling the meeting was taken as read.

2. Read letter from Mr. C. G. Lechler giving notice that he wou propose that the subscriptions to the S. P. A. be reduced to Rs. per annum.

After some discussion it was resolved that the subscriptions reduced to Rs.12 per annum as a temporary measure from th 1st proximo.

3. Read letter from Collector (replying to our request that a lette box should be attached to the wall of the Cutcherry for the receptio of letters arriving in the absence of the Tahsildar) stating that th Head Clerk had been ordered in future to receive all such communic tions.

N.B.—This letter has already been circulated to all members o the Hills.—*Recorded.*

4. Read letter from Chairman forwarding copy of a telegra from Mr. Chailley Bert, President of the Union Coloniale, to th effect that the minimum tariff on coffee imported into France w likely to be continued.—*Recorded with satisfaction.*

5. Read letter from Secretary, U. P. A. S. I., asking for statisti of coffee under cultivation. Distributed forms to all present.

The following letters were read and recorded :—

Circulars received from Secretary, U. P. A. S. I., during the mont of May, 1901.

No. 38/01. Madras Chamber of Commerce is prepared to associa itself with Wynaad Planters' Association in securing the abolition duty on tea imported into Ceylon.

No. 39/01. Forwarding copy of our letter and correspondenc between Messrs. Stanes & Co. and the Traffic Manager, Madr Railway, about high freight charged for coffee.

No. 40/01. Forwarding alterations in the Labour Act proposed b Goverement of India.

No. 41/01. Proposes 29th July for commencement of Annu General Meeting of the U. P. A. S. I.

No. 42/01. Forwarding suggestions from Mr. Acworth for pushi and controlling the sales of tea.

No. 43/01. Forwarding letter from Secretary, I. T. A., to be ci culated to those Associations who are interested in tea.

Letter from Mr. Clegg thanking the Association for electing him Honorary Member of the S. P. A. and stating that he will be please to attend meetings whenever he is at Yercaud.

Letter from Mr. C. G. Lechler requesting that the Secretary, J. P. A. S. I., be asked whether shippers from the West Coast ports re bound, as those in Madras, to ship by special combined lines of teamers, to entitle them to the 10% rebate on freight, etc.

Victoria Memorial Fund list.

Books and papers received during the month:—

Planting Opinon, dated May 11th, 18th, 25th and June 1st, 1901.

Brazilian Review, dated March 19th and 26th, April 2nd, 9th and 6th, 1901.

Proceedings of Indian Tea Association, dated May 6th, 7th, 11th, 4th and 16th, 1901.

Proceedings of the South Mysore and Nilgiri Planters' Associations.

YERCAUD, *th June*, 1901.

R. GOMPERTZ,
Honorary Secretary, S. P. A.

NILGIRI.

Extracts from Proceedings of Annual General Meeting of the Nilgiri Planters' Association, held at Masonic Hall, on May 4th, 1901. PRESENT:—Messrs. Barber, Crum, Hodgson, R. L. Kindersley, F. T. F. Wilson, VansAgnew, Phillips, Alexander, Wilbraham, and J. Liebenrood, *Honorary Secretary*. *Visitor* Mr. M. Clementson.

Mr. Crum was voted to the chair.

The Honorary Secretary's report.

GENTLEMEN,—On reviewing the past year's crops and weather, I am thankful to say, we have on the whole had good crops as regards tea and coffee; crops that have mainly been above the average, and the weather of the past year has been much more favourable than the two preceding ones. But when we turn to the prices obtained by our produce, we are face to face with prices that I think I may safely say are the lowest we have ever had to do with. As regards coffee, the market is in an overstocked state, Brazil having shipped an enormous crop, which will probably exceed their record and their following on several years of large shipments has driven down prices. Only the best grades and market fetch anything like paying prices, whilst the ordinary run of East India coffee realizes such prices that it is hardly worth sending home. In view of the state of the market, a proposition was made that coffee planters should raise a fund by a cess on acreage. This was not supported by all the District Associations, but the proposal of pushing sale of coffee by a shop in Paris met with more favour, but so far nothing definite has been done. Of the 50 members of our Association interested in coffee, 25 agreed to the cess conditionally, 3 negatived, and 22 expressed no opinion. Turning to tea we find this product in the same state, over-production handicapped like coffee by an enforced high exchange, and further, not helped by the extra taxation imposed last year in England.

But tea planters have been working to clear the markets, by pushing the sale of tea in new countries, and have shown their willingness to help this work, by almost unanimously advocating Government being asked to impose an export duty on tea, such money to go to pushing sales. Seven of our 18 tea members are voluntarily subscribers to the Indian Tea Association as regards the compulsory cess, 11 owners representing 1,700 acres have expressed themselves in favour; 2 representing 115 acres, have negatived; 1 has referred home; 4 have expressed no opinion, hence are I suppose indifferent as to what is done.

One of the subjects for consideration of the meeting will be the choice of delegates and instructing them as regards the feeling of Association in respect to coffee, and tea cess, and I would further suggest that you might instruct them as regards taking action with reference to the following. Rates charged on tea and coffee on Madras and South Indian Railways, whether they could see their way to making a reduction. Curing charges whether the curers could not be asked in view of the low rates ruling to make a reduction in their charges. The suggested movement in favour of agitating for an import duty, on foreign grown teas, in India. And the need of the appointment by Government of a specialist to report on bug.

As regards the financial position of the Association we are in a fairly strong position. In answer to an appeal issued last year some 23 members subscribed 410 rupees, 31 members paid up back subscriptions so that we were enabled to pay up our back debts to the United Planters' Association, Southern India, of Rs.647, and Rs.100 to a delegate of 1899, and closed the year with a balance of Rs.9-6-4. Since October 1st the Honorary Secretary has dispensed with the services of a writer, thus saving Rs.240 per annum to the Association and as Honorary Secretary *pro temp.* I should like to ask members to answer circulars, etc., when necessary, by return post, thus doing away with the necessity of your Secretary having to repeat letters. Owing to delays in answering important circulars, the whole work of the United Planters' Association, Southern India, is delayed as they cannot obtain the information they require.

As regards our position for the current year, if all members pay up their subscriptions we shall have an income of 630, which will allow us to pay our usual subscription to United Planters' Association, Southern India, of Rs.400 and leave a substantial balance to carry on the work of the Association.

Mr. Hodgson in moving that the accounts should be passed, made a few remarks on the need of supporting the United Planters' Association, Southern India, and called attention to an article in the *Indian Gardening and Planters' Gazette*, in which the writer called attention to the good and business-like work done by the United Planters' Association, Southern India. He also proposed a vote of thanks to Mr. Liebenrood for having taken up the work of Honorary Secretary, Mr. Wilbraham seconded him.—*Passed.*

Mr. J. Liebenrood was elected as Honorary Secretary for the ensuing year, and the following gentlemen were elected as Committee:—

Messrs. A. W. Brodie, A. S. Crum, W. C. Deane, W. L. Edmiston, F. W. Groves, H. P. Hodgson, R. James, T. Kenna, A. M. Kinloch, L. C. Liebenrood, W. Mullaly, A. G. Nicholson, J. W. Pascoe, B Phillips, J. T. F. Wilson, E G. Windle, and H. D. Wilbraham, J. Liebenrood (*Honorary Secretary*).

Mr. Barber proposed, Mr. Wilson seconded, that Mr. Hodgson and Mr. J. Liebenrood be elected as delegates to the United Planters' Association, Southern India.—*Passed.*

Coffee Cess.—Read correspondence on this subject, after some discussion, Mr. Barber proposed and Mr. Wilson seconded.

That this Association approves of the coffee cess, and that the matter be left in the hands of our delegates.—*Carried unanimously.*

Coffee adulteration.—Read report of London Committee, also letters from the Madras Chamber of Commerce, Malabar, C. C. stating their willingness to support planters in taking action.

Mr. E. F. Barber proposed and Mr. A. F. VansAgnew seconded. That in the opinion of this Association every effort should be made to combat the adulteration of coffee, and that our delegates be empowered to take steps in their matter on the lines of the resolution passed by the London Committee.

Resolution of London Committee.

That in the opinion of this meeting it is desirable that Indian planters should make representations in regard to the Coffee Trade and its consumption in the United Kingdom to the Indian Chambers of Commerce and to their local and central Governments, and by them or through them to the India Office, the Board of Trade and the Chambers of Commerce of the United Kingdom.—*Carried unanimously.*

Madras Freight.—Proposed by Mr. F. T. F. Wilson and seconded by Mr. R. L. Kindersley.

That this Association warmly approves of the action being taken by the Madras Chamber of Commerce in the direction of reducing freights and accords its support, assuming that if any tarriff is arrived at, it will include other Coast Ports besides Madras.—*Carried unanimously.*

West Coast Harbour.—Read correspondence. Proposed by Mr. Barber, seconded by Mr. Kindersley, that this Association strongly urges the necessity for a harbour on the West Coast and leaves the discussion as to the locality in the hands of the delegates to United Planters' Association, Southern India.—*Carried unanimously.*

Read correspondence between Madras C. C. and Government with reference to improvement of Madras Harbour —*Recorded.*

Bug.—Resolution proposed by Mr. Wilson, seconded by Mr. Wilbraham. That this Association regrets that Government has not been able to assist in the matter of an entymologist, and again urges the necessity of state assistance.—*Carried unanimously.*

Mr. Hodgson speaking of the subject of Tea Cess and the failure of the scheme, originated in Ceylon, of reducing the output in India and Ceylon by so many millions of pounds, pointed out the possibility of largely increasing the overland tea trade with Russia.

where there exists a strong antipathy to sea-borne tea and the need of supporting the Indian Tea Association.

Resolved by Mr. Barber, seconded by Mr. Wilbraham that this meeting is in favour of compulsory tea cess and that the delegates be asked to press the matter at the United Planters' Association, Southern India, meeting and that the idea of restriction of output be allowed to lapse.—*Carried unanimously.*

Exploitation of Indian and other tea markets.

With regard to circular 36 of Indian Tea Association members felt it was too much to expect of South Indian planters not only to give tea, but to pay freight so far as Calcutta, when there was a large market in South India open for exploitation, but that no doubt that when this was pointed out to the Indian Tea Association they could formulate some scheme to meet this.

Mr. Clementson, who was present as a visitor, then spoke on the subject of tea in Russia and Persia. He stated that he had made enquiries as to all the roads and prices, and that he was willing to personally conduct a caravan of tea if tea planters would forward and give him tea to take with him. He would pay all expenses in taking up the tea and eventually divide profits.

The annual subscription to the United Planters' Association, Southern India, of 400 rupees was confirmed and Rs.100 to the expenses as delegate of the Honorary Secretary.—*Passed.*

A vote of thanks to the chair terminated the proceedings.

IF SMITH HAD EXPLAINED.

My wife says, and she says it with a snap, that never, *never* again will the Smiths get an invitation to eat at our house. And when she once makes up her mind to anything, she sticks to it like shoemaker's wax to a bit of woollen cloth.

You see the Smith's, man and wife, were old and intimate friends of ours. We lived within a stone's throw of each other for many years, and were as thick as treacle. As to our worldly estate, we were about on a level, in very moderate circumstances.

Between two and three years ago Smith's employers sent him to America on some business errand; he would not tell us what. A fortnight since he turned up at home and gave out that he had made a trifle of money for himself while he was away.

Last Tuesday we had them to dinner; the best dinner my wife could get up. And it was a good one, if I do say it myself. Yet, socially, it was a failure. In the old times Smith had the appetite of a cab-horse. Now he picked and winced over the very dishes that used to be his favourites. As my wife pressed him to taste this or that, he thanked her politely, but he dindn't eat. Mrs. Smith apologised for her husband, and said he had been ailing somewhat since his return from America. So the dinner ended in disappointment, and the Smiths went home early.

"Poor Smith is ill," said I. "No" said my wife, "he isn't ill. He's proud. He thinks his old friends aren't good enough for him; that's where it is. He's rich, and we are poor, and——." The worried woman here broke down and cried, and I went out for a consolation smoke.

And yet bless your soul!—wait a moment however. If Smith had been perfectly frank and said, "I am not the man I was. I lived high in America, and I'm all gone to pieces with inflammatory dyspepsia, and this splendid dinner will half kill me if I eat it." If he had said that we should have pulled through without a break. Why didn't he say it?

Here is a lady who does not hesitate to tell us her experience with that wretched ailment. Miss M. J. Barton is her name, and her home, 56, Sorby Street, Sheffield. In a written statement dated September 19th, 1900, of which the following is the sum and substance, she says that it is now rather more than two years since her health began to fail. At first, she thought it was only some trivial ailment that would soon pass away, for beyond loss of appetite and a feeling of langour and weariness, there did not seem to be much the matter with her.

So she struggled on with her work as do countless thousands of brave women every day, hoping to be right again in a short time.

But alas! her hope was short lived, for Indigestion, that demon health-destroyer, had got her in its iron grasp and would not set her free. Instead of getting better, she became worse.

Her tongue was now always foul and nasty, and after taking food —no matter how little—she experienced such a sense of fulness and tightness in the chest that she could scarcely breathe. "It seemed," she says, "as if some heavy weight was resting on my chest pressing in my ribs." Indeed her chest became so sore and p ful that she could scarcely bear anything to touch it, and was al afraid to walk about, the slightest jolting hurt her so.

This feeling of weight and oppression in the chest is one of most distressing and common symptoms of Indigestion Like red flag of the railway signalman it counsels caution and warn danger ahead. What untold pain and misery might be avoide only we heeded these danger signals of nature, but there, wh the good of moralising. We *don't* take warning, therefore su in consequence. Miss Barton did for she goes on to say:—

"At times, I suffered intensely from wind spasms, and was c stantly vomiting sour water. Sleep no longer refreshed me, fo only came in snatches and was disturbed by horrible dreams. prived of proper rest at nights, and afraid to eat much becaus the fearful pains that were sure to follow, small wonder I got weak and thin, that at last I was forced to give in and take to bed, where I stayed for six weeks. During that time I vomite quantity of blood.

"The doctor said I was suffering from Indigestion and an ul ated stomach. His medicine enabled me to get down stairs ag but did not cure me, for I still suffered great pain after eating, was always tired and weary.

"In this condition I remained for several months, despairing ever being well again, but providentially I was led to try Seig Syrup, and to that medicine alone is due my present good hea Now I can eat heartily and enjoy my meals without fear of p and feel brighter and better in every way than I have done for o two years."

Why Mr. Smith didn't mention his illness at our dinner, I d know. He admitted it afterwards to me. Still my wife ha forgiven him. "Happy," says Homer, "are those who died un the high walls of Troy." Happier yet, say I, are those who and can eat what is set before them.

MARKET REPORT.

[*Per Mail advices of* 17*th May* 1901.]

COFFEE.

The London Commercial Record says:—During the past sen'ni there has been a decided improvement in the tone of the mar and the bulk of the supplies at auction has encountered a be demand, and was chiefly sold at firm prices to an advance of 1s 2s per cwt. for all growths, except Brazil. The low range of pr which has prevailed of late has at length attracted the attentio buyers both for home trade and export, and the public sales h passed with more spirit than for some time past. A quiet tone prevailed in the market for Brazil futures and prices are sligh easier, owing to relatively large receipts and a fall in excha

To-day good colory coffee in fair demand and full rates p Medium and ordinary qualities quiet. Guayaquil 6d per cwt. lo To-day's auctions supplies consisted of 2,579 bags East India barrels Jamaica, 1,170 bags Costa Rica, 516 bags Salvador, 244 b Guatemala, 234 bags Ecuador, 304 bags Mexican, and 503 b Vera Paz.

London ...	... Santos ...	July delivery	... 30s 9d.
New York	... No. 7 Rio...	,,	... 5·45 ce
Hamburg...	... Santos ...	,,	... 30¾ pf.
Havre ...	... Santos ...	,,	... 37⅝ fra

At the Dutch Trading Co.'s auction, held in Rotterdam, Tuesday, 15 cases 17,207 bags were offered; good ordinary J realised 31c against 31¼c valuation, and 32⅓c paid at the last s held in Amsterdam. The following are some of the particular

Lying in Rotterdam.

No.	Bags.	Valued at. Cents.	Result Cents.
1	1,890	31	30¼ @ 3
2	385	31	30½ ,, —
3	1,000	31½	31 ,, —
4	538	33	32¾ ,, 3
5	342	32	32 ,, —
11	1,000	40	39⅓ ,, 3
12	786	20½	20¾ ,, 2
13	714	21	21 ,, 2

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	22,632	19,215	24,447	19,791
	Home Consumption.		Export.	
	1901.	1900	1901.	1900.
Tons ...	7,873	7,240	9,684	8,075

The preceding figures exhibit—

	Tons.
In the Imports an increase this year of	4,656
Home Consumption an increase of	633
Export an increase of	1,609
Stock an increase of	3,417

EAST INDIA.—4,265 bags offered and partly sold as follows:—*Mysore*, smalls 36s 6d to 58s 6d, low middling to middling 42s 6d to 48s, good middling 51s to 62s, bold 63s to 78s 6d, fine bold 80s 6d to 100s 6d, peaberry 47s to 80s. *Coorg*, smalls 34s to 42s, low middling to middling 44s to 48s 6d, good middling 56s to 57s, bold 55s to 81s, peaberry 54s 6d to 64s. *Nelliampathy*, smalls 40s, low middling to middling 42s to 44s 6d, bold 54s, peaberry 54s.

NYASSALAND.—52 bags sold, smalls 27s to 34s 6d, common bold part defective 35s 6d to 36s 6d, peaberry 35s to 37s.

JAMAICA.—58 barrels 27 bags sold, ordinary to fine ordinary greenish 32s to 38s, low middling 43s to 45s, peaberry 49s.

COSTA RICA.—6,305 bags practically all sold—smalls 30s 6d to 43s 6d, good ordinary 37s to 41s, low middling to middling 42s to 50s, good middling blue 50s 6d to 58s, bold 58s 6d to 70s 6d, fine bold 77s, peaberry 42s to 63s 6d.

GUATEMALA.—1,569 bags sold, smalls 33s 6d to 40s, fine ordinary 40s 6d, low middling 41s, middling to good middling 45s 6d to 52s, bold 54s to 69s, peaberry 47s to 59s.

SALVADOR.—1,787 bags sold, smalls 36s to 38s, low middling to middling 42s 6d to 44s, good middling 47s 6d to 53s, fine middling 58s 6d to 59s 6d, bold 50s to 79s, peaberry 52s to 74s.

ECUADOR.—Of 200 bags offered, only 7 bags ordinary pale sold at 30s.

NICARAGUA.—107 bags partly sold, ordinary to fine ordinary 33s to 39s, peaberry 43s to 50s.

VERA PAZ.—47 bags sold, smalls 34s, fine ordinary 40s to 40s 6d, peaberry 45s.

COLOMBIAN.—654 bags sold, damaged, ordinary pale 33s to 33s 6d, low middling to middling 41s 6d to 46s 6d, bold 47s to 51s 6d, peaberry 40s 6d to 46s.

MEXICAN.—143 bags sold, smalls 30s, good ordinary 37s 6d, middling 47s, good middling blue 51s 6d to 52s, bold 67s, peaberry 47s 6d.

BRAZIL.—1,425 bags Santos sold, washed, smalls 35s, medium to bold grayish pale 36s to 40s 6d, bold 43s 6d to 44s 6d, peaberry 43s 6d to 45s, medium pale yellowish 35s 6d to 36s 6d, bold to extra bold 45s to 47s, peaberry 42s to 43s ex quay terms.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	2,585,000	3,114,000	2,871,000	4,018,000
Santos ...	7,519,000	5,452,000	5,162,000	5,912,000
Total...	10,104,000	8,566,000	8,033,000	9,930,000
Crop...	—	8,391,000	8,772,000	10,461,000

Rio Exchange 12½d, previous day 12$\frac{11}{16}$d.

HAVRE, *May* 15.—Good average Santos May opened barely quiet at 37¼f. and closed steady at 37¼f., September opened at 38f. and closed at 38f., December opened at 38½f. and closed at 38½f., March opened at 39¼f. and closed at 39¼f.

May 16.—The market has been closed.

HAMBURG, *May* 15.—Good average Santos May opened quiet at 30½pf. and closed dull at 30¼pf., September opened at 31¼pf. and closed at 31¼pf., December opened at 31¾pf. and closed at 31¾pf., March opened at 32½pf. and closed at 32¼pf.

May 16.—No markets have been held to-day.

NEW YORK, *May* 16.—Closing prices of No. 7 Rio were as follow:—

	May.	June.	July.	Aug.	Sept.
May 16...	5·30	5·35	5·45	5·52	5·55
May 15...	5·25	5·30	5·40	5·45	5·50

East India offered in Public Sale since 10th May, 1901.

May	Mark.	District.	Size A.		Size B.		P. B.	
10	Arbuthnots Yemmagoondi.	Coorg ...	63	not sold	92	41/6,41/	25	53/6
	Utollalu, Mockett ...	Mysore ..	77	51/6	37	45/	44	71/
	Elliots	,, ...	24	not sold	37	40/	7	47/
	Mockett, S. & Co. ...	,, ...	36	,,	71	not sold	23	78/
	Palamadoo	Coorg	14	,,	20	,,	8	63/6
	Kulhutty, W. D. ..	Mysore ..	79	75/	22	,,	30	not sold
	S. F. Cowcoody Mysore W.	,,	59	51/6	27	45/	17	59/
	F. E.	,, ...	45	45/ *50/	22	39/	6	54/
	Utollalu, Mockett ...	,, ...	54	not sold	23	not sold	35	71/,71/6
	Irwin Jumboor	Coorg ..	18	63/ *51/	69	,,	12	60/
	Do. do. ... 7 ...	,, ...	12	not sold	30	41/6,42/	10	51/
	Binnys Cannon Kadu ...	,, ..	36	44	9	37/	11	56/
	Sumsay ...	Mysore ..	25	44/6	20	38/	4	48/6
	Wrights Hooroor Mountain.	Coorg ..	21	54/ *40/	51	44/,45/6	11	54/
	M. Hoosul	Mysore ..	7	not sold *40	11	36/	3	42/
	Mangles Santagherry ...	Coorg ..	40	55/	98	43/6	13	54/
	Do. do. ...	,, ...	36	53/6 *62/	52	44/	10	58/
	Mangles Allicutty Mountain	,, ...	13	not sold	60	48/	10	not sold
	Do. Hallery ...	,, ...	53	*60/	107	44/6	13	56/
	The Engadine ..	Mysore ..	15	44/	21	38/6	4	not sold
	H. E.	,, ...	7	not sold	22	41/6	7	48/*
	E. M. P. Hooldy ...	,, ...	18	48	23	42/	10	59/6
	Bobbanhulli	,, ...	7	47/ 62/*	22	40/6	5	47/6
14	Cannon M. C. ...	,, ...	54	not sold	5	52/	12	not sold
	Do. B. C	,, ...	60	68/	76	not sold	24	,,
	Yellikodigi	,, ...	7	63/	6	49/	4	48/
	Moodsoosie E. E. B. ...	,, ...	5	not sold	8	52/	4	43/
	J. P. & Co. Bibbenluke ...	,, ...	7	,,	37	not sold	18	not sold
	P. H. & Co. J. Santawerry	,, ...	35	80/6	15	58/6	12	80/
	C. M. N. Korthikhad ...	Coorg ..	19	not sold	58	44/	7	55/6
	Chowhully	Mysore ..	3	,,	15	not sold	5	56/
	† Hamiltons Seagully ...	,, ..	8	,,	10	42/6	4	53/
	Do. do. ...	,, ...	11	,,	10	not sold	4	54/6
	H. G. B.	,, ...	14	44/	3	36/6	13	58/
	B. D. G. Chickhilly	,, ...	45	62/	19	47/	5	70/
	Do. Sunksali ..	,, ..	29	43/6	10	37/6	6	not sold
	B. D. G. Sumpigay Khan...	,, ...	24	not sold	6	37/	2	52/
	Binny's Bete Kadu ...	Coorg ...	16	45/	6	38/	8	59/
	Do. Purchie do. ...	,,	26	48/	12	40/6	7	63/
	B. B. Koondalum Kollie .	,, ...	76	48/	13	40/6	11	58/6
	G. R. Evans Aalie Tapoo South	,, .	38	not sold	16	39/	8	not sold
15	Harris's Chick ...	Mysore ..	18	,,	25	46/	11	58/
	Hossully	,, ...	42	,,	51	not sold	26	57/
	Harlay Mountain ...	,, ..	21	45/6	29	40/	8	55/
	Kudunuhully	,, ...	27	not sold	31	43/	15	not sold
	Chetenhulli	,, ..	25	48/	14	43/	11	60/
	Faith Coorg	Coorg ...	4	not sold	8	40/6	2	51/
	Buchanans	Mysore .	47	,,	85	43/6	22	54/6
	A. B. Heroor	Coorg ..	18	54/6	11	46/	10	63/
	Wood Suntikoppa ...	,, ...	1	43/6	1	43/6	10	56/6
	Mangles Covercoly Mountain	,, ..	29	81/	79	57/	38	64/
	A. I. Meppens Nugger ...	Mysore ..	16	78/6	16	60/6	4	84/6
	Granite Hill	,,	29	not sold	50	not sold	6	not sold
	Yalliemudloo ...	,, ...	8	70/6	17	51/	15	61/
	S. Channahadloo ...	,, ...	36	not sold	53	44/,44/6	13	56/6
	Mdevarhully	,, ...	86	,,	64	46/6	24	58/6
	Yellagode	,, ...	21	54/	48	45/6	13	not sold
	Leslies	,, ...	15	not sold	35	42/6	6	46/6
	D. B. L.	Coorg ...	21	55/	33	44/6,45/	6	54/6
	St. Edmunds	,, ...	35	56/	27	45/	18	57/6
	Alagaishwara, Mc.D. ...	Mysore ..	2	55/6	21	47/	10	54/
16	Hope	Coorg ...	29	55/	24	44/6	12	57/
	Bynikhan Bababoodan ...	Mysore ..	20	63/6	32	51/6	16	58/
	Hamiltons Chundrapore ...	,, ..	25	not sold	35	not sold	5	60/
	Adderkey	Nilgirry.	61	,,	61	,,	14	56/
	Do.	,,	105	,,	73	,,	22	57/
	Seaforth	Naidbtm	33	,,	50	,,	5	not sold
	Seetagundy Kollengode ...	Nelpthy.	18	,,	41	,,	22	,,
	Palagapandy	,, ..	5	54/	7	44/	4	54/
	Polyampara	,, ...	7	not sold	34	42/	9	50/

* These lots were sold since the sale.

TEA.

China.—At auction during the week 2,023 packages have been offered, and with an extremely slow demand only a very small portion sold, and then at easier price. Formosa Oolong realised 7d to 11½d, Lapseng Souchong 4¾d, Panyong 4d, broken leaf 2d.

Indian.—Only small sales were held, amounting to 12,600 packages, compared with 15,300 packages in the former week and 13,900 packages a year ago.

A quiet tone prevailed, and although there was fair bidding for good liquoring grades, other descriptions, particularly those with mixed red leaf, were neglected and realised very low quotations.

South India was represented by 1,280 packages, mainly from Travancore, among which were some useful shipments which commanded attention from buyers.

For 10.400 packages on Estate accouut 6d per lb. was obtained.

Ceylon.—Catalogues comprised 19,600 packages contrasted with 18,800 packages on the 7th instant, and 27,000 packages at this time twelve months since.

On the whole not much change occurred, though competition was to a great extent concentrated on the most desirable invoices. Common Pekoe Souchongs and Pekoes did not always bring previous rates, and there was less demand for inferior Broken Pekoes, but the better lines of these were in several instances firmer.

The average is 6⅜d per lb. On the 9th instant it stood at 6½d per lb. and 7½d per lb. in 1900.

Java.—Rather over 1,700 packages of direct import were brought forward and passed without showing any marked alteration in values.

Deliveries.—The clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 14th May,	1901	...	...	4,811,585 lbs.
Do. do.	1900	...	...	5,969,072 „

During the week the following have been printed for sale by public auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offered. Pkgs.
India	10,784	1,800	12,584
Ceylon	17,619	1,956	19,575
Java	1,259	488	1,742
Total ...	29,662	4,239	33,901

Also 655 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated May 17th, 1901, says:—

Quantity brought to Auction in London from 1st June to date.

	Indian. Pkgs.	Ceylon. Pkgs.	Java. Pkgs.
1900-1901	1,650,189	1,247,549	62,360
1899-1900	1,651,216	1,191,440	61,406

13,195 *pkgs.* Indian, 19,964 „ Ceylon, 1,742 „ Java } Total 34,901 packages were offered in public auction this week.

The gradual expansion which has occurred in foreign and colonial markets for Indian and Ceylon Tea is shown in the following table:—

Statement showing the amount of Indian and Ceylon Tea taken outside the United Kingdom for the last five years.

	Indian. 1900.	1899.	1898.	1897.	1896.
Australasia ...	9,578,626	8,772,050	6,257,281	7,093,948	5,864,558
North America ...	6,958,370	8,487,443	5,971,701	5,663,244	5,258,773
Turkey with Persia	7,714,349	6,387,919	7,455,095	3,548,156	4,650,585
Germany with Russia ...	5,585,926	3,315,173	3,545,184	2,790,962	1,405,257
South America ...	692,867	497,336	360,464	319,927	20,617
Holland ...	483,975	486,103	474,509	522,110	415,593
South Africa ...	1,273,484	470,281	539,416	565,693	380,297
Denmark ...	96,016	197,646	238.670	91,111	91,230
France ...	112,873	68,296	81,258	59,954	62,294
Other Places ...	1,069,755	969,686	915,407	1,785,582	1,077,585
Total lbs. ...	33,566,241	29,651,933	25,892,985	22,440,687	19,226,789

	Ceylon. 1900.	1899.	1898.	1897.	1896.
Australasia ...	17,606,912	15,606,833	15,126,891	13,258,456	11,062,8
North America ...	9,173,824	8,289,376	7,636,995	5,698,596	4,364,5
Turkey with Persia	1,256,306	824,385	1,439,473	1,246,594	1,325,3
Germany with Russia ...	16,097,859	9,958,673	8,249,482	5,749,558	3,824,0
South America ...	759,841	594,579	435,231	390,477	30,6
Holland ...	313,993	309,149	281,536	281,821	254,9
South Africa ...	1,311,730	778,761	1,109,474	806,585	588,1
Denmark ...	102,820	315,065	286,361	169,619	285,2
France ...	459,911	182,819	189,208	166,490	147,4
Other Places ...	2,172,637	1,918,955	1,598,992	1,306,302	1,339,2
Total lbs. ...	49,255,833	38,778,595	36,353,643	29,074,498	23.222.4

The increases in some of the principal outlets are very marke especially Australasia, "Russia and Germany" and North Americ

With regard to the latter market there is strong ground for b lieving that when India and Ceylon can manufacture suitable Gree Tea, progress will become considerably more pronounced.

Indian.—The small auction passed with some lack of animatio and a rather dull tendency, 308 "last of the season" Invoices hav been disposed of against 377 at the same date last year. Th official telegram gives exports to U. K. for first half of May a 466,000 lbs., against 700,000 lbs. in the same period, 1900, and fro 1st April to 15th inst. as 661,000 lbs., against 1,100,000 lbs. in 190

Week's average of Tea sold on Garden Account 1901, 10,535 pkgs av.6·03d. 1900, 8,096 pkgs., av 7·25d.

Total Tea sold on Garden Account 1st June, 1900 to date, 1,365,53 pkgs., av. 7·21d. 1900, 1,301,302 pkgs., av. 8·24d.

Ceylon.—Competition was good at rates current last week, bu no improvement can be recorded in prices, although a generall steady tone characterized the markets for all grades.

Private telegraphic advice gives the quantity exported to U. K for the first half of May as 4,500,000 lbs., against 4,500,000 lbs. la year, and estimates the quantity for the month as 10,000,000 lbs against 10,500,000 lbs. shipped in May, 1900.

Average for week 6·38d., against 7·12d. in 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 483,02 pkgs., av. 6·64d. 1900, 478,050 pkgs., av. 7·46d.

Java.—The Teas brought forward were mostly sold with fa demand and without material change in quotations.

Bank Rate 4 per cent. Exchange on London three months' sight:— Calcutta 1/4 7/32. Colombo 1/4¼.

COCOA.

A slightly better feeling in West India growths was noticeabl at the auctions on Tuesday, but other kinds were unchanged; 3,46 bags were catalogued, of which about 1,550 bags sold. Only 26 bags Trinidad were brought forward, and these mostly sold at advance—good to fine red 70s to 70s 6d. 384 bags Grenada sold a 65s 6d to 67s 6d for good to fine, and 62s to 64s for common to fai or 1s over valuations. 47 bags Jamaica mostly placed at 58s to 63 whilst 11 bags St. Vincent brought 61s to 66s, and a single lot Dominica 62s. Of 1,322 bags Guayaquil 620 bags found buyers a steady rates—70s for Arriba, and 63s to 64s for Caraquez an Machala. Ceylon continues much neglected, especially Estat kinds, and of the 1,085 bags offered only 250 bags of odd lots sol 231 bags Samana and 100 bags Puerto Cabello were bought i Private sales embrace 200 bags Trinidad—good red 69s to 70s, fi 71s to 72s, 50 bags Samana at 59s, 35 bags Puerto Cabello a 102s 6d, 500 bags Guayaquil—Machala at 65s, winter Arrib at 66s to 68s, early summer ditto 70 to 74s, and a few lots of Ceylo at 83s for fine, and 70s per cwt. for good bold.

PEPPER.

Black.—The market is dull and business has been done at easie prices—at 6 3/32d for fair Singapore on the spot, at 6 7/16d down t 6 13/32d for July-September shipment, and at 6 5/32d for May-July.

At public sale on Wednesday 21 bags Singapore sold at 6⅛d fo dusty. Of 394 bags Malabar, 309 bags sold—bold dullish heav Tellicherry 6⅛d, small heavy brownish Aleppy character 6d. 20 bags Penang bought in at 5⅞d for 3 lb 4 oz., dust 5·32 % per gallo also 92 bags Lampong at 6d, and 8 bags Ceylon at 6¼d per l 94 bags shells bought in at 3d per lb.

Black Pepper firm.—*To-day* 25 tons Tellicherry August-Octobe shipment sold at 56s 9d c.i.f. (London).

Of white, 5 tons Penang sold on the spot at $8\frac{13}{16}$d, and 10 tons ingapore at $9\frac{3}{8}$d. For arrival no sales reported.

Zanzibar Cloves dull and no sales reported.

The shipments of Black Pepper for the first half of May, ompare as follows:—

		1901.		1900.	
.K.—Singapore ...	50	160	160	320
„ Penang	110		160	
ontinent		30		30
.S.		170		*nil*
Total tons ...		360		350

WHITE.—There has been more demand this last day or two, and bout 60 to 70 tons have been sold on the spot, including fair ingapore at $9\frac{5}{16}$d to $9\frac{3}{8}$d, and fair Penang at $8\frac{11}{16}$d to $8\frac{13}{16}$d. For rrival no business reported.

Auctions on the 15th instant presented 334 bags Singapore, of hich 183 bags sold at $9\frac{3}{8}$d for good fair, and 61 bags Penang and 5 bags Lampong which retired at $8\frac{7}{8}$d and $8\frac{3}{4}$d per lb. respectively.

The shipments of White Pepper for the first half of May ompare as follows:—

		1901.		1900.	
.K.—Singapore	10	40	*nil*	30
„ Penang	30		30	
ontinent		50		30
Total tons ...		90		60

GINGER.

COCHIN.—81 cases 50 bags were brought to the hammer but nothing sold, medium and small cut retiring at 65s, native cut at 54s to 55s, and good washed at 45s per cwt.

Sales to-day of C at 50s c.i f. May-June shipment Hamburg.

BENGAL.—94 bags withdrawn.

JAMAICA.—570 barrels were offered, and 250 barrels found buyers. Fair to good bright washed realised 53s to 63s, middling to good middling 45s to 50s 6d, common to good common 40s to 44s per cwt., these prices being in buyers' favour. 2 barrels St. Lucia sold at 36s 6d per cwt.

QUININE.

Dearer. The improvement reported last week has been well maintained, and a considerable business is reported from second-hands at advanced rates. B. & S. or Brunswick has sold on the spot at from 1s 4d to 1s $4\frac{1}{2}$d, June, 1s $3\frac{7}{8}$d to 1s $4\frac{1}{8}$d, July, 1s 4d, August, 1s $4\frac{1}{8}$d to 1s $4\frac{1}{2}$d, and October, 1s $4\frac{3}{8}$d to 1s $4\frac{7}{8}$d; a sale of 10,000 oz. Zimmer has been made at 1s $4\frac{1}{2}$d, and P. & G. brand has been advanced to 1s 5d. The market quieted down somewhat on Wednesday, and only a small business was done at previous rates. To-day the market is again quiet, and little or no business has been done. The speculation is, of course, due to the small bark shipments for the first half of the month, and the improvement in the unit at Amsterdam last week. It is reported that agents for the B. & S. and Brunswick brands have refused orders from brokers at 1s 5d, while druggists' orders are accepted subject to approval.

(AVERAGE FOR ALL INDIA 6·03d., MAY 17TH.)

GARDEN.	Total.		Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity		Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price.
Neilgherry															
Prospect ...	36		5¾	...	...	21	5½	15	6¼	...	...	...	...	...	...
Travancore ...	**1157**		**5·36**												
MR ...	29½c		4	...	...	17½c	3¾	9½c	4¾	...	...	3½c	2¼	...	...
Invercauld ...	55	p	4¼	11	5¼	22	4¼	...	...	11	4	...	..	11½c	2½ 4¼
Ban Dev H Co. An	239	p	5½	..	...	41½c	5½	129½c	6¼ 6½	...	...	7	3¼	62½c	3¼ 5¼
„ Munaar	168	p	7	...	...	45	6	61	9 9½	...	...	..	...	62	p 4¾ 5½
Kerchiston ...	129	p	4½	15	5¼	56	3¾ 4¼	26	5¼	...	...	22	3 3¾	10½c	2¾
Poonmudi T Co B	122	p	4½	...	...	40	4½	32	5½	22	4¼	18	3¾	10	p 2¾ 4¼
„ Braemore ...	79	p	4½	15	5	31	3¼ 4¼	12	5½	10	3¾	7	2½ 3½	4½c	2¾
„ Poonmudi ...	73	p	5	19	6½	27	5	...	...	12	4¼	6	3 3¾	9	p 3 4¼
I T Co Kud Kar	130		5½	50	5	..	...	44	6½	21	4	...	...	15	5¾
T T Co Venture	133		5¾	...	...	67	6	35	6¾	31	4½	...	...	...	...
Wynaad ...	**89**		**6·59**												
Kanambyle & Cher	58		6¾	...	...	...	...	58	6½ 7	...	...	...	...	...	...
Wynaad T Co C	31	p	6¼	11¼	8	12	6¼	...	...	8	4¾	..	...	...	...

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VOL. VI.] MADRAS, SATURDAY, JUNE 15, 1901. [No. 24.

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SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 21st instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad.

June 5th.—Weather—Dull days with showers; wind has been set from the South-West for some days. *Coffee prospects*—very poor this year on most estates. *Health*—Universally bad throughout the district. *Labour*—Abundant. *Interesting item*—The rice crops are looking this year as well as can be wished. *June 10th.—Weather*—The monsoon broke on last Saturday the 8th very mildly. *Works*—Weeding now engages a good deal of attention. *Plant diseases*—Borer bad. *Health*—Bad. *Labour*—Abundant. *Interesting item*—Mr. Wetherall, our Sub-divisional Officer, and the Amildar are now prosecuting the jummabundi throughout the district.

Coorg.

POLLI BETTA, *12th June—Weather*—Monsoon set in mildly on 5th. Since the 7th it has been severe, over an inch being gauged daily. It seems to be easing off now. *Plant diseases.*—Borer has been severe again this year. One circuit of the Estates removing the stricken trees has been completed. Supplying and weeding are now monopolising attention. *Labour* is plentiful, and *General Health*—fair. Prices of grains easy.

THE TEA CRISIS.

THE variety of opinions expressed with respect to the present Tea Crisis is bewildering. In the first place, planters have not fully agreed as to the cause or causes, so it is hardly to be expected that they should agree as to the most likely remedy. Here we have over-production urged as the chief cause, in another place this view is contested; there we have the Exchange question brought to the front again, only to be met with the argument that when supply exceeds demand there must be a loss to the producer. One contemporary endeavours to make an exhaustive analysis of causes and to give useful hints as to what should be done. Others promptly

fall upon him, pull his statements to pieces and demonstrate to their own satisfaction that all his chief assertions are erroneous. To the outsider it must be amusing, to the insider the tea-planter it is not merely perplexing but aggravating. He is not even left to lose his money quietly. He is called little less than a fool for not having foreseen and guarded against this, that and the other. He is patted on the back as an enterprising fellow and told, the while, that his energy and enterprise have been so misdirected as to prove that he ought to have been in a lunatic asylum long ago. He will be there soon if he attempts to weigh, the one against the other, all the arguments and counter-arguments, all the advice, all the warnings put before him. Unless he has very strong opinions of his own he will even waver as to whether it is best for him to produce fine quality, with the expected result of improved quality and improved prices, or to go in for plentiful production, relying upon the demand that there always is for low-priced tea.

If the planter wishes to remain sane, and at the same time to plan out a reasonably fair future for himself, he has first to bear in mind two points: (1) his tea must be grown and manufactured, whatever its quality, at the lowest possible cost, consistent with the production of the quality he is able to turn out; (2) the market for tea, his teas in particular, must be developed to the highest possible extent, always subject to the proviso that the cost of developing it beyond its present dimensions or activity must not exceed the benefit to be derived from any extra expenditure undertaken. What is termed "over-production" is not altogether prejudicial to his interests, for, speaking generally, the larger a man's production the less its cost per pound. On the other hand, restriction of production, if carried to excess, might easily entail curtailment of consumption, by causing many buyers to discard tea in favour of something cheaper. There are at least two classes of consumers: one desirous of having really fine tea, and not very particular as to price; the other not very particular about quality provided the price is low and the infusion from the leaf bought not unpalatable. Whatever eventual profit may be anticipated from attempts to "educate" the popular palate, planters must not entirely overlook the fact that education, if fruitful, usually costs money; it is often costly and fruitless. The average consumer of tea thinks he knows just as much as any planter about "desirable" quality, and he will be reluctant to change from one kind of tea to another, even if both cost him the same. If invited to pay more in order to gratify the predilections of someone else he will probably wink, and suggest that he is a little wiser than to follow that course.

The solution of the great problem before tea producers cannot be effected by sentimental methods. Practical means must be adopted. There are millions of people who never even heard of tea, many millions who have never tasted it. Let it be brought to their notice. There are tea-drinkers who know the China leaf but not the Indian; they should be converted. There are even some consumers who will drink Ceylon tea, not Indian. Here comes the parting of the ways in the campaign of the Ceylon and Indian allies. It is all very well for these allies to assert that every extra pound of tea taken from either of them benefits both, but this style of argument is not very convincing to most of us. In fact, an advance upon lines such as this suggests inattention to the old proverb about saving the pence. Advance step by step, and in the end considerable progress will be achieved; try to advance by grand strides, and a fall is the most proba consequence. It is essential that planters should band the selves together, but it is equally so that they should bear mind that an alliance with Ceylon can only be equally be ficial to both of the high contracting parties if the ter arranged are equitable and the burden of effort fairly sha by the two. Up to the present time this has not been the ca Moreover, we do not think the plan of campaign adop has been the best possible. Whether we regard the succes attained as the direct result of this campaign or not, cannot shut our eyes and ears to the fact that, notwi standing enormous outlay, complaints are rife. The Russ market, one of the finest in the world, is almost untouch the main effort has been to "capture" the American, wh may yet assume greater importance than it at present posse es, but which cannot be regarded as equal to the Russi Again, in India, it has been suggested that the Railw stations should be bombarded with Indian teas. An admira suggestion in its way, but narrow. A poor suggestion wh coupled with a hint that funds hitherto provided for veloping much wider fields should be entirely devoted to cost of this bombardment. The above are points that consider worthy of tea-planters' notice. We wish we co feel that we had come near the end of the list; but, unfor nately, there are many more. It is to the community th bears the largest number of them in mind and happily h off what should be done to meet the difficulties and to gath in the potentialities they indicate, that the chief success w fall in the present effort to solve, or dissolve, the Tea Cris

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S.

Sale of Tea in India.

The Indian Tea Association (Calcutta) has issued the follo ing circular, dated 7th June, 1901 :—

I am directed by the General Committee of the Indian T Association to invite your attention to their Circular No. of 4th April upon this subject.

It will be within your recollection that in that Circular description was given of a scheme for extending the sale tea in India, which it was proposed to put into practice. A appeal was also made to Tea Companies and Proprietors f voluntary contributions of tea, upon which, it was explaine the scheme would be entirely dependent.

I am now instructed to inform you that in response annu contributions amounting to about 300,000 lbs. of tea—amo them being a generous offer of about 200,000 lbs. Messrs. Finlay, Muir & Co. on behalf of the companies whi they represent—have been promised. But in the opinion the General Committee, as also in that of the Sub-Committ appointed to deal with the subject, this quantity is n sufficient to warrant the establishment of the proposed Distr buting Agency. They consider that at least half a milli pounds annually must be guaranteed before distributi operations can be commenced. There can in fact be doubt as to this, because if the business is not sufficient extensive to make the terms and conditions of the appoi ment of Superintendent as attractive as possible, it will difficult to secure the services of a competent man.

I am accordingly again to appeal to all those Tea Co panies and Proprietors who have not so far replied to t

Circular. In doing so I am to point out that a considerable proportion of the promised contributions—including that of Messrs Finlay, Muir & Co.,—are conditional upon the scheme being generally supported by the industry. At present the scheme is not being so supported ; and it is consequently of the highest importance—if the Agency is to be established—that further offers of tea should be forthcoming without delay. It is only reasonable that every tea producer should be called upon to contribute; for if the scheme can be successfully worked the resulting advantages will be shared alike by all.

The Sub-Committee have been recently making enquiries respecting the different parts of India where a demand for tea is believed to exist. It seems to them that in the Upper Provinces the demand is probably greatest. In fact they think there is little doubt that large quantities of tea might be disposed of in the principal northern centres, such as Delhi, Cawnpore, Lucknow, Agra, Meerut, Amritsar, Umballa, and elsewhere. It is also asserted by dealers and others that brewed tea could be extensively sold at the chief junction and terminal stations in the Punjab, the North-West Provinces, and in Bengal. Other parts of the country to which the attention of the Sub-Committee has been drawn by a most competent authority are the districts of Eastern Bengal and the Western Punjab. In Eastern Bengal there is a population of approximately twenty-five millions of Mohammedans. They are well-to-do agriculturists; and are said to be better able to afford small comforts such as tea than any other rural population in India proper. The Western Punjab is also a promising field. The people there number about ten or twelve millions. They are practically all Mohammedans ; and will, it is stated, readily take tea if they can procure it. The markets of Southern India—where the Travancore Planters will co-operate with the Agency—are likewise reported to be capable of development.

The Sub-Committee have, further, good reason to believe that H. E. The Commander-in-Chief in India, and the other principal Military authorities will be pleased to give the weight of their influence and support to the Agency in attempting to create a taste for tea in the Indian Army. If tea can be popularised as a beverage for the native soldiers, a great step in advance will have been made. For not only will the Agency be required to supply considerable quantities at regular intervals, but a general increase in consumption is practically certain to result in those localities where the regiments are quartered.

The Sub-Committee would also draw attention to the following remarks from the last Annual Report of the Indian Tea Supply Co., Ld., *viz.*: "Judging by orders received we are of opinion that the consumption of tea is rapidly on the increase throughout India, and the low prices current during the past year have given a very natural impetus to the naturally increasing demand."

Looking to the foregoing facts it can hardly be doubted that much useful work may be done in the way of developing the local markets if the Sub-Committee's scheme can be put into operation. All that is required to enable a start to be made is the liberal support of tea producers. If that be promptly accorded there is no reason why an expert tea distributor should not be engaged, and the work of the Agency begun during the current season. In the present state of the tea trade the need for immediate action is evident ; and the General Committee therefore trust that if you have not already promised your support to the scheme you will be able to see your way to do so with the least avoidable delay. A form of undertaking is appended to this letter.

NOTE :—*An additional contribution of* 80,000 *lbs. of tea has been promised since the foregoing was written.*

To

June, 1901.

THE SECRETARY,
Indian Tea Association.

DEAR SIR,

Sale of Tea in India.

I / We undertake, in behalf of the Estate / Company, Ld., to make over without charge to the proposed Tea Distributing Agency lbs. of tea annually for the years 1901, 1902, and 1903, for distribution in India with the object of developing the native market.

The tea to be delivered free in Calcutta.

Yours faithfully,

COFFEE IN DISTANT LANDS.

XXIX.

Costa Rica.—An ex-Ceylon resident writes to the *Ceylon Observer* :—Coffee planting and curing are carried on in this country in ways and under conditions peculiar to it. The only one which resembles it in some respects is the sister republic, San Salvador, as regards the size of the farms, and their being owned principally by native farmers who, with few exceptions, do all the manual labour necessary on their own lands, besides going out to look for work on larger estates when not too far off. The farmer sells his crop to different curing stations, and between these a lively competition has at all times existed, thus securing to the producer a lion's share of the profits, which would be much greater if he were to undertake to increase the productiveness of his land by an effective system of manuring, which alas is almost unheard of, and cannot be hoped for. The present generation shut their eyes and ears to the most convincing of practical proofs. By this it can be inferred that coffee culture in general is not in a prosperous condition as regards crops produced, or prices of the same ; the world's markets naturally being the cause of the drop in these of late years. With some exceptions, in the neighbourhood of the cities, the land under cultivation is owned by the small farmer who plants his coffee in lots which range from one acre upwards, and cultivates it in a manner which can well be termed orthodox, his principal implement being the broad shovel, in the handling of which he is an adept, so much so that no imported labour is employed to any extent, as all trials in this direction have resulted in failures. The cost of keeping up a manzana ($1\frac{7}{8}$ acres) is between 30 and 40 colones per annum and means four cleanings a year in most cases, the colon being worth $46\frac{1}{2}$ cents American gold ; this means to larger estates where a day's work is the way labour is employed and paid for. In the centre of the republic native labour is scarce only at certain times—in June when the maize-fields have to be cleaned, and in October when Summer beans are planted,—the labourer prefers to work in these districts for less wages than are paid on banana farms or in districts nearer the coast line.

MANURING AND PRUNING UNKNOWN.

As manuring may be considered almost an unknown feature, the same is true of trimming or pruning, it being almost impossible to follow the native farmer when at this kind of work, and establish a fixed idea, the tree in most parts being *shuck*, which becomes more scraggy in appearance as each succeeding crop is taken from it. There are ideas pre-

valent that the introduction of plantains and different kinds of shade trees are of benefit to the plantation, the first being an article of food, and therefore the origin of the idea ; the latter, though planted with the object of giving shade to the coffee, is useful principally as a wind-break, during the dry months from December to April, when the northerly winds are most violent, and also for firewood in some cases. Both however have their disadvantages, as at all times the plantain needs constant care to see that the stalks do not fall on the coffee, to say nothing of their being exhaustive of the fertility of the soil ; while the cutting of firewood is also attended with damage to the coffee tree.

One crop of coffee is hardly picked and sold, before the farmer begins to think of

RAISING A LOAN

on the coming one, and has immediate recourse to some curing station, where it has long been the custom to make these advances for the purpose of securing as much as possible of the crops. This transaction, barring some risk, gives most of its advantages to the money-lender, whose rate of interest is often 1½ per cent. a month, sometimes more ; capital and interest payable in coffee of stipulated good quality in fruit at current prices, the failure to deliver this incurs an additional fine of 20 per cent. or more in case cash is taken instead of coffee ; a backer's signature and pledge is exacted in all cases. This borrowing in advance has sent many a poor farmer to the wall, legal prosecution often following the non-fulfilment of such agreements.

Perhaps the most onerous of burdens laid on the farmer is the Government

EXPORT TAX

which is levied when the coffee is shipped out of the country ; it amounts to about one cent American gold per pound which means a considerable fraction of its value as prices are at present. No complaints are heard of however on this point from the farmer, as it does not come from his pocket direct, but is paid by the exporter on whom he lays the blame of all reductions in his selling price. The daily papers often publish inflammatory articles in the same strain. When coffee begins to ripen, everybody is on the alert, in ascertaining prices paid in the neighbouring stations, to make sure of not having to sell at a lower price than is possible, and soon afterwards men, women, and children are out with baskets and cloths, some picking from higher branches, others from lower branches and what is on the ground, and everything is delivered to the stations all of a rush, which puts some of the receivers into a squeeze to know how they can take care of it all. Picking is done in December on the lower levels of 2,500 and 3,000 on the Pacific slope, and in January on the upper levels of about 4,000 feet elevation.

The disheartening effects of

THE FALL IN PRICES

of coffee are felt alike by farmers and purchasers, many manzanas being abandoned of late years, on account of low prices and small crops ; the first being unavoidable, the second, however, seems to have found a remedy in what few farms have practised,—chemical manuring. Coffee manured thus by a brand of manure well known in the London market yields 30 fanegas to the manzana, of high quality (the fanega, equal to 4 hectolitres, giving 116 lbs. of cleaned coffee), leaving clear profit of 300 colones upwards to the manzana Taking coffee at its current price, as delivered in fruit, this cannot be called a low return, and is only an exceptional case on account of the use of manure. This being so, many owners of coff estates near the capital have realised similar returns fro land that was supposed to be exhausted long ago. T introduction of manures into the country is free of duty, a obtains also 33 per cent. reduction in railroad freight. Wh is wanted, as Professor Voorhees expresses himself in t preface to his "First Principles of Agriculture," is t teaching of the use of manures in public schools according practice and theory : every inhabitant of the country cou have a manzana of his own whose yield would not alter t markets of the world one single point. As it is, the form in despair has abandoned some or all of his coffee, and h devoted himself to sugarcane and yucca, the produce of whic has to be sold in the Republic, both of them following t downward drop in prices. Indeed, some are at their wit end to know what to plant, and talk about leaving off plan and taking to long shirts like the aborigines. In the interi of the country coffee may be said to be the only exportab product, and this is the part of the country where the farm will always live if he can.

When coffee was at a good price, four and five years ag several large lots of land were taken up on the Atlantic slop close to the railroad by capitalised firms, principally in t Turrialba and Juan Ninas districts : at elevations of 2,50 and 3,000 feet, the climate, one of almost continuously dail rainfall all the year round, is not favourable to the develo ment of a single uniform crop, as on the Pacific slope, but ha to be picked two or three times a year. The price of labou is here fifty per cent. and seventy-five per cent. higher also and last, but not least, the quality of the produce after a fe crops does not fetch such good prices as at the start, bligh in the crops being often heard of.

NOTES.

Austria. The Austrian Government is sai to be contemplating an increase o the duties on coffee of every origin.

The Indian Tea Crop. The estimate of the new tea crop is not likely to appear before Sep tember next. Usually the estimate appears in May-June an a revision in September.

Indian Tea for Indians. With a view to encouraging th natives of India to drink tea, th Simla Municipality have, says *Indian Gardening and Plantin* decided to allow that article to enter the station free octroi duty.

Average Prices of Tea. In Messrs. Gow, Wilson & Stanton market report published to-day wi be found an interesting table of the average prices of tea grown in each district. The latter embraces rates during th last three years.

Rail Freight in Brazil. The Paulista Railway has deter mined to reduce its tariff for coffee t the maximum rate of 1$500 per arroba and, moreover, ha reduced its sliding scale 15%, which will henceforth be ca culated on the basis of 15 pence per mil réis.

Tea Imports in the U. S. Imports in March were, 3,657,76 pounds, against 4,458,974 pounds i same month of 1900 ; imports for nine months ending March

,451,790 pounds, against 77,093,826 pounds in 1900, and ,228,683 pounds in 1899. In warehouse, 48,606,214 pounds, gainst 40,956,693 pounds at same date last year. Held in ew York, 32,833,365 pounds, against 28,565,512 pounds at rresponding date in 1900.

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adras Cinchona.

We give to-day an interesting extract from the *Chemist and Druggist* wherein Mr. F. L. Seely, Secretary of the Paris edicine Co., St. Louis, Mo, has set down some of his experiaces during a visit to India, one object of which was to quire into the future of the supply of quinine, which is rgely consumed by his Company. We regret that we cannot produce the illustrations with which Mr Seely's feet is terspersed.

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eylon Green Tea in Canada.

Writing to the *Canadian Grocer*, Mr. P. C. Larkin, of Toronto, states that the strongest factor of all in ringing about the decrease of the demand for Japan tea, is, he green teas of Ceylon. He says :—Every wholesale house as, by this time, recognized the fact that there is no future r Japans, and that there is a great future for Ceylon greens Canada. Consequently, not only the wholesale houses, but very bright retailer as well, are afraid to stock up with apan teas, wishing rather to adopt a hand-to-mouth policy.

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orneo Coffee.

The Borneo Coffee Company's Agents in London, Messrs. Shand, aldane & Company, reported lately :—" We are glad to be ble to tell you that the 17 bags of coffee have arrived in ood order. This makes a good sound drink and @ 1s. 3d., he price we are charging, we think it will compare favourably ith other coffee. We began sending out our circulars this eek and in the three possible days Wednesday, Thursday, nd Friday have sent out 140 lbs. of coffee nearly all in 1st ial orders. This is not a bad beginning and we hope orders ay result for larger quantities."

Chance for Tea in Italy.

According to the *Gazetta degli Esportatori*, the trade in tea in Italy at the present time is a monopoly in he hands of one or two firms who supply shopkeepers, and so private customers directly, at extremely high prices, ough the quality is not always good. Quite a low quality tea, the *Gazetta* asserts, is sold at the present time at out 3s. 6d. the pound. In its opinion, an enterprising firm lling Indian and Ceylon teas, which would open branches Italy, and content itself with a moderate profit, would soon able to control the Italian tea market, reaping handsome ofits for its enterprise.

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new Tea Kiosk in Colombo.

A correspondent of a Ceylon paper remarks :—The much-talked-of tea Kiosk for the Australia Building has hung fire" for a long while now, with the result that two nterprising Australian ladies have opened a tea-house in the ictoria Arcade between the offices of Messrs. Cook & Sons nd Beato, Limited. The verandah has been set out with ts of fern and the large cool room inside is being tastefully corated. It will be opened to the public on Thursdays and ay not inappropriately be known as "The Tea-house of Ten housand Joys" for it is said to be greatly favoured by even e chief lady in the land.

France as a Tea Buyer.

Are Indian Ceylon planters' efforts at the Paris Exhibition to be thrown away? M. Dormer, Governor-General of Indo-China, speaking at Paris on the 16th ultimo at a lunch in his honour by the French Society of Industry and Commerce, said that hitherto Indo-China furnished all the pepper consumed in France, and would soon furnish all the tea. He, however, deplored the fact that the French only control one-fourth of the commerce of the colony. The Far East promises a magnificent field for France, and all that Frenchmen need is self-confidence. M. Dormer is seeking to form a company here to build a railway from Indo-China to Yunnan-fu, and it is believed that he will be successful.

Rubber Cultivation in Burma.

In the House of Commons on May 18th, in reply to Mr. Sharpe (Kensington, N.), Lord G. Hamilton (Middlesex, Ealing) said,—The Government of India have recently authorised an extensive experimental plantation of the Pará rubber tree in the Tenasserim Division of Burma, where the climate and other conditions are believed to be favourable. I am aware that attempts are being made to develop the production of rubber in Ceylon and elsewhere by private enterprise, but I do not think that this is a reason why the Government of India should not do their best to develop their resources of that country and encourage private enterprise by showing that this tree can be profitably cultivated in parts of India.

Indian Tea.

The Indian Tea Association has reported to London that in all districts the weather is unfavourable generally. The Assam outturn last month was very poor, except from Dibrugarh. The Cachar and Sylhet outturn at the end of last month was stated to be forty per cent. under that of last year. The Duars and Terai outturn last month was very poor. The Darjiling outturn to the end of last month was twenty per cent. under last year. The tea entered for export from Calcutta to the United Kingdom for the second half of May, 1901, was 727,673 lbs., and in the corresponding period of last year it was 1,960,249 lbs. From the 1st April, 1901, to the 31st May, 1901, the quantity stands at 1,389,932 lbs., against a total for the same period of 1900 of 3,084,306 lbs.

The "Rest Question."

Indian Gardening and Planting writes :—" Our Madras contemporary, *Planting Opinion*, writes : ' We observe that our Calcutta contemporary, *Indian Gardening and Planting*, claims to have been the only opponent of the 'resting' scheme some months ago. We are glad to be able to state that we opposed the scheme *ab initio* and that South Indian planters, almost without exception, did likewise.' We were alluding more particularly to our northern contemporaries, but we are glad to acknowledge on examination that *Planting Opinion* held a very sound view of this question throughout, and was as much opposed to the dangerous scheme as we were. Nothing less could be expected from an organ that reflects the opinions of practical men such as the South Indian planters have shown themselves to be."

Roasted Coffee.

Mr. Schmelzel, of E. J. Gisell. & Co., says : " Roasted coffee, especially in package, has pretty effectually knocked out the sale of green coffee to consumers. 'Tis not so very long ago that

Farmer Jones, Villager Smith, and more or less of Townsmen Brown bought their bean in the green, the *frau* giving it a variegated roast over the opened holes in the cook-stove. The quality of the raw bean was usually good, but the roasting was as demoralizing as dyspepsia after a baby pig dinner. The Southern tiller of the soil still swears by the green, but the triumphant march of the package of roasted increasingly heard in Dixie. Package, though, can't get a footing or drinking in New York. Gothamites don't like Rios. The Metropolitan palate demands milder, more fragrant coffees."

The London Tea Market.

In their weekly telegram, dated 6th instant. to Colombo, Messrs. Gow, Wilson & Stanton reports that the market generally is weak, and that the market for medium liquoring Pekoes and Broken Pekoes, as well as for Common Pekoes and Broken Pekoes is also weak. The price of fair liquoring Ceylon Pekoe Souchong is 5d. (same as last week) and the average price of Ceylon tea sold on garden account this week was 6½d. (one-eighth of a penny down). Reuter reports that fine qualities of Ceylon tea are firm, but common rather easier. Pekoe Souchongs are quoted at 4⅜d. (the same as last week) and the average for the week at 6½d. (⅛d. down). 28,000 packages of Ceylon tea were offered for sale, of which 26,000 were disposed of; while of the 1,000 packages of Indian tea offered, 9,000 found purchasers.

Colombo Tea Sales.

At the public sale of tea at Colombo on the 5th instant, Chamber of Commerce room to-day 13,712 packages = 1,105,542 lbs., were offered, of which 11,165 packages = 919,122 lbs. were sold. According to the *Times of Ceylon*, the sale passed off well, all grades being in better demand and dearer. Good medium Broken Pekoe, and common to medium Pekoes and Pekoe Souchongs were from two to six cents dearer. The quality in a few cases showed a marked improvement, though the bulk of the offerings still consists of poor liquoring teas. Another report states :—"The general tone was distinctly better, and buyers showed more inclination to operate. Leaf teas were firm, common Pekoe Souchongs selling at a slight advance; while Broken Pekoes generally were in strong demand and realized higher prices all round."

Indian Tea Prospects.

In connection with the telegram sent by the General Committee of the Indian Tea Association in India to the Committee in London, stating that the weather had been unfavourable for tea in all districts, the meteorological returns up to the end of May show, says the *Indian Daily News*, that the rainfall during the spring was very much in defect in all the tea-growing districts. Thus, at Sibsagar, at the end of May, the total rainfall between the 1st of March and that time was only 16 inches, instead of the normal 27 inches, and in the Dooars, only 12 inches, instead of 17½ inches. At Darjeeling, conditions were less unfavourable, the deficiency having been only 2 inches during the three months, March, April, and May. In the Cachar districts, however, the rainfall was even worse than in the Assam Valley, and the station of Silchar reported only 23 inches during March, April, and May instead of the normal 40 inches.

Malay States Coffee Co., Limited.

The report of the Directors for the year ended 28th February, 1900, says:—That during the year 79·97 piculs of coffee were secured netting Rs.2,385·59, this being sligh in excess of the amount estimated. The balance of the cap has now been called up and it is calculated that the funds hand will be sufficient for the working of the estate u March, 1902, when it should be self-supporting. The cu vated acreage is now as follows—144 acres of coffee, (fr which 300 piculs is estimated as the crop for season 19 1902), 50 acres of rubber planted 12″ x 12″ total 194. acres of the coffee has also been planted with rubber 20″ x and with cocoanuts 54 trees to the acre ; the remaining acres of coffee bas likewise been planted with rubber 20″ x and with cocoanuts. The rubber is all coming on well a we are advised by the Superintendent that the older trees branching out, 8 to 10 feet up the stem.

GENERAL ARTICLES.

A VISIT TO THE CINCHONA-PLANTATIONS I MADRAS.

Mr. F. L. Seely, St. Louis, Mo, writes in the *Chemist a Druggist* :—

Two months ago in company with my wife I arrived at the li town of Conoor, the upper terminus of the cog-wheel railroad wh takes you from the hot plains to the mountain-top in South India. From Conoor we took a "jonga" (which is the name o two-wheeled carriage used in India), for a distance of ten miles, Ootacamund. Here we stopped at a very comfortable hotel, wh we found that in lieu of the suffocating heat we had left in morning we needed top-coats and grate-fires. We remained some days at this place, which is the home of Mr. William Standen, the Director of the Government cinchona-plantations the Madras Presidency, he occupying a delightful little nook wh is appropriately called "Cinchona Villa." Mr. Standen and family, however, were out at the quinine-factory, which is in midst of the cinchona-plantations at Nedivattam, twenty-th miles distant from Ootacamund, where he spends a large par his time managing the laboratory and cultivation. As I wanted see the plantations I set about to find transportation, and fina made arrangements with a teamster to take me out and back. was necessary for him to station fresh teams along the road, a the day before the journey teams left Ootacamund and were waiting for me at proper intervals, so that, except the stops change horses, I made the twenty-three miles each way with allowing the animals to reduce the speed to a walking pa Having started before it was light I reached the bungalow in go season, and, after a very pleasant reception by Mr. Standen a his good companion, we started off through the cinchonas for laboratory.

I was greatly surprised to find such a well-established facto and still more surprised to find that quinine sulphate, as be produced, when placed side by side with the European ma could not be distinguished. The factory was undergoing extens changes at the time, and very shortly will be a most modern ty of quinine-laboratory; indeed, the most modern methods of ma facture are used, the quinine being taken from the bark with and obtained as a pure white product with great economy. machinery is operated by a water-wheel, the power for which, course, costs nothing.

Mr. Standen is making about 10,000 lbs. of quinine a year, wh is largely sold through the post-offices in 5-gr. powders. T feature of the British-Indian quinine-industry is most credita and pleasing, for it places quinine, which is almost as essential bread to the natives, entirely within their reach at about act cost.

The quinine, after completion at the laboratory located Nedivattam, is brought into the offices of the director at Oota mund, where it is accurately weighed into 5-gr. lots, and each plac in a little envelope, on which is printed all necessary informati for the native. The envelopes are printed in many tongues a dialects, each section of the country receiving its quinine

packages printed in its own familiar tongue. The little envelopes are tied up in bundles of 100 each, and sent to all post-offices. The price charged is barely sufficient to cover actual cost of production. Persons not familiar with the country and people can hardly appreciate what a blessing this act is on the part of the Government.

There is usually a surplus above the requirements for post-offices and hospitals, and this surplus is sold, if anyone wishes to buy it, though the price charged is sometimes higher than market-price, by reason of the fact that a price is decided upon by the Government at the beginning of the year, which price shall rule through the year—and the fluctuations so common to quinine frequently go below the Indian price.

As to the plantations, they are very large and contain some very old trees, as well as a variety of species. The Government plantations have by far the best cinchona, but they are reserving most of their trees and letting them grow while bark can be purchased so easily from the planters. This is a help to planters too, as they receive the same price as they would in London, and have not the expense of sending it there, while the Government trees are being held for a "rainy day."

The finest trees are those at Dodabetta plantation. These trees have been shorn of their bark twelve times, and now have a good coat on again, but the practice of barking live trees has been stopped, and the trees are cut down, as is done in Java.

In addition to cinchona-cultivation and quinine-making I was much surprised to see fine beds of jalap and digitalis growing. Digitalis in full bloom is a beautiful thing, and made such a striking picture that I photographed it. This photo is of the Dodabetta plantation, where they are producing sufficient of these drugs to supply the medical stores of India.

This enterprise being entirely a private one, belonging to the British Indian Government, makes it impossible to say anything from a commercial standpoint; but I hope to return to the subject in connection with Java later.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange—*April 27th*, 1901.—Ninety days' Bank rate on London opened on Monday 21st at 12 7/16d. and closed this evening at 13 1/16d. . . .

Telegrams from Pará advise that shipments of rubber to the value of about £500,000 may be expected in May, which, if coffee continue to go forward on the same scale as this month, will give about £1,800,000 in ready bills, as against £2,600,000 in March, and £2,300,000 in February. Imports for February were nearly £1,400,000 and are expected to be larger in March; so that, allowing for Government requirements and private remittances, it seems possible that the balance of foreign payments may turn against us for a time until heavier shipments of coffee are renewed. The question, however, arises, whether shipments will really increase very much with the new crop?

At present they keep abreast of entries, but make little impression on stocks. Will they do so later? If not, a slump in exchange would sometime be inevitable. Shipments (embarques) during the past week were heavy, giving a value in sterling to be drawn-for of £400,000, as against £269,000 the previous week and £162,000 for the corresponding week last year. Rubber shipments from 1st to 26th April were 1,240 tons, of the value of about £400,000, or say £100,000 per week.

In the present temper of the market such considerations are scarcely taken into account, much more importance being attached to rumours of loans and such like. But, nevertheless, sooner or later their effect must be felt unless compensated as may easily be the case, by money from Europe. . . .

It cannot be too carefully borne in mind that at present prices coffee will give considerably *less* than last year even if the crop reach 12,000,000 bags, that rubber prices are falling and that the rise of exchange is certain to stimulate imports, and inflate payments due on their account towards the end of the year. With shrunken values for produce and all the bills taken up by speculators in advance, how is the market to be then supplied? Then will be the chance of the bears, unless, we repeat, the banks act in such a manner as to prevent it. So far, we believe, little harm has been done. But the market is warming-up and speculation extending in a manner that threatens at any moment to become as feverish and uncontrollable as last year.

A Correction.—In our Money article of last week a compositor's error of some importance was overlooked, by which the value of the probable amount of coffee available for export up to the end of June was given as 2,800,000 bags and their value as £1,000,000 instead of £4,000,000.

Coffee.—Entries at Rio and Santos during the week ended April 26th, were again slightly smaller, being 2,938 under those of the previous week but still 80,418 or 144%, over those for the corresponding week last year! Where all the coffee comes from is a mystery that has puzzled the whole market! It is noticeable that the falling off this week came entirely from Santos. Entries for the current month up to the 26th amounted to 504,970 bags, as against 214,999 last year, and since 1st July to 9,922,425, as against 8,453,915. At this rate there seems every prospect of the entries for the season at Rio and Santos reaching 11,000,000 bags, including new coffee expected in May. This, however, may be interrupted and thrown back by the rains which have recommenced and appear to be pretty general.

The Rio market during the past week was weak throughout at prices ruling from 6$700 to 6$100, at which business is said to have been done. Business, however, was very limited and mostly for orders for special European kinds, the States market being completely paralysed. For good colory coffees Nos. 7 to 8 we quote c. f. & comm. 6$300 to 6$000, equivalent to 29s. 3d. or 6 1/16 cents.

The big roasting houses have been buying steadily all week.

The conference lines have reduced freights to New York from 50 cents and 5% to 35 cents and 5% in consequence of competition *viâ* New Orleans, where coffee was being shipped at 25 cents. The reduction as far as we are concerned is of little or no value, as in the overstocked state of the market it can only result in lower c. & f. offers from this side, the consumers getting all the advantage, as they will also from the reduction of railway rates.

Up-country purchases have become almost impossible as the prices asked are far above parity and out of all proportion to real value. In spite of low prices low grades and even "escolha" continue to come down as much as ever.

At Santos the market was steadier but extremely nervous, with wide fluctuations. Dealers who sold heavily the previous week are inclined to look on a bit, although receipts continue heavy. We quote 4$100 to 4$400 for "superior", other qualities being quoted at the same differences as last week. No special demand was noticeable but "superior" seemed to be preferred whilst that for peaberry also improved. Receipts continue large and as there seems little hope of a rise of prices, planters pour their stuff down for whatever they can get, even at a loss, if only to repay some of the expenses.

This however can be no criterion as to what may happen with the coming crop; nor can it be concluded that new coffee will be sent down in the same way. On the present crop the cost of production has been paid long ago and all that remained for the planter to do was to pay the freight. So long, therefore, as prices would have left something over after that was done the coffee was bound to come down. With the new crop it will be different; and how the planters are to manage to even pay expenses at such prices is difficult to understand.

Coffee from Parana.—Arrangements are being made for collection of export duties on coffee from the State of Paraná at the Revenue Offices of the State of Sao Paulo. It is not generally known that the cultivation of coffee in the frontier districts of Paraná and São Paulo is considerable and growing in spite of the difficulties of transport.

Coffee and Exchange.—A correspondent at S. Paulo has favoured us with the following interesting communication:—

"That silly theory that rising exchange should also bring about a rise in coffee, regardless of supply or demand, is at last thoroughly exploded, I suppose, much to the regret of Mr. Murtinho and the speculative crowd in Rio. The eyes of those unfortunate importers in Europe and the States were at last opened to the fact that the rate of exchange will not command coffee prices for any *length* of time, especially when supply is so overwhelming as it is now.

"Things look very gloomy here amongst *fazendeiros* and *commissarios* and nobody can even form an opinion, as to what will be the ultimate result of all this or in what way things will right them-

selves A large number of the planters cannot produce at such prices; and even the writer of that unnecessarily sarcastic letter in your last issue fails to convince me that by the mere substitution of one weak man by another, if stronger, the difficulty can be solved. The strong man will simply get weak too at present prices, especially if the Central Government persists in its present mistaken fiscal policy and, with the help of the Banco da Republica, drives exchange still further. It is never wise to strain the bow too much and I am afraid we are already near breaking point. *Commissarios* here who have advanced money to planters on mortgages are doubtful as to whether they will ever get their money back, whilst taking plantations over at their present value, would leave them an enormous loss apart from throwing numbers of useful and active members of society on their beam ends.

Consumers have restricted their advances for working plantations very much indeed, and I think the ultimate remedy will prove to be a smaller output next year, as at prices of 4$000 only few can pick and market their produce. Yet I do not see how coffee prices in gold can rise materially, as the visible supply is too large to admit of an advance, substantial enough to counteract the effect of exchange.

Altogether there seems no other remedy than a still lower rate than even that at present ruling, and circumstances will bring this about and very forcibly too; but it would have been far better had a little more foresight been shown by the governing class and speculators been prevented from pushing the rate to its present level. If the rate go down now, the gold price of coffee will follow. After the first blunder in November, when the rate was also pushed to celebrate Mr. Petersen's advent, everything went well and smoothly. Europe and the States which had not large holdings were forced to come to buy daily in our markets and, notwithstanding large entries, the heavy stock was admirably held and the slow disposal of it well managed by our *commissarios*. It is utter fallacy to put the blame of previous low currency prices on the large accumulated stock here, because, if that stock had been half held and the other half disposed of to Europe and the States before, the big speculators there would simply have forced prices down with such surplus supplies on their hands, and have frozen out all the smaller dealers by manipulating the future markets for which the continuance of heavy entries here would have been used as a handle. Only the fact that the stock was held on this side and consumers had to buy as requirements, or at least 2/3 of them, equal to about 30,000 bags daily, in order not to let their own stock run down too much, maintained the gold price as well as the currency price. Otherwise the former would have gone down in February to 26s. or 27s., had *commissarios* and planters not stuck to their coffee. Then in February the upward movement of exchange commenced and all these efforts were frustated.

THE AMERICAN COFFEE TRADE.

Coffee—good, bad, and indifferent—reaches our country and the stomachs of its people; but, says the *American Grocer*, it is somewhat of a reflection on the United States that the demand for the lowest grades (*alias* "bad") is so much in excess of supply—great as the supply is—that prices are paid for the poorest grades, out of all proportion to their real value, while the demand for the higher grades is so limited that they do not realize to the planter their intrinsic worth.

A prominent broker—Mr. Arnold Schramm—an authority on coffee—deplores the depraved taste that forces such a contradiction in values. He attributes the anomaly to the fierce unprincipled competition that compels the sacrifice of quality on the brazen altar of a low-down cheapness.

Unfortunate it is for the highest good of the populace that the bargain counter has become a fetish, receiving the reckless homage of the thousands. Cut prices, especially in the coffee line, slash the taste, stomach, and nerves out of all resemblance to a healthy model.

Ergo! neighbour grocer, give your patron the best coffee, and you bathe his interior with a nectar of the gods, infuse life into his nerves, make yourself a lifelong friend, and fatten your pocketbook with bigger profits.

An expert in the coffee line claims that there is more in the making of coffee than in the quality of the bean; that is, a first-class coffee-maker can get a better drink from a low-class bean than a low-class coffee-maker from a first-class bean.

A representative coffee firm that has been roasting the inspiring bean for fifty years ought to know something about the "steeping" end of the coffee business. Here is their prescription for boiling in a common coffee-pot: "Grind coffee as fine as possible; use two teaspoonsful for each cup of cold water. The moment it boils to top set aside for ten minutes. Then pour off carefully into another vessel for serving.

"In French pots or muslin bags grind coffee like granulated sugar; place two teaspoonsful for each cup needed in a bowl. Pour on just enough boiling water to thoroughly swell the grounds. In about five minutes place these dampened grounds in top part of coffee-pot or muslin bag, and pour fresh boiling water through slowly; then re-pour the entire liquid through the grounds again. Let stand for ten minutes, and pour off carefully into another vessel for serving. Cream is best to use with coffee; condensed milk next, warmed (but never boiled); milk next. For after dinner (*demi tasse cafe noir)* use half as much again."

COFFEE *vs.* CEREAL CRANK.

Mr. G. Edward Fuller writes in the *American Grocer* :—

There never yet was an exposition where the food crank did not try to have his innings. The Pan-American is no exception to the rule. One of the Exposition officials has suggested that the greatest show of the season might be had if they could all be corraled into the Stadium some fine day for a heart-to-heart talk. They would be sure to pull each other's hair and call names before the meeting adjourned. They are combative, like all souls with a mission.

The management has tried to sort out the crank, but it is pretty safe to predict that some of the food exhibitors will be of that class. The difficulty is to tell a crank from a scientist. They use the same jargon. The world confounds them and pays them equally well. It takes an expert to classify them, and he is deceived sometimes.

We pass by the vegetarian crank, the cold-water crank, the two-meal-a-day crank, the no-breakfast crank, and a score of others, because they have no wares to exhibit, and will not be permitted to lift up the voice of warning or exhortation at the Pan-American grounds. The gospel of pure food and right living will be quietly but thoroughly handled, however, by dealers in cereals, bread, coffee, baking powder, and prepared milk from their little pulpit-booths on the floor.

There is a lot of conscientious buncombe in the world. The food crank dispenses much of it most advantageously to himself. He has not only a good commercial return to pay him for his trouble, but the sweet thought that he is benefiting the race.

The crank who depends on cereals for his advancement has a good thing. His is a plausible theory. Not being naturally enthusiastic over a cereal diet, mankind is prone to think it very wholesome because not particulary agreeable. Hence its popularity as a "food for babies." Nothing that a child likes is supposed by the truly orthodox to be good for him.

The cereal crank trespasses on the coffee field now-a-days.

There is an idea abroad in the land that it is much more wholesome to drink a hot liquid made of barley and wheat and molasses than to imbibe an extract of the pure coffee. It may be, as a change, for some, less injurious for awhile, but my observation leads me to believe that, if cereal coffee is drunk for any length of time, it weakens the tissues of the stomach and induces a flatulent condition, as the long-continued use of hot water does. They both lack the tonic qualities needed in a steady drink. If a man wants to abandon the coffee habit, he can break himself gradually by the use of cereal coffee. But hot water would do as well. As to the nutrient value of cereal coffee, it has been shown, by recent expert dietetic examinations, that a fellow would have to drink four and one-half gallons to get as much food as is contained in a quart of skim milk.

It is a curious fact that coffee has no injurious effect on the man that smokes tobacco. The effect of either one, bad in itself, as it may be if abused, seems to be counteracted by the effects of the other. Better than cereal coffee is a mixture of coffee with chicory root. Statistics show that the coffee drunk by the greatest coffee fiends in the world—the Germans and the French—contains a large per cent. of chicory, in comparison to a very small per cent. used in America. If I had a sluggish liver, I'd put chicory in my coffee

rather than drink any of those cereal combinations. Or if my nerves were too much stimulated by coffee, I'd mix it with cocoa. One who has never tried that mixture can't know how delicious it is.

Coffee is least harmful to most people when taken clear. The Portuguese who said he wanted it black as ink, sweet as honey, and hot has hell had an idea. Also better than cold cream as an adjunct is hot milk in the French fashion, but the trouble in either case lies not so much with the coffee as with its accompaniments. When it comes alone with a roll or toast and eggs, the stomach bids it welcome. With beefsteak and griddle cakes and all the other horrors of an American breakfast in its train, it is an unwarranted guest in the digestive tract. The sturdy citizen who toils all day in the open air is none the worse, but the pallid sedentary with a liver like a cinder would better banish either coffee or beefsteak from his morning meal.

The Jews made a strange discovery thousands of years ago. According to the tenets of their religion, it was not well to drink milk within an hour of eating meat. That was no baseless superstition. Within recent years French scientists have discovered that milk and meat brought together in the stomach are likely to produce a harmful germ. I very much question the wisdom of milk as a food for adults.

Of all the food cranks, none is more persistent and plausible than the bread crank. Sometimes he says that wheat bread is absolutely barren of nourishment, sometimes he declares that rye and graham breads are too soggy, and that only porous white bread is wholesome. Between the two extremes, a conscientious consumer must make his way as carefully as an ancient mariner between Scylla and Charybdis.

One of these staff-of-life cranks wants the Exposition management to hire him to lecture to the populace this summer. He says that if his ideas about bread are put into practice, not only will the citizens be better nourished, both physically and mentally, but the taxation of the city may be greatly lessened through the reduction of pauperism and crime. He goes to the length of saying that if Christ were living to-day and eating the food of our times, he would be a very different man from the humble Nazarene.

THE CESS (FOR INDIA) AND THE TEA CRISIS.

"A. C." writes to the *Ceylon Observer* :—

I have received, and gone through, the May number of the *Tropical Agriculturist*. You have never been backward in giving *all* the news on planting topics, but still a stranger reading that number from cover to cover would not learn that there is a "Tea Crisis." The article on page 759 by a specialist touches lightly on the matter. Your specialist was not in favour of resting tea; he would advise estates to "abandon outright" any unprofitable area. This is a remedy for each estate, and not for the industry. On page 751 you have a letter to *Planting Opinion* from Mr. Ashton who decries the voluntary system of subscriptions and says that a Cess is necessary. Mr. Ashton is the Chairman of the I. T. A., and this letter, "*ex-cathedra*," gives his views. He points out the way to safety. He says that money is required and cannot be obtained by voluntary subscriptions. This letter was written in March; subsequent to that time the reduction scheme was adopted and dropped owing to the failure of Ceylon.

On page 371 of *Indian Gardening and Planting* I have found a fresh scheme proposed by other members of the I. T. Association. They ask for

FREE GIFTS OF TEA

this in the face of the declaration by their Chairman that the voluntary business is a snare and delusion. The scheme proposed is one which is sure to succeed in its object, *i.e.*, to make profits for the subscribers, but everyone knows that private sale of tea is certain to succeed, if undertaken on sufficiently large a scale —*vide* Lipton, Mazawatte, etc. But this will not help the industry. The dead silence which has succeeded the letter by Mr. Ashton has encouraged me to take up the cudgels and I am endeavouring to stir up all concerned; I have dreaded attacks on my "blooming cheek," but am ready to face anything. In his interview with *Tea* (the new paper), Mr. Rutherford said that there would have been no over-production if India had had a Cess. This is a "tall" saying because after all India *did* subscribe a considerable sum, and the small difference between the amount subscribed and what would have been obtained from a Cess at the *same rate* as Ceylon would have made practically no difference in the great surplus which we failed to place on New Markets.—I am a plain, practical planter like hundreds of others who toil, and have toiled, to make the industry what it is. We—I dare to speak for the rest—do not understand the cause of the failure to produce and adopt any scheme which shall at least give hopes that prices will improve. How is it—we ask—that the only scheme which met with any pronounced favour —the reduction scheme—has been so universally condemned? We have absolutely come to the end of our tether as regards quality. We can, and do, change the quality of our teas to meet the requirements of the markets, but we invariably make a thorough mess of it. The market howled for coarse tea and paid up to 6d. for it; with great joy, we responded. The extra duty was imposed, but tons of coarse tea were on the sea and in our tea houses—*it had to go on.*

Then came such foul abuse regarding quality that every decent manager began to blush, and it ended up by Mr. Skrine setting up a cry of "stinking fish." He got a special man to find microbes on *dry* tea. The tea they got hold of was dry, yet rotten. May the Lord help us and give us peace because, as the sentence goes, "there is none other to fight for us." I am speaking out on behalf of tea managers, myself included.

I have done all that *can* be done. I have reduced my expenditure, and forfeited the greater part of my commission. If this state of affairs lasts much longer, the quality of my tea must suffer. I shall have to reduce rolling, and fuel, and labour in the tea house. My garden receives the minimum of cultivation, and will have to do with less. I shall soon have to reduce my own pay, or look for fresh work.

None of this is *my* fault (I speak for hundreds of managers); the fault lies with *you* (*the owners*). I tell you, out straight that, unless you get a Cess, and a heavy Cess, your properties will be closed. Some of you—like Mr. Rutherford—own properties that may weather *any* storm. Will you refuse help to us who have been less fortunate. Some of you have helped in the past, and are willing to help in the future, but naturally you do not move heaven and earth for redress. When it comes to the vote will you help us?

There is room for all, and for double our present area of tea. If Ceylon and India will combine and have a Cess worthy of the industry we shall be able to conquer the Tea world.

If Ceylon will let good Indian tea in free of duty, she would be able to blend her poor teas and make them valuable.

COLOMBO SHOULD BE OUR DISTRIBUTING CENTRE FOR AMERICA AND AUSTRALIA AND RUSSIA IN EUROPE.

If it comes to a fight, India is *much* stronger than Ceylon. We shall be able, by means of cheaper labour, and bigger ventures, to crowd you out. You supply 37 per cent. to our 53 per cent. to British consumption. We shall be able to run you down—down—down as we did China, by being more capable of expansion than you are. It will be a dreadful fight, but we are bound to win. "We don't want to fight" but by jingo if we do,! etc., etc. Again I appeal as a manager—to the owners; why cannot you agree? and pull together, and make our work *certain?*

Up to now, you—the owners, directors, agents, of tea properties—have pocketed the proceeds. It is time now to think, and to think seriously; to formulate some plan and *stick to it*. In the past your managers have pulled you through each crisis as it came up. I have recently learnt the reason why we cannot help you any more. It is because there is only seven million pounds of China tea to be displaced in British markets. We can no more prevent our expansion than can the school-boy. We stick out at each end and our chests are cramped by our clothes. You have to get us a new suit, and if you imagine that a new suit costing seven lakhs of rupees will cover our partial nudity you are mistaken. But it will relieve the pressure on the chest and let us breathe. I beg to be excused if I am too outspoken, or frivolous, or for any other fault. I understand that there is a crisis, a bitter fight for existence. I cannot understand this lethargy, this utter apathy, this heathenish way of sitting down to meet our fate.

We, the managers, have *trusted* the owners to find a solution of the difficulty. If they will not or cannot find it we shall be better employed in serving men who *can* manage their business. If another war was to the fore, I believe that we could organize a

managers' strike, and take the best brains out of the country. At present men are *waiting;* some of them will lose their reason from the strain, many their lives, and more their employment; a large proportion of owners and shareholders will lose their properties. A few will gain in the end, and tea will become an industry of bloated properties and trusts. Am I placing more than the truth before you? If so, the papers lie. I glean my forebodings from them. Have I exceeded my station by an inch? If so, it is for the benefit of my fellow-managers. We, the managers, cannot "strike," but let us speak out, and blow the consequences; nothing worse can happen than what we *have* to face in 1901, if our owners are asleep.

THE BULGARIAN OTTO-OF-ROSE CROP.

A Kezanlik correspondent writes to the *Chemist and Druggist*:—

The general outlook of this year's rose-crop is, on the whole, pretty fair. Of course, no one in Kezanlik expects a rich crop like last year's. That was a wonderful and exceptional one, the like of which happens only once in every decade. Even under the most favourable harvest weather the present crop can only be an average one. On account of the early spring and the warm weather in March the crop is rather in advance, and the distillation throughout the whole district promises to begin about a fortnight earlier than usual. It has already begun in the most southern localities, but in the Balkan valleys of Toundja and Strema it will hardly commence much before the end of this month. The budding season is now over, and, judging from the yield of rose-buds, the crop will probably be 25 or 30 per cent less than last year. While last year's crop was variously estimated from 115,000 to 130,000 T. oz., this year's may be only about 80,000 T. oz. The rose-bush is a delicate plant and most susceptible to the changes of the weather. March was rather warm; but all through April we had very abnormal weather, accompanied with snow and frost. This considerably affected the yield of rose-buds, and instead of having clusters of seven or fourteen rose-buds, which is usually the case when a crop is rich, this year's clusters rarely show more than five buds. In addition, many rose-plantations have suffered from hailstorms, spring frosts, and destructive caterpillars, and nearly all the old rose-plants are more or less damaged from the winter cold. The main factor, however, which affects a crop is the weather during the harvest-time, when the rose-flowers are being gathered and distilled. This is yet to come. It may change, and upset all previous calculations and early forecasts. As last year's wonderfully fine crop sold at a very low price nearly the whole of it was bought up by the exporters, and very little old otto is left in the hands of the growers; but some of the exporting houses have fair stock on hand. Small lots lately sold here have realised prices from 16s. 6d. to 17s. 6d. per T. oz. We shall send you full and definite information after the harvest.

THE COST OF PRODUCTION OF COFFEE.

A correspondent writes to the *Brizilian Review* from S. Paulo as follows:—"Your estimate of the cost of production is disputed all round here, it is said that some very favoured planters can raise coffee at 4$000 per *arroba* on their farms, but not delivered in Santos, and of these farmers there are not very many.

"A bag of corn costs here 10$000 and a bag of coffee 26$000, of which practically everything goes to the labourer or Railway Co. Consequently, the balance of trade must go against us very soon, as the Italian labourer will remit his earnings from gathering coffee as well as from selling the corn he planted, and the Railway Companies also remit in the shape of wages and in payment for coal, etc.

The followiug statement gives cost of production on a fazenda yielding 65 *arrobas* per 1,000 trees, which is more or less the average, and another yielding double that amount, which is exceptional. Nothing has been allowed for administration, as you will perceive.

From the first two items nothing can be deducted: the third might be reduced a trifle, but only for big concerns with their own machinery, which on most plantations is not the case. The 4th item may be increased largely and only in a few cases will be less. The 5th may be smaller, but not much in most cases. Those fazendas which are still new and yield heavy crops have in most cases to pay more freight. With regard to items 6 and 7 no reduction can be admitted.

Cost of production of 100 *alqueires*, equal to 65 *arrobas* per 1,000 trees:—

1.	Treatment of 1,000 trees	90$000
2.	Picking 100 *alqueires* at 800 réis	80$000
3.	Cartage from the fields, drying, hulling, etc. ...	70$000
4.	Transport to the station	13$000
5.	Railway transport, 1$400 per *arroba*	91$000
6.	Cartage in Santos	5$000
7.	Commission, 3% on 409$530	12$000
	Total ...	361$000

Yield of 65 *arrobas* at 6$300 per *arroba*, equal to 409$500.

Cost of production of 200 *alqueires* equal to 130 *arrobas* per 1,000 trees:—

1.	Treatment of 1,000 trees	90$000
2.	Picking 200 *alqueires* at 800 réis	160$000
3.	Cartage from the field, drying, hulling, etc. ...	140$000
4.	Transport to the station	26$000
5.	Railway transport, 1$400 per *arroba*	182$000
6.	Cartage in Santos	10$000
7.	Commission, 3% on 819$000	25$000
	Total ...	633$000

Yield of 130 *arrobas* at 6$300 per *arroba*, equal to 819$500.

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

CROSSE & BLACKWELL'S, LTD.

By Special Warrant Purveyors to The Queen AND Empress of India.

CELEBRATED OILMAN'S STORES.

[w. 1-10-98—t.f.o.]

THE AMERICAN TEA TRADE.

A BID FOR TEA.

Have you ever attended a tea auction? If not, says the *American Grocer* to its readers, it would interest and likely pay you—if you bid wisely—to visit the capacious auction room of the Montgomery Auction and Commission Company, located at No. 132, Front Street, New York.

On the fifth floor will be found the large, high-ceilinged aiyr, well-lighted chamber, that once a fortnight resounds with the bids of the tea buyers.

May 1, under the gentlemanly, business-like superintendence of the auctioneer, Mr. Thomas, there were sold 337 packages Moyunes; 316 boxes Pingsueys; 585 half-chests Congous; 224 packages Indias. Ceylons, etc.; 486 half-chests Foochows; 2,089 packages Formosas Prices realized were very low, in face of the fact that the general trend of the market is upward.

Sample packages of each particular tea named in the liberally-distributed catalogues are arranged around the sides of the room—some with a two-inch hole bored in the side; others with tops removed. Ample choice is thus given intending buyers to compare qualities and conditions, and make identification entries opposite catalogue numbers pre-requisites to intelligent bidding. At 12 noon sharp the tea-seeking audience seats itself on comfortable camp-chairs; the sturdily-built auctioneer mounts a platform, which, with a desk in front, is mounted on rollers, and the fun begins. So rapid is the utterance of the "Going, going, gone" gentleman that a stenographer would be distanced, and the tyro in auction tea dialect can hardly distinguish the words. With great rapidity the 4,037 packages are knocked down to the highest bidders. Then the buyers fish a pound or two of tea from the representative package of each lot they have secured. These samples are for comparison with the lots purchased, and for supplying salesmen with specimens in advance of receipt of goods.

Most of the tea is sold in bond, purchaser paying the duty—10 cents per pound. You need ready money if you bid, for the terms are net cash on delivery. You have ten days to examine, accept, or reject your purchase. All teas are guaranteed equal to auction samples.

The next regular tea sale will be held on Wednesday, May 15.

In the list of special sales noted by Joseph R. Peebles' Sons Company, Cincinnati, O., is the following: "We buy teas for their quality in the cup, the choicest early growth, picked and cured while the leaf has its most delicate flavour and fragrance. Such teas are limited in quantity, but we have them. Formosa Oolong; Gunpowder; Moyune Young Hyson; Mixed; English Breakfast; Japan (early gardening pickings). $1·00 grade, 80 cents; 75-cent grade, 60 cents; 50-cent grade, 40 cents. This week only."

That firm has learned the secret of a growing tea trade. Quality in the cup is the prime factor.

WILD VANILLA.

In an interesting article in last March number of *Chambers's Journal* Mr. Rowland W. Cater relates his experiences and adventures while gathering vanilla in Central America. The author, while staying at San José, casually fell in with a native trader, and together they undertook an expedition into the interior of Costa Rica with the object of collecting wild vanilla and other forest products. Port Limon was the starting-place, whence train was taken to Jimenez, a small settlement on the branch-line to Carrillo. Here the travellers alighted and struck into the bush, the passage through which was comparatively easy. On the second day out a wild vanilla vine was discovered hanging from a huge *zapotillo* tree, from which twenty-two pods were obtained, and by sunset that day the travellers had found nearly 250 pods, or about 12 lbs., and that within a distance of little more than six miles.

Mr. Cater gives a description of the wild vanilla vine (*Vanilla sylvestris*), which he says often reaches over 30 feet in height, and is usually about the thickness of one's little finger. The vine is round, knotted at intervals, and covered with dark-green spear-shaped leaves. It throws out a number of thin arms or aerial roots as it rises, which, attaching themselves to neighbouring trees, appear to derive therefrom such nutriment that the vines are little dependent on the soil. Occasionally the wild vines completely cover the branches of the tree, and, running from it into adjacent ones, they will hang in huge festoons and arches so thick that they seriously impede one's progress in the bush. The vines blossom profusely—usually in the Spring—the strange and delicate flowers, with their long, straggling, and pale yellow petals, springing from the angles were the leaves branch off. After a few days' existence the flowers wither and fall; and as their chance of fertilisation through any of the outside agencies on which they depend is a brief one, and precarious at best, very few of them are succeeded by fruit This takes the form of a large pod, and although the pods attain their full growth within fifty days from the fall of the petals, they take fully seven months to ripen.

The pods vary from 5 to 12 inches in length, and are about an inch across. In shape they resemble a knife-sheath; hence the word vanilla, which is a corruption of the Spanish word *vainilla*—a small scabbard. Each pod contains a quantity of small black granules, surrounded by a balsamic pulp whose peculiar combination of oil and acid is supposed to impart to the pods the delicious flavour and powerful aroma they possess. Altogether the travellers were in the bush eight days, and as provisions were giving out they hastened with their plunder to Tortugero, where Mr. Cater sold his portion to his companion at the current price in the settlement, and having paid his share of the expenses of the trip, he came out financially so far to the good that he was prepared there and then to set out on a similar expedition had the opportunity offered. Mr. Cater winds up with a detailed description of the systematic cultivation and curing of vanilla in Central America(*Vanilla planifolia*), about which so much has been written in recent years by consuls and others. It is a fact not generally known, however, that Mexico produces the finest vanilla in the world, and that practically the whole of it is consumed in the United States.

DISTRICT ASSOCIATIONS.

COORG.

Proceedings of the Annual General Meeting of the Coorg Planters' Association, held at the North Coorg Club, on Wednesday, 22nd May, 1901. PRESENT:—Messrs. W. M. Ball, H. F. Davy, J. D'Vaz, G. C. Garrett, W. H. Sprott, and A. Lambert (*Honorary Secretary*).

The President, Mr. Sprott, read out the Annual Report which ran as follows:—

Annual Report 1900-01.

GENTLEMEN,—It is again my duty to lay before you the Annual Report of our Proceedings during the past season, and to submit for your approval the accounts, which I trust you will find in order, as, through the circulation of printed copies of the minutes of all our meetings, every member who takes any interest in the affairs of our Association is, or should be, thoroughly cognisant of all that takes place at our meetings; it is hardly necessary for me to more than touch upon the principal matters which have come under our notice during the past year. The Annual Meeting of the U. P. A. S. I. took place as usual, at Bangalore in August last, and was of a most interesting and business-like character; but as your delegates gave you a full report of the questions which were of especial interest to Coorg, at our November meeting, and as moreover a complete account of the general Proceedings was published in the papers at the time; it is hardly essential for me to trespass upon your time unduly to repeat information which is, doubtless, already known to those who take interest in such matters.

The Railway Project is progressing favourably, and there is no reason to doubt its eventual successful accomplishment.

The Coffee-stealing Prevention Act.—We have no further information *re* this question, but no doubt in the course of another season or two we shall be able to decide. According to information received from other Districts as to the results of the working of the said Act, whether it is advisable to ask Government to introduce the same into Coorg.

New Markets for Coffee.—This scheme has unquestionably been the subject of much thought and discussion not only in Coorg, but in all the Coffee Planting Districts of S. India, and if only sufficient funds can be raised and the powers of advertisement directed into the proper course, it seems certain that some good results will arise therefrom. To what extent, however, the coffee

industry would benefit thereby it is impossible to tell until a fair and ample trial has been given to the project. But judging by the very satisfactory results of the efforts of both Indian and Ceylon Tea Planters in the same direction, I think it is safe to assume that such a venture is well worth an effort on our part. Therefore it appears to me that some plan for the effective raising of funds and some suitable system of advertisement having been agreed upon by all the Coffee Planting Districts of S. India it will become the duty of every coffee owner therein to subscribe to the Fund for pushing our staple in new markets. More especially in these days of low prices and keen competition.

Local Fund Board.—This innovation on the part of Government is by no means popular amongst our members, and though we strongly urged Government to allow things to remain on their old footing, we soon found that any efforts on our part were not likely to prevail, as we were given to understand that Government had fully determined to introduce a District Board into the Province. Now, however, that the Local Fund Board is a matter of fact, we must do our best to see that planting interests are well and rightly safeguarded, and we hope that our representatives on the Board will, to the best of their ability, see that such is the case. The question of the increase of planting representation will be brought up later at this meeting.

French Import Tariff.—This question which has caused much trepidation in many quarters may, I venture to suggest, be safely left in the hands of the Government of India; and I do not consider it at all probable that we shall ever be troubled by this extra import on our staple. It is with great satisfaction that I note the appointment of an Assistant Superintendent of Police to our Province. This has been a long felt, and asked for, want, and many and frequent have been the complaints carried to me against the Police. But I am bound to state that whilst admitting the general question of the complaints in my opinion much of the so-called want of Police supervision appears to be due to the Force being under-manned and in many cases badly recruited. Though doubtless Mr. Travers-Phillips when he has had time to settle down, and become thoroughly acquainted with the various Districts of Coorg will soon find out the real causes, and place Police matters on a better footing than at present, they apparently are with regard to the coffee crops and general prospects; the crop just picked has turned out a large one—which is a matter for congratulation, though I fear prices do not promise to be as good all round, even, as those of last season. Crops for the coming season will be small, as a rule, which perhaps, is only to be expected after the bumpers just picked. Our list of members remains much the same as that of last season, 71, though we have had some two or three resignations. We have, however to deplore the loss of Mr. H. Mann whose sad and untimely death has deprived Coorg of one of the most popular planters we have ever had amongst us. And that, also of the well-known and generally respected coast agent, Mr. R. Tatham, who was a member and supporter of our Association.

Roads and Communications. Hutti Bridge.—This, I am glad to say, is approaching completion. Though I am given to understand that the work has been delayed by the non-arrival of the girders from England. This, however, is, in a measure, an advantage as it will give the approach embankments time to settle down, several other bridges, notably those at Vriti and Ahtur have been renewed.

The Wynaad road is now open to within 1¼ miles of Wynaad, and this section would have been also open had not small-pox driven away the labour. I am informed that the open portion of the road stood the heavy traffic thereon very well during the current year. Work on bridges will now be put in hand. Nalknâd road, progress is being made with this as funds will allow. The general condition of our roads is good, I consider, and perhaps the one down the Periambady Ghât has never been in better order and condition. Complaints have been very few during this season, so I think we may again safely congratultate the officials in charge of our roads and communications on their satisfactory state.

With reference to the question of the unsatisfactory stacking of metal on the Polli Betta road, our Executive Engineer informs me that if the planters would sell to Government a few yards of land on the lower side of the said road, all reason for any annoyance or inconvenience arising therefrom would cease. It therefore seems as if the remedy for this evil lies in our own hands.

The following is the report for current season of the S. C. Coffee-stealing Fund which has been kindly sent to me by the Honorary Secretary, Mr. Fred. W. Gerrard. One coffee-steali case was reported during the season, and a reward of Rs. 25 was pa

It has been found necessary to make a call upon the members f the balance of the original subscription. In most cases this h been satisfactorily met, but I understand that there are so members who apparently decline to satisfy the demand. T accounts stand as below :—

To	Rs.	A.	P		Rs.	A.
Balance at credit last year	80	5	6	Reward paid ...	25	0
Payment, 2nd Call ...	228	9	3	Reward notices ...	9	6
				Postages	3	5
				Cash in hand ...	271	3
Rs ...	308	14	9	Rs. ...	308	14

E. & O. E.

FRED. W. GERRARD,

20*th May*, 1901. *Hon. Secy., S. C. Coffee-stealing Prevention Fur*

The C. P. A. accounts were then submitted and these, togeth with the Annual Report, were approved of and passed. Propos by Mr. Ball, seconded by Mr. Shaw. The Honorary Secreta pointed out that there were large outstandings due for subscri tions, and that there would be a difficulty in meeting the subscri tion to the U. P. A. S. I. under present circumstances.

Honorary Secretary in account with the Coorg Planters' Association season 1900-01.

	Rs.	A.	P.		Rs.	A.
Cash in hand end of season, 1899-1900 ...	10	3	1	Telegram during season, 1900-1901 ...	5	8
Received for subscriptions during 1900-01.	579	0	0	Carriage in seeds from Lal Bagh ...	0	12
				Paid on account of U. P. A. S. I subscription...	200	0
				1 copy Proceedings, U. P. A. S. I. ...	2	0
				Paid Vest & Co. for printing, etc.	5	2
				Expenses of Hon. Secy. to U. P. A. Meeting ...	70	0
				Office allowance, season 1900-01 ...	216	0
				Postages and stationery	40	0
				Cash in hand, May 22, 01	49	13
Rs. ...	589	3	1	Rs. ...	589	3

Due for outstanding subscriptions up to May 31, 1900 ...	240	0
Due for subscriptions for season ending May 31, 1901, say ...	600	0
Rs. ...	840	0

E. & O. E.

A. LAMBERT,

22*nd May*, 1901. *Honorary Secretary, C. P.*

The ballotting papers for the election of a member of the ne Local Fund Board for South Coorg were then opened and M Parsons was found to have been duly elected.

Read correspondence from the Commissioner and others *re* t impost of the Local Fund Tax.

Police.—Mr. D'Vaz spoke at some length, and strongly, on th important subject, and quoted several instances of Police incomp tency which had come under his own cognisance. He attribute much of this undesirable state of affairs to the improper enlistme of the men, pointing out that the authorities should take eve precaution to ensure the enrolment of good men only, as at prese and he asserted that almost anyone is taken on irrespective of h merits or character, and that in some cases even constables we employed who did not understand the language common to t Province. Mr. Ball suggested that sales of manures collected Government roads, or on Bazaar sites, should be properly advertis and due notice of all such sales be given to all persons who ow land in the vicinity of the place where the said sales take pla Resolved to address Government on the subject. I now beg tender the resignations of your President, Honorary Secretar and Committee, and will ask you to open the ballotting papers f the election of new office-bearers.

The following is the result of the ballot :—

PRESIDENT—W. H. Sprott.

HONORARY SECRETARY—A. Lambert.

COMMITTEE.

North Coorg.	*South Coorg*
W. M. Ball.	A. Boponna.
H. F. Davy.	J. S. Gerrard.
I. W. Irwin.	H. G. Grant.
J. T. Morgan.	A. H. Jackson.
C. E. Murray-Aynsley.	J. Logan.
C. G. Maclean.	H. G. Parsons.

MERCARA, *22nd May*, 1901.

A. LAMBERT, *Honorary Secretary, C. P. A.*

MARKET REPORT.

[*Per Mail advices of 24th May* 1901.]

COFFEE.

The London Commercial Record says:—The improvement in the demand noted last week has continued and supplies at auction met a steady demand, a large proportion being disposed of at firm prices to further advance of 1s per cwt. for all growths. The public market closed on Wednesday for the Whitsun holidays and will re-open on the 30th May. There have been some fluctuations in the market for futures, a rise of 1s established early in the week, on moderate receipts and an upward movement in Exchange, being subsequently partially lost. July Santos rose to 31s 9d. fell to 31s, but rallied and close at 31s 6d per cwt. Yesterday business was done in September delivery at 31s 10½d. and in December at 32s 3d. We quote—

London ...	... Santos ...	July delivery	...	31s 6d.
New York	... No. 7 Rio...	,,	...	5·55 cents.
Hamburg...	... Santos ...	,,	...	31½ pf.
Havre ...	... Santos ...	,,	...	38¾ francs.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	STOCK.		IMPORTS.	
	1901.	1900.	1901.	1900,
Tons	23,132	19,557	26,206	20,797
	HOME CONSUMPTION.		EXPORT.	
	1901.	1900.	1901.	1900.
Tons	8,311	7,570	10,503	8,411

The preceding figures exhibit— Tons.

In the Imports an increase this year of			..	5,409
Home Consumption an increase of	...	...	...	741
Export an increase of	...	...	..	2,092
Stock an increase of ...	...	...	...	3,575

Auctions this week have passed off as under:—

CEYLON.—*Plantation.*—45 casks 4 tierces 13 barrels 9 bags mostly sold, middling dull greenish 73s, bold 77s to 104s 6d, peaberry 76s.

EAST INDIA.—3,692 bags were offered and partly sold as follows: *Mysore*, smalls 36s 6d to 40s, low middling 42s, middling 46s 6d, bold 57s, peaberry 49s to 55s; *Coorg*, good bold colory 66s; *Neilgherry*, smalls 35s 6d to 42s, low middling to middling 41s to 49s, bold 49s to 60s, peaberry 48s to 58s; *Wynaad*, smalls 37s 6d to 40s, low middling to middling 42s 6d to 47s, bold 51s to 62s, peaberry 49s to 57s 6d; *Naidoobatum*, smalls 43s to 52s 6d, low middling to good middling 50s 6d to 64s 6d, bold to extra bold 77s 6d to 100s 6d, peaberry 55s to 96s; *Shevaroy*, middling 43s, bold 53s, peaberry 53s.

JAMAICA.—34 barrels 57s bags sold, smalls 30s 6d, ordinary to good ordinary 30s to 35s 6d, low middling greenish 44s, bold 54s to 55s 6d, peaberry 47s to 51s.

COSTA RICA.—Of 5,214 bags offered 4,820 bags sold:—smalls 35s 6d to 42s, low middling to middling 43s to 51s, good middling blue 52s to 61s, bold 58s to 82s 6d, peaberry 47s to 83s.

GUATEMALA.—1,044 bags catalogued and 810 bags sold, smalls 35s 38s, low middling to middling 44s to 49s 6d, good middling 50s to 50s 6d, bold 57s 6d to 69s 6d, peaberry 50s to 62

VERA PAZ.—Of 314 bags offered 270 bags sold, good bold blue gray 83s to 87s, fine to very fine ditto 95s to 105s 6d, peaberry 90s to 100s.

COBAN.—71 bags bought in.

SALVADOR.—215 bags sold, smalls 38s, middling 45s to 45s 6d, good middling 52s to 52s 6d, fine bold 72s 6d, peaberry 58s 6d to 74s 6d.

COLOMBIAN.—578 bags partly sold, low middling 41s to 44s 6d, peaberry 54s.

MEXICAN.—91 bags mostly sold, smalls 38s, middling 44s 6d to 45s, peaberry 57s.

ECUADOR.—Of 81 bags, only a few bags of sea-damaged bulked sold at 30s.

PERUVIAN.—58 bags mostly sold—common brownish 26s, fine ordinary greenish 40s, peaberry 38s.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	2,625,000	3,135,000	2,913,000	4,068,000
Santos ...	7,580,000	5,467,000	5,202,000	5,958,000
Total...	10,205,000	8,602,000	8,115,000	10,026,000
Crop...	—	8,391,000	8,772,000	10,461,000

Rio Exchange 12¼d, previous day 12 5/16d.

HAVRE, *May* 23.—Good average Santos May opened quiet at 37¾f. and closed quiet at 38f., September opened at 39f. and closed at 39¼f., December opened at 39½f. and closed at 39¾f., March opened at 40f. and closed at 40¼f.

HAMBURG, *May* 23.—Good average Santos May opened quiet at 30¾pf. and closed steady at 31¼pf., September opened at 31¾pf. and closed at 32pf., December opened at 32½pf. and closed at 32¾pf., March opened at 33¼pf. and closed at 33½pf.

NEW YORK, *May* 23.—Closing prices of No. 7 Rio were as follow:—

		May.	June.	July.	Aug.	Sept.
May	23...	5·45	5·50	5·55	5·60	5·65
May	22...	5·40	5·45	5·50	5·55	5·60

TEA.

INDIAN.—There was again a shrinkage in the quantity brought forward, which was 11,900 packages contrasted with 12,600 packages in the week before, and 14,700 packages for the corresponding period of 1900.

These limited supplies met with a rather better demand, though prices did not mark much alteration, enquiry being principally confined to the best liquoring parcels. South-India was represented by about 1,700 packages, some of the shipments being of a usual character.

Printed on importers' account in the month:—

1901.	1900.	1899.
39,900 packages	59,600 packages	39,600 packages (281 New Season's) (Including Whitsuntide)

making the amount passed through the Mincing Sale Room from 1st July last 1,619,000 packages, *versus* 1,609,000 packages and 1,497,000 packages in 1899-1900 and 1898-1899 respectively.

CEYLON.—Public auctions were larger, aggregating 24,600 packages, compared with 19,600 packages on the 14th instant. Twelve months ago 30,400 packages were offered.

Except for the more attractive invoices, bidding was somewhat less brisk, and the market showed considerable irregularity. Leafy kinds under 6d per lb. were not so much in request, in many cases favouring buyers; for medium to fine Pekoes and Orange Pekoes, however, steady rates were usually paid. Common broken Pekoes went easier, but those with good cup and the choice lines of broken Orange Pekoe realised higher figures. The average is 6⅝d per lb. On the 16th instant it stood at 6⅜d per lb., and 7d per lb. in 1900.

Total sold for the month:—

1901.	1900.	1889.
62,900 pkgs. (3 sales) (Avge. 6½d per lb.)	161,200 pkgs. (5 sales) (Avge. 7⅛d per lb.)	97,600 pkgs. (Avge. 8⅛d per lb.)

JAVA.—Slightly over 1,300 packages of direct import were submitted to the trade and taken up without material change, though at times quotations manifested unevenness.

The undermentioned were catalogued in May:—

1901.	1900.	1899.
4,900 pkgs. (Avge. 6½d per lb.)	8,400 pkgs. (Avge. 6⅜d per lb.)	1,500 pkgs. (Avge. 7⅞d per lb.)

Deliveries.—The clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 21st May,	1901	...	...	1,142,092	lbs.
Do.	do.	1900	...	9,308,013	,,

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	10,701	1,256	11,957
Ceylon	20,670	3,886	24,556
Java	635	697	1,332
Total ..	32,006	5,839	37,845

Also 551 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated May 24th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO END OF MAY.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1900-1901	1,662,647	1,272,310	63,692
1899-1900	1,678,576	1,256,120	65,651

12,458 *pkgs.* INDIAN
24,761 ,, CEYLON
1,332 ,, JAVA

Total 38,551 packages were offered in public auction this week.

The average price of Indian tea sold on Garden account during the season was 7·24d. against 8·23d. for season, 1899-1900, and 8·78d. for 189--1899.

1900-01.		1899-1900.		1898-99.	
pkgs.	price.	pkgs.	price	pkgs.	price.
1,367,930	7·24d.	1,313,554	8·23d.	1,143,396	8·78d.

Average Prices obtained by each District are shown in the following table:—

	1900-01.		1899-1900.		1898-99.	
	pkgs.	price.	pkgs	price.	pkgs.	price.
Assam	637,554	8·53	579,547	9 29	564,219	10 03
Cachar & Sylhet ...	372,856	5·70	400,241	6 96	287,906	6·67
Chittagong ...	6,608	6·21	3,721	7·32	3,772	7 27
Chota Nagpore ...	2,676	4 68	2,504	6·10	1,850	6
Darjeeling ...	84,176	10 01	76,568	10·63	75,447	10 98
Dooars	194,273	5·69	173,845	7 21	149,795	7·68
Neilgherry ...	5,304	6·09	6,322	7·34	7,712	7·01
Terai	15,782	6 02	13,460	7·25	13,249	6·78
Travancore ...	48,028	5·31	44,913	6·74	49,288	6·66
Kangra Valley ..						
Kumaon ...	9,673	5·71	12,413	7·03	7,674	6·91
Dehra Doon ...						

The Season's average price of Indian Tea is far below any previous record. A glance at the above table illustrates the way in which Districts producing Tea of poor quality have suffered, owing to the recent heavy fall in the value of low grade Teas.

The last auction of Indian Tea before Whitsuntide was held on the 20th inst., and of Ceylon Tea on the 21st. The next sales will take place, respectively, on the 3rd and 4th prox.

INDIAN.—The small sale, comprising only 12,458 packages, showed rather better competition than of late, but no change can be recorded in quotations.

Week's average of Tea sold on Garden Account 1901, 11,051 pkgs., av. 6·35d. 1900, 5,269 pkgs., av 6·81d.

CEYLON.—Supplies were fairly heavy, comprising 24,761 packages against 19,964 last week, some of the Tea having probably been brought forward a little earlier than usual in view of the Whitsuntide holidays. No actual change can be noticed in the market, last week's prices being on the whole fairly well maintained.

The quality and character of the Teas coming forward are fairly good, and distinctly better than usual for this time of year; bearing this in mind, present market rates show as low a market as has ever been recorded.

Average for week 6·59d., against 6·95d. in 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 506,897 pkgs., av. 6·65d. 1900, 505,997 pkgs., av. 7·44d.

JAVA.—Javas were fairly well represented, 1,332 packages being brought forward on garden account, all of which were of Direct import. No material change was noticeable in the market although several parcels were withdrawn for higher prices. 216 packages from the "Goalpara" Estate realised an average of 9½d. per lb.

Bank Rate 4 per cent. Exchange on London three months' sight:—Calcutta 1 $4\frac{7}{32}$. Colombo 1 $4\frac{1}{4}$.

There being no Public Sales next week, our next Circular will not be issued until the 7th prox.

COCOA.

The better feeling noticeable last week for West-India gro developed further at Tuesday's auctions, when an advances to 2s per cwt. was obtained in some cases. A total of 7,758 was brought forward, of which about 3,950 bags found buyers. 995 bags Trinidad catalogued, 770s bags were placed, at 75s t for fine and very fine, and 69s to 72s for middling to fair improvement of 1s to 2s. 985 bags Grenada practically all good and fine realising quite last rates, although the less desir grades were rather easier; 64s 6d to 67s 6d was paid for goo fine, and 61s 6d to 64s for common to fair. 173 bags Domi sold at 60s 6d to 64s 6d for common to good. 43 bags St. L brought 59s 6d to 61s. Of 152 bags Jamaica 100 bags sold a to 64s 6d. 6 bags St. Vincent realised 61s to 66s. Of 416 Haiti 50 bags sold at 56s. 53 bags Colombian found a buye 78s to 80s. Of 2,691 bags Guayaquil offered 1,160 bags were pl at valuations—58s to 60s 6d for Esmeraldas, 64s to 65s for Carac and 66s to 70s for arriba. Estate growths of Ceylon cont neglected, but collected sold at very full prices; 1,799 bags catalogued and 550 bags sold—good bold red 83s, ordinary middling ditto, 62s to 72s 6d, good to fine small 62s to 72s 6d. ordinary to good collected 57s to 64s per cwt. Privately a 400 bags Trinidad sold at 72s to 73s 6d for good, also 150 African at 64s, and 500 bags Guayaquil—winter Arriba at 66 68s, good red 78s per cwt.

PEPPER.

BLACK.—The market has been quiet since our last, and ra lower prices have been taken in the business done. In all a 100 tons Singapore are reported sold, *viz.*, shipments near at h at $6\frac{5}{32}$d, and March-May shipment at $6\frac{3}{16}$d.

A good selection was brought to the hammer on Wednesday, the only demand was for Malabar Coast kinds, 574 bags of w were catalogued 500 bags selling at $6\frac{5}{8}$d for fine heavy bold, $6\frac{1}{8}$ $6\frac{1}{4}$d for smaller ditto, $6\frac{1}{8}$d for bold dullish, and 6d to $6\frac{1}{8}$d for heavy small. 10 bags Malakoff partly sold at $5\frac{3}{4}$d for greyish. bags Singapore were bought in, also 111 bags Aleppy at $6\frac{1}{8}$d, 140 bags Trang at $6\frac{3}{8}$d per lb.

WHITE.—Is dearer on the spot, with sales of fair Penang private contract at $8\frac{13}{16}$d, fair Singapore at $9\frac{3}{8}$d, and fair Sian $9\frac{5}{16}$d per lb. For arrival no business reported

At public sale on the 22nd instant of 92 bags Singapore offe 50 bags sold—fully fair $9\frac{3}{8}$d. 2 cases 4 bags Malakoff brou $11\frac{3}{4}$d to 1s for fine bold, and $9\frac{1}{2}$d for good. 199 bags Penang bou in at $8\frac{3}{4}$d to $8\frac{7}{8}$d, and 66 bags Siam at $9\frac{1}{2}$d per lb.

GINGER.

COCHIN.—The market continues devoid of animation, and th were practically no bids for the 1,145 bags brought to the hamm although some holders were apparently willing to accept mate reductions on recent range of values. The whole of the quan offered consisted of washed and brown rough, and the buying prices were 37s 6d to 42s per cwt., as in quality.

JAPAN.—278 bags offered and 78 bags sold at rather lower price good fair limed (1893 import) at 32s per cwt.

JAMAICA.—Was not in such good demand as of late, only 275 bar selling out of 844 barrels offered, and these went at lower ra especially for medium grades—good to fine bright realised 59 65s, fair 51s 6d to 55s, middling to good middling washed 43s to 47s 6d, common to good common 40s to 42s 6d, and dark Rhat 38s to 39s per cwt.

GREEN.—9 barrels bought in at 50s per cwt.

CINCHONA.

There was a very good demand at the auctions on Tuesday, w 4,072 packages were brought to the hammer, against 2,049 packa catalogued at the previous series. The bulk of the offerings s at an advance on the higher range established at the Amsterd auctions, the unit value obtained being 2d against $1\frac{7}{8}$d last year, $1\frac{3}{4}$d in 1899.

956 bales *South American* brought forward and 730 bales sol Bolivian cultivated Calisaya quill $7\frac{7}{8}$d to $11\frac{1}{4}$d, broken quill chips $8\frac{3}{8}$d to 1s 1d, flat $7\frac{1}{2}$d; Carthagena chips $2\frac{1}{2}$d, Cuprea 2d $3\frac{5}{8}$d, and New Granadian $1\frac{3}{4}$d per lb.

Of 635 packages *Ceylon Cinchona* offered 450 packages sold—Officinalis, chips and shavings 7d to 7⅛d, broken quill and chips 5d to 5⅞d, renewed chips 4¾d to 5½d; Red chips and shavings 3⅛d to 7¾d, chips 3d to 9d, branch 2d to 4½d, root 3½d to 5d per lb.

Of East India Cinchona, 1,915 packages were offered and 1,650 packages sold—Officinalis, chips and shavings 2¾d to 11⅝d, ditto renewed 4⅝d to 11⅝d, branch 3d to 6⅞d, root 4⅜d to 11⅜d; Succirubra, chips and shavings 2¼d to 8⅝d, chips renewed 4d to 7½d, broken quill 4d to 4½d, branch 2¾d to 5¼d, root 3⅜d to 7¾d; Ledgerian, chips 4⅛d to 8⅞d, broken quill 10½d to 11⅝d, root 8d to 11d per lb.

176 bales *Java Cinchona* mostly sold—Succirubra, root 4¾d to 4⅞d; Hybrid, branch 8⅜d to 8¾d per lb.

100 bales *African Cinchona* sold at 6⅞d to 7d per lb. for Succirubra quill.

290 bales *Jamaica* sold—Hybrid, chips 5⅝d to 6d, chips and branch 4¾d to 6⅜d per lb.

QUININE.

SULPHATE QUININE is dearer. About 100,000 ozs. best German makes have been sold during the week at 1s 4½d spot, at from 1s 4⅝d up to 1s 4⅞d for August, and at 1s 4¾d up to 1s 5d for October, HB or B&S brands.

OFFICIAL QUOTATIONS.

	in tins.	*in 1 oz. vials*
Howards & Sons	1s 6 d @ 0s 0d	1s 8d for 1.000 ozs.
Thomas Whiffen	1s 4½d ,, 0s 0d	1s 6½d @ 0s 0d
		nominal
Brunswick	1s 5 d ,, 0s 0d	
Mannheim	1s 4½d ,, 1s 5d	
Auerbach	1s 4½d ,, 0s 0d	
Zimmer	1s 4½d ,, 0s 0d	nominal
Milan	0s 0 d ,, 0s 0d	0s 0d @ 0s 0d
Taillandier	1s 5 d ,, 0s 0d	nominal
Amsterdam	1s 4 d ,, 1s 5d	,,
Pelletier's	1s 9 d ,, 0s 0d	0s 0d ,, 0s 0d

(AVERAGE FOR ALL INDIA 6·35d., MAY 24TH.)

GARDEN.	Total.		Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity		Price	Quantity	Price	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price.
Neilgherry															
Glenfruin ...	10		4¼	...	...	10	4¼	...	...	...	...	...	...	...	...
Travancore ...	**1555**		**5·16**												
Ashley ...	31		5½	...	...	...	...	31½c	5½	...	...	...	.	...	...
Balamore ...	182½c		4¼	...	.	110½c	4 4¼	64½c	4¾		...	6½c	3¾	2½c	2¾
Corrimony ...	110½c		5	...	...	42½c	4½	48½c	6	17½c	3½	1½c	2¾	2½c	2¾
Ellangy ...	263 p		4	...		108	4 4¼	64½c	5 5¼	59	3½ 3¾	...	..	32½c	2¾ 3½
Kan Dev H Co. An	345 p		5¾	...	...	35	5¾	145½c	6½ 6¼	26	4¼	...	...	139½c	3½ 5¾
,, Munaar	318 p		6	24	7½	96	5¾ 6¼	46	9	140	4¾ 5	...	..	12 p	3 4¼
Seafield ...	190½c		5	...	...	122½c	4½	65½c	6	...	...	2½c	3	1½c	2½
T T E Co Mount ...	55		5½	...	...	13	5¼	19	6¾	12	4¼	...	...	11	5
,, Munja Malai	43		5¼	12	7	31	4⅝	...	...	...	..	..	...	...	...
W ...	18½c		5	...		18½c	5	...	...	..	...	...		.	...

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Lays of Ind, Comical, Satirical and [illegible]scriptive Poems, illustrative of English life [illegible], by Aliph Cheem, illustrated. [illegible] *cash* Rs. 4/8.

Behind the Bungalow, by E. H. A., illustrated by F. C. Macrae. Rs. 5/4; *cash* Rs. 4/8.

The Management and Medical treatment of Children in India, by E. A. Birch, 3rd edition, revised. Rs. 9/3; *cash* Rs. 7/14.

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PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday the 28th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Coorg.

Polli Betta, 19*th June*.—*Weather*—Monsoon still going strong. From ·50 to over an inch has been the daily record, except on last Friday when only ·10 inch was gauged. Coffee is looking very fine, but there is a good deal of borer. Some planting out of supplies has been done—supply-holing, filling, planting, and weeding are the works principally in hand at present. *Labour*—plentiful. *Health*—fair.

BRAZILIAN EXCHANGE.

Our occasional allusions to Brazilian presidential messages must not be taken to mean that we accept without reserve all that is stated in these messages. It is our desire to place before our readers official as well as non-official statements bearing upon points of interest to the planting community. We venture to think that many coffee-planters in India do—and that even more should—take a deep interest in such information as reaches them concerning the opinions, the policy and the utterances of the men who stand at the helm of Brazilian affairs. On the 3rd ultimo Dr. Manoel Ferraz de Campos Sálles, President of the Brazilian Republic, presented a message on the occasion of the opening of the second session of the 4th Congress. Naturally, this message contained a great deal that is of not the most remote interest to planters here. It also contained some remarks, however, that should be noted by these gentlemen. In two respects Brazilian affairs have a direct importance to planters here.

Firstly, Brazil is the chief coffee-producing country of the world, and all that affects cost of production, price, etc., in Brazil affects the coffee markets of the world; secondly, the first point is so intimately connected with the movements of Brazilian Exchange that any remarks made by the President with reference to Exchange deserve as close study as what he may say from time to time about Coffee apart from exchange. In Brazil, in like manner, Coffee, the chief product of the country, is of paramount importance. In its effect on exchange it exercises perhaps as momentous an influence indirectly as it exerts by its direct influence on the wealth or the poverty of the country. The State of S. Paulo, a portion of the Brazilian Republic, is the chief centre within the chief centre of coffee production, and thanks to the *Brazilian Review*, we have before us not only the latest message of the President of the Republic, but also that of Dr. FRANCISCO DE PAULO RODRIGUES ALVES, President of the State of S. Paulo, delivered to the Congress of that State on the 7th April last.

Although the general prosperity and consequently the general administration of the Brazilian Republic affects, and is affected by, the Coffee industry, we pass over all Dr. CAMPOS SALLES' remarks except those relating to Coffee, Exchange, railway rates and the financial problem before the Republican Government. As to railway rates it is merely observed that the notable improvement of exchange since June last year facilitated a reduction of 10 per cent. in the three most important classes of the tariff. Coffee also has thereby benefited to the extent of 19 per cent. on the normal rate. Naturally, the reduction of coffee rates must affect the revenue of the Railway, but with the object of mitigating the severe agricultural crisis, Government resolved to admit a reduction of 25 per cent. for hulled coffee, 30 per cent. for coffee in the berry and to fix a maximum rate of 1$200 per aroba, irrespective of distance. The wise principle upon which this reform is based was expressed by the President in an earlier message, in the course of which he pointed one that "it was to the interest of the Railways to do all they could for a product from which the greater part of revenue and profits was drawn." Certainly he now says, this is not the only remedy, but for the moment it is the most prompt and most efficacious. The powers of intervention by the Federal Government with regard to exports allowed by the constitution are very limited, but feeling that this commerce must always constitute the true strength of the Country, the Government have spared and will spare no effort to further such interests. Abroad, he says, Government has used its influence to remove the restrictions that embarrassed consumption and intends to persist in this policy. "Other and more energetic measures might, however, be undertaken by the Governments of the different interested States and, especially, by private parties. Secure in the possession of better elements for success than any of our competitors, let us never despair but resolutely face the issues." Doubtless the President realises that the raising of Exchange—a necessity forced upon him by the financial position of the Republic—is not the best thing for the coffee industry. Hence his desire to provide—as far as may be—a counterpoise. As regards finance, his most interesting remark to us, in India, is that the country is now fully prepared to return to the normal condition of specie payments. He anticipates no difficulty in maintaining payments regularly in future. While preparing to meet its engagements, the Brazilian Government has, he asserts, succeeded in also banish deficits from its estimates and has consolidated the situat of the Treasury on the solid basis of surplus revenue. debts accumulated in previous years have been grea reduced; all current obligations are paid up to date; wh not a single Treasury bill exists in circulation.

The President of the State of S. Paulo alludes to the l price of coffee as aggravating the financial crisis throu which the whole country is passing. He alludes to exp duties as unfit to serve as a basis for the finances of Union, yet it is to this alone that the States can at pres look for nearly all their revenue. Export duties in S. Pa yield, approximately, over two-thirds of the revenue. Th were reckoned in the last official year on the official value 268,040 : 060$125, those exclusively on coffee amounting 266,784 : 094$879. Well may the President remark that ag cultural interests are of the greatest importance. It shou be noted that he also says that despite the great difficult arising from the fall in the price of coffee, planters are d playing great activity in the promotion and development the economic forces of the State. He rebuts accusations excessive routine in the agricultural industries of the Sta while admitting that coffee is and must be the mainstay the State because at present it constitutes the greater p of its wealth and furnishes most of its revenue, besi providing most of the bills of exchange and forming t principal factor in the balance of Brazilian foreign trad His remarks on these matters are of such great importan that we give them in full elsewhere, and we may perha be pardoned for laying special stress on the fact that t President of S. Paulo says to Brazilian planters, much as have said to planters in India, that "to cut down worki expenses, improve their process and secure permanent a steady labour, should be the aim of planters." We trust th all he says will be most carefully studied by our readers.

CEYLON AND INDIA.

It has been urged in several quarters that Indian t should have free access to Ceylon so that arrangements mig be made for blending Ceylon and Indian leaf at Colomb Failing this, it is urged with equal force that Ceylon t should not be admitted into India while in Ceylon an impo duty is levied on Indian tea, unless it be subjected to an equ import duty in this country. How greatly the throwi open of Ceylon and the conduct of blending operations Colombo might affect South Indian teas, our readers w easily judge. It appears to be a fact that the Travanco teas—which would probably be the most quickly affected have not yet acquired any very distinctive characteristi Like the climate of England, they may be regarded "samples," little bits of all sorts. What is most wanted, planters rather than buyers are to command the market, the production of fairly even standard types. The odds a ends that must naturally be produced also should, as far possible, be utilised for the purposing of pushing sales in Ind where price will be of much greater moment than qualit Planters should dump their rubbish down near their ov gates—so as to keep cost of transport as low as possible, and only pay heavy freight, etc., on teas that do credit to t district in which they are grown.

INDIAN TEA FOR INDIANS.

One or two organs of the native Press of India have set their faces against any attempt to develop Indian demand for tea. They regard it as an attempt to train coolies and the poorer classes generally to the use of unaccustomed luxuries. They "are not sure that the thrusting of tea by artificial means on the rural population and on the poorer classes in towns will prove an unmixed blessing." The *Indian Spectator* writes :—

The thousands of agents that will soon be set to work will, of course, keep their eye on such paying markets as Delhi, Cawnpore, Lucknow, Agra, and so forth; nor will they miss railway junctions and terminal stations. But they will penetrate even into villages and force their article on the simple villagers. A Sub-Committee that has been making enquiries about the matter is said to have noted that "in Eastern Bengal there is a population of approximately 25 millions of Mahomedans; they are well-to do agriculturists, and are better able to afford small comforts, such as tea, than any other rural population in India." Then there are the markets of the Punjab and Southern India which will also be "developed." Now, these simple and poor people have gone on from time immemorial without the "small comforts" that European civilization is bringing into the country in such abundance; and nobody can say that they have been any the better for the money spent on these comforts in preference to the rough and rude plenty of former times. That the brass vessels of olden times, for instance, which would last for generations, should be replaced by glass or enamelled wares is bad enough, but what need there is for the villager to give up his simple, and in many instances nutritious, morning meal, which he takes before going out for work, and substitute the costly but by no means nourishing beverage of tea, we altogether fail to see. The drudging coolie cannot sustain the strain of a day-long toil on the strength of a cup of tea, taken at daybreak, probably without milk or sugar.

Of course there is truth in the above remarks; but the fact remains that India's millions, outside the coolie class and the people who cannot well afford the price of a cup of tea per day, are pretty numerous. If the great Indian "middle classes" can be reached, and induced to drink tea, the leaps and bounds by which Indian consumption of that article will increase will astonish the planting community and send all dread of over-production out of their minds. It *can* be done; the thing is, to do it.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

Trade with Persia.

The Indian Tea Association, Calcutta, has published for the information of members the following Communication from Mr. E. G. Foley, who is travelling on the Persian frontier in behalf of the Association.

Dated, Camp Merui, 276 Miles from Quetta, 11th May, 1901.

We are well on our way now; to-night we shall be exactly half way. We have got on fairly fast since we left the caravan, which is now some ten days behind us. We hope to reach the British frontier on the 21st May and to arrive at Seistan on the 27th. We have been obliged to take on four extra camels to lighten the loads for quick travelling.

2. We have overtaken a caravan belonging to a Pathan from Dehra Ghazi Khan. He has 27 camel loads of tea from Bombay and Dehra; and about 15 camel loads of country indigo from Multan; as well as piece goods, roughly tanned buffalo hides, etc. These loads are carried by Pathan camels, which are celebrated for their endurance and weight-carrying qualities. Each camel carries six and a half maunds of tea, and two cases of indigo weighing 8 maunds; while our hired camels are not on the average carrying four maunds each. The tea has been repacked in *bales* first, a wicker or mat-work basket; then a wrapping of cloth; then *raw* hide netted and sewn over with leather thongs; and finally a wrapping of gunny. These bales are as tight as drums. They hold $3\frac{1}{4}$ maunds each, and can stand any amount of knocking about. They measure in girth about 10 feet by 9 feet.

3. The Pathan is a trader in tea and a good judge. I gave him samples, or rather showed him some. He infused the tea, and said it was very good, and better than what he had got. He valued the Pekoe and Orange Pekoe at from 25 to 30 Krans per maund of 6 lbs. (a Kran is equal to $4\frac{1}{2}$ annas), and the price per lb. would therefore be about Rs.1-3-9 to Rs.1-6-6. The man is going to Meshed *viâ* Herat. He will meet me at Meshed and will introduce me to another Pathan merchant, from Dehra Ismail Khan, who, he informed me, does a business of over four lakhs of rupees a year. He also told me that our Pekoe, and particularly the Orange Pekoe, would be very much liked, throughout Eastern Persia and Herat. The people there are mostly Persians, and they prefer to drink black tea. I gave him a sample of Pekoe and Orange Pekoe with labels and marked the prices at annas 8 and 9 delivered at Quetta. I also explained to him that our object was not to go further than Quetta and compete with them in the various Persian and Afghanistan markets; but rather to leave the trade with its enormous profit to them as before. I added that by dealing with us they would have their wants supplied at Quetta, where all caravans for this route start. I hope to be able to do a very large business with this man and his friend yet.

4. The Punjab Bank at Quetta is I believe prepared to make advances to traders by this route to the extent of 50% on a lien of the goods—one-half of the goods remaining as security in a Bonded Warehouse until the other half is sold and the advance repaid. But the Bank want Government to build a Bonded Warehouse and to encourage their business. Negotiations were proceeding between the Agent to the Governor-General (Col. Yate) and the Bank Manager (Mr. MacBean) when I was at Quetta.

5. At Seistan itself there is not much to be done; but it is the emporium for Herat and other places in Western Afghanistan, where there is less extortion in the way of dues. From Cabul, Ghuzni and Kandahar on the other hand there is but one road; and at various places along it caravans are subjected to the grossest extortion, as much as Rs.500 being demanded for a single camel load of tea. On the Baluchistan frontier this is impossible; for the country is open, and to protect it the Ameer of Afghanistan —so I am told—would require 100,000 men. Extensive smuggling (which the Ameer is unable to prevent) is carried on all along this line into Southern Afghanistan. At Meshed Major Trench will introduce me to the principal Merchant and Banker; and from what Captain Webb Ware told me there is every prospect of a good business being done with him.

6. I propose to return the same way as I am now going. On returning to Seistan from Meshed, I shall travel either by riding camel or on horse-back, and will try and get *daks* laid for me the whole way, through the Political Agent, Captain Webb Ware.

Sale of Tea in India.

The following circular letter has been issued by the Secretary of the Indian Tea Association, London :—

"With a view to develop the market for tea amongst the natives of India, a Committee was recently formed in Calcutta to consider the question, and submit a scheme for carrying the idea into effect. The Committee recommended that the arrangements be made for establishing an agency under an energetic and experienced Manager, with headquarters in Calcutta, and employing travellers to visit the bazâr in towns and villages throughout the country, and induce the local dealers to take up the sale of tea, and also to arrange for its sale at railway stations, mills, coal mines, and other centres, where numbers of natives congregate or are employed. To enable the scheme to be carried out, proprietors are invited to make over to the agency, without charge, a certain quantity of tea annually for three years, for distribution, or, if preferred, a money contribution may be given instead. It is anticipated that it may take them four, or perhaps five years to develop a large market, but during the first year it is believed the Agency may be able to

dispose of about 2,000,000 lbs. of tea, or, say, rather more than 1 per cent. of the Indian crop, and the Association would be glad to receive promises of support on this basis for three years, during which time it is hoped that a market for the sale of tea to natives of India may be firmly established. I am accordingly to ask you to let me know, at the earliest possible date, the amount of the contribution, either in tea or money, which you are prepared to make towards the scheme annually for three years. In view of the failure of the proposed scheme for restricting output, it is of vital importance, in the interests of the industry, that everything possible should be done to enourage consumption, and find new markets for our teas, and the Committee trust that proprietors will give the support required to enable the present scheme to secure the large field for the consumption of tea, which is believed to exist in India, to be carried out. I shall be glad if you will favour me with a reply at your earliest convenience."

COFFEE IN S. PAULO.

THE PRESIDENT'S LATEST MESSAGE.

The following extract from a message addressed to the Congress of the State of S. Paulo by the President on the 7th April, 1901, is referred to in our leading columns:—

AGRICULTURAL INTERESTS.

Agricultural interests are of the greatest importance. They may even be considered preponderant in this part of the republic where we pride ourselves on our energy and perseverance.

Despite the great difficulties arising from the fall in the price of coffee, planters are displaying great activity in the promotion and development of the economic forces of the State which have already given good results.

Plantation of cereals is being carried on on a large scale.

In municipalities like that of Tatuhy production is already considerable and is said to be surpassed in others. The grape is cultivated in different parts of the State, in many cases with excellent results, Dr. Luiz Pereira Barreto, author of a valuable monograph on the art of Wine making, being worth of particular mention. Sugar-cane, manioc, tobacco, wheat, and lucerne are also cultivated in different districts, whilst fruit growing is increasing rapidly and has given good profits to small farmers. Aramina to planters seems to offer good profit and promises to revolutionise the spinning and weaving industries. Impartially considered, all these facts show how unfounded the accusation of excessive routine in our industries and of exclusive attention to coffee planting really is. Without doubt, coffee is and must be the mainstay of the State, because at present it constitutes the greater part of its wealth and furnishes most of its revenue. Moreover, it is coffee that provides most of the bills of exchange and is, consequently, the principal factor in the balance of our foreign trade. Coffee cultivation in the State is enormous and its value very considerable. During the last nine years shipments were as follows:

Financial years.	*Kilograms.*	*Official value.*
1892	245.456.719	251.815:025$228
1893	169.216.720	214.057:479$968
1894	174.444.912	232.346:430$888
1895	262.375 176	294.295:419$366
1896	240.395 503	272.506:960$749
1897	343.521.826	304.578:830$542
1898	346.077.280	252.827:639$560
1899	363 465.115	264.076:840$548
1900	368.700 935	266.784:094$879

It will be easily understood from these figures, how profoundly discouraged planters must have been by the fall of prices after having been so long accustomed to large profits. Long ago however, the tremendous expansions of plantation alarmed the authorities and impressed them with the necessity of finding new markets for these products.

In 1896, foreseeing the crises that the over-production was sure to bring, the Presidents of this State and of the State of Espirito Santo addressed to the governors of the other coffee States an invitation to a conference for the purpose of considering measu for a systematic propaganda in favour of the coffee in consum markets.

In his last message the President of the Republic referred complimentary terms to this movement although at the time action of the two governors were accused of having alarmed markets by calling attention to the increase of production; sin then the fall has been still more marked. coffee being sold at San at this moment at less than 5$000 per 10 kilos. Undoubtedly i a very low price especially with an equally large crop already up us, but the situation must be fixed without exaggerating their effe nor ceasing to struggle against them. Crises that originate excess of production such as this must form their own reme The fall of prices will thus stimulate consumption and restr further production by curtailing planters' means of extension even maintenance.

Undoubtedly other coffee producing countries will likewise f the fall and have to contend with difficulties as great as ou Planters in Java and Sumatra already complain of the damage flicted by the over-production of this country and maintain t the future of coffee will be everywhere controlled by conditi here. In Mexico, the West Indies and Central America complai are also heard that coffee is no longer profitable in consequence our competition.

After spending so much labour and money on raising the cof industry to its present proportions, it would be a tremendous m take to abandon the struggle when the exceptionally favoura conditions and the fertility of our soil and the tenacity of planters are the most certain guarantee of ultimate success. coffee cultivation has to be abandoned anywhere, it will not S. Paulo, where the conditions of resistance are better than a where else!

What is wanted is that planters, merchants, and Governm should work all together, and harmoniously for the common end a give no attention to fanciful measures that can effect no remedy and only make things worse.

To cut down working expenses, improve their process, and secu permanent and steady labour, should be the aim of planters th imitating the example of countries where production is far mo insignificant, but better prices are secured by better produc On the side of *commissarios*, they should aim at extending markets and opening new ones as well as at organizing lo elements of resistance to speculation and the eliminations of usel middlemen and consequent reduction of commission and dir dealing with consumers. The Santos market, important as it is now too narrow for operations so vast and branches of seve exporting houses have, we are informed, been already started America, and Europe, whilst a few planters have commenced selli direct to consumers with good results. Energy and agitation ca not fail to produce good results for planters if persisted in. By *Brésil* I observe that during the last few days a new house for clusive sale of Sao Paulo coffees was opened in Paris by Snr. C ceiçao. with the object of promoting consumption and raising the putation of Brazilian coffees so unjustly depreciated by retailer

The responsibility of the Government, deriving as it does nea all its revenue from coffee, cannot and has not been overlook By promoting immigration, improving the means of transpo reducing railway charges, funding agricultural schools, and enco aging mortgage banks and other cognate measures, the Governm has already done much to benefit the planting interest.

Above all it is requisite to know the precise position and ext of the Coffee industry here and elsewhere and for this end efficient statistical service is being organized.

Up to the present we have relied exclusively upon incompl information gathered from Consuls' reports, or supplied by hou heavily interested in the coffee trade. We must free ourselves fr so dependent a position by the organisation of a thorough trustworthy statistical service of our own. Something has alre been done in this direction and no exertions will be spared to arr at a thorough knowledge of the situation of Agriculture in t State.

We must go still further: the information afforded by Cons is not sufficient and a measure will shortly be proposed for organisation of more satisfactory statistics of the coffe trade industry outside as well as within Brazil.

NOTES.

Java Cinchona and the Volcanic Eruption. An Amsterdam bark importer states that, so far as is known in his city, the volcanic eruption in Java has not destroyed a single bark plantation.

Java Cinchona. The shipments from Java for the first half of May amounted to 228,000 Amsterdam lbs. and second half 502,000 lbs.—total 730,000 lbs., against 816,000 Amsterdam lbs. in May last year, and 666,400 lbs. in 1899.

Batavia Quinine Auctions. In reference to the auctions of Java quinine in Batavia, the *New York Commercial* under date of May 15 reports that a rumour is current that there will be no further sales, but why they are to be abandoned, as alleged, is not stated.

Coffee. The *American Grocer* waxes amusingly. It gravely announced on the 15th May, 1901 :—"The Java crop for 1901 is about gathered. Picking of Ceylon crop, also Brazilian crop, just beginning. Harvesting continues until September." The reference to the Ceylon coffee crop is distinctly precious.

The Glasgow Exhibition. The *Daily Graphic*, of May 17th, in a notice of the many attractions of the Glasgow Exhibition, says :—"Among the more curious and among the busiest is the Ceylon Tea Stall, devoted, as its name implies, to the cup that cheers and according to professor Victor Horesley, has no narcotic effect on brain tissue."

Pepper in Trinidad. Plants of *piper nigrum* in Trinidad have grown well but are not sufficiently advanced to produce seeds. The old plants have produced seed yearly. A demand has arisen for this, among European seedsmen for raising plants for the supply of some of the African Colonies. Crop has all been disposed of as growing seeds.

Messrs. Gow, Wilson & Stanton, London. This firm announces that it has made an arrangement by which Mr. A. S. Moore, late of Messrs. Porter, Moore & Co., will become associated with it from 1st June, 1901. Mr. Moore was for some fifteen years connected with Messrs. Moran & Co., of Calcutta, and during the last two or three years has been working in London.

Amsterdam Bark Market. The amount of bark announced for sale at the Dutch auctions in Amsterdam on June 13th, amounted to 3,869 packages, containing 330,531 kilos. (nearly 727,168 lbs.). The shipments from Java for the second half of May are reported to be, in round figures, 500,000 Amsterdam pounds which makes 730,000 pounds for the whole month.

Cheap Coffee. There was a time, observes the *American Grocer*, when dealers would pile up coffee in their lofts when it touched 6 cents; but now, when the area of production has been greatly enlarged, steamers supplemented by sailing vessels, machinery brought into play on the plantation and at the warehouse, the relation of supply to requirements becomes a somewhat uncertain factor. We find old experienced coffee importers saying: "I don't propose to load up with coffee until it touches 4 cents."

American Coffee Wanted. The *Evening Journal* of Albany, N. Y., writes :—"As there is ample room for the expansion of the coffee-raising industry in all the islands recently added to the United States, it is only a question of enterprise how soon this country will cease to be dependent for its coffee supply upon any foreign country, and the $50,000,000 or more which American coffee consumers pay out every year will remain in circulation among the people who live under the American flag." Yet the Americans will probably find it cheaper to continue to buy Brazilian coffee.

Cinnamon. The crops for 1900 were good, the result being an increase in export of quills to the extent of 163,080 lbs., and of chips to the extent of 34,279 lbs. Prices, notwithstanding the increased production, have been maintained. The export of wild cinnamon, which for a short time threatened to injure sales of plantation and garden cinnamon, has now practically ceased. The value of wild cinnamon in London is barely sufficient to pay the freight and dock charges there. In one or two instances wild cinnamon-chips have beenmixed to a small extent with usual chips, and exporters will have to very closely watch deliveries.

Packet Teas at Galle. A Galle correspondent of a Colombo paper writes :—"Hitherto the local retail prices of good estate teas have been prohibitive, or rather much above the average of teas sold at the Colombo sales. Regular consumers who could not afford to pay Re.1 to Re.1·50 per pound were forced to buy dust at 50 cents or very inferior coarse leaf at about the same price. Of late, however, a retail trade has sprung up in packet teas. Good Broken Pekoe, Pekoe and Souchong from some of the estates are being retailed in one-pound lead packets at very reasonable cash prices. It is to hoped the public will encourage the venture in every way.

The Hankow Tea Market. Recent advices state that the Hankow Tea market has opened, without much success in any direction. The buyers, British and Russian, have all arrived there and have been disappointed because of the bad quality of tea this year. The reason given for this is that in the Spring just gone by when the leaves were just coming forth there had been too much rain in the tea districts whilst at the time of plucking the leaves, a sand storm was experienced. Consequently, the majority of leaves became muddy and unclean. The market price for Ningchow or Oolong Tea (Black), varies from Tls 45 to Tls 50 per picul.

Prospects of Tea. A City Man wrote under date 18th ultimo to the *Ceylon Observer:*—The export from this country, you will see, has been increased a million pounds per mensem. If your March exports to this country from Ceylon are also a million more per mensem below last year, what more is wanted? India will, I have no doubt, follow Ceylon in restricting its output. The "Thirty Committee" should keep the Indian Tea Planters' Association informed of what is going on. Why not send them a list of

the estates that have agreed to pluck finer. The Russians will apparently get their usual supply from China. I hear the season has opened at Hankow.

Tea Culturé in Natal. A Home paper remarks :—To Mr. William R. Hudson, of the Clifton tea estate, the credit of the present tea industry is due, and the estate now comprises 3,000 acres on the Nonoyoi River, fifty-five miles from the city of Durban, the river furnishing the necessary water-power. Coolie labour is used in preference to that of the Kaffirs. A coolie can pick forty-two pounds of green leaf per day, the Kaffir only nineteen pounds. The picking season in Natal commences generally early in September and goes on till about the end of the following May. The months of June, July, and August are taken up with digging and manuring the land and pruning the plants. The tea is picked by the coolies, mule-carts in different gangs collecting the leaf. Men and women are employed in the picking process.

Tea in the U. S. A prominent tea firm of New York states that the quantity of tea received into United States is little larger than last year; quality better; prices lower. The *American Grocer* writes :—"There are lots of folk who eat anything without regard to taste, just because it is "suthin'" to chew; and there are lots of other folk who drink anything, tea included, without a thought of flavour, just because it is a warm drink. Between the swallowers, the tasters, and the discerning enjoyers, between 85,000,000 and 90,000,000 pounds of tea—mainly Chinese and Japanese—are used by all Yankeedom. The East dotes on black tea—the Congous and English Breakfasts. West of New York the Japans and the Greens tickle the palate, and infuse paradise into the myriad drinkers. Forty million out of eighty-five million pounds annual consumption are Japan teas."

Rubber in Ceylon. Mr. Francis J. Holloway writes from Kepitigalla, Matale, to the *Ceylon Observer* :—Now, as the price of tea has gone down and things generally are looking gloomy, most planters are on the look-out for some other products that would pay. And as it may be of interest to many planters, I enclose a report and valuation on a consignment of Pará rubber despatched from this estate, which speaks for itself. Sample of this same consignment is lying at your office :—Report and valuation on a consignment of Pará rubber sent from Kepitigalla estate, Matale, Ceylon :—"Good clean sheet valued at 3s. 9d. per lb. This is very nice rubber, as good, *or better than the finest Pará rubber*. Therefore, when you see the quotations for fine Pará rubber, you may assume that is the value of your produce. Rubber like yours is *readily saleable in any quantity*."

Coffee in London. Though there has not been a strong demand, says the *Produce Markets' Review* of 25th ultimo, the supplies brought to auction were all sold at steady to rather dearer rates. Notably is this the case with East India, the market for which has shown signs of hardening for some time. Naidoobatum met with particularly keen competition, and sold at 2s. to 3s. advance from the previous sales. A good supply of foreign cleaned Costa Rica attracted attention, and very full rates were paid, while Guatemala and other Central American sorts sold at pri quite equal to the highest point of last week. In the termi market there is hardly any change to note; a report that Brazilian Government would destroy a proportion of coming crop was not received with credence, and, though attempt was made on the strength of it to put up quotatio they were not maintained for long.

The London Tea Market. The weekly special telegram dat 15th instant, from Messrs. Gow, Wils & Stanton to Colombo reports that the London mar generally is steady, and that the market for medium liquori Pekoes and Broken Pekoes, as well as for common Pekoes a Broken Pekoes is also steady. The price of fair liquori Ceylon Pekoe Souchong is 5d and the average price of Ceyl tea sold on garden account this week was 6½d (both same last week) as against 6d and 6¾d respectively in the correspon ing week last year. Reuter reports that common kinds Ceylon tea are steady, and the others firm. Pekoe Souchon are quoted at 4⅜d and the average for the week at 6½d (bo same as last week). 32,000 packages of Ceylon tea w offered for sale, and all were disposed of; while of 15,000 packages of Indian tea offered, 13,000 found p chasers.

Ceylon Tea. The special correspondent of *Daily Telegraph* writes in the cou of his letters about the Royal Visit to Colombo :—The develo ment of tea cultivation has been marvellous. Wherein, th lies the secret of the marvellous diversion of a staple tra from an old-established centre to new and younger riva who, moreover, were handicapped in their dealings, owing the artificial rise in the value of the rupee, due to legislati which operated to the disadvantage of the Indian and Ceyl planter in competition with the Chinese manufacturer? T secret will be found in the value, purity, and cleanliness the tea manufactured under European supervision, and scien fically prepared by machinery, as compared with the primiti methods of Chinese hand labour. It is said by those speaki with knowledge that, if people at home knew how the Chi tea was prepared for the market, they would never dri it again.

A Hint to British Capitalists. In the *Mining Year Book for* 19 the author, Mr. Broomhead, remark —"It is a noteworthy fact that the world's total gold production in 1898—about £60,000,0 —over one-half, was obtained from territory now forming t British Empire, and considering the prospects of increas production in the Transvaal, Australasia, British Columb India, Rhodesia, and the West of Africa it is very proba that within the next few years the British Empire will responsible for appreciably more than 50 per cent. of t total gold production of the world. If Englishmen o realised the vast areas within British territory still unexplo or unprospected for the precious metal, they would still m confine their capital and energies to those regions, coveri one-fifth of the globe, where the British language, Brit freedom, law and justice, as well as the inherited colonisi energy of the Briton, prevail." We can but remark, He Hear!

Rubber Classification. In Brazil rubber is classed *Fina*, *Entrefina*, *Sernamby*, and *C*

ho, the *pauta* or official valuation of the different kinds being rrived-at from information furnished by buyers from which n average is struck. There are now only two official classifi-ations, *fina* and *sernamby*, that of *entrefina* having been offi-ially abandoned. For *Caucho* from Pará *sernamby* rubber prices are adopted. Manáos rubber is always quoted some-what higher than Pará in the local markets, because it is much drier. The Pará rubber coming from districts com-paratively close has less time to dry than the Manáos arti-le, which is only sent to market months after it has been collected in consequence not only of the far greater distance, but of frequent lack of communication when the waters of the upper branches of the Amazon are low. *Caucho* is sold on the market at prices slightly over *sernamby* and *sernamby le caucho* also enjoys slightly higher quotations than *sernamby le prancha*.

Quinine and Cinchona. Referring to the fact that only a short while ago everybody recommended purchases of quinine as a safe means of making money, The *London Commercial Record* says :—Those who have followed the advice have probably seen some small increase in value of their purchases, but hardly sufficient to induce them to realize, and now the movement has practically come to a stop, and all holders are in great trepidation lest the shipments of Cinchona Bark should increase, which would mean an immediate collapse of the little rise. There is no doubt the high value paid for Bark—2d per unit—is begin-ning to attract the attention of planters, and many are said to be considering seriously the idea of resuming its cultivation in Ceylon in preference to the overdone tea. Some time, of course, would elapse before the young trees would yield sufficiently, and before an area would be planted large enough to render its cultivation remunerative. The number of acres planted with Cinchona in Ceylon had receded to 1,189 acres in 1898, as against 64,000 acres in 1883, and 50 acres in 1867. No wonder, therefore, that the price per unit is now 2d. It will be very interesting to watch the future cultiva-tion of the Bark in order to see whether the determination of the planters is to be taken seriously or not.

Dr. Johnson in his Cups. The *Athenæum*, reviewing a work on the 18th century, has the following amusing extract :—"Cumberland relates how once at his house Johnson drank his dozen cups of tea :—"At the tea-table he made considerable demands upon his favourite beverage ; and I remember when Sir Joshua Reynolds at my house reminded him that he had drunk eleven cups, he replied : 'Sir, I did not count your glasses of wine ; why should you number up my cups of tea ?' And then, laughing in perfect good humour, he added : 'Sir, I should have released the lady from any further trouble if it had not been for your remark ; but you have reminded me that I want one of the dozen, and I must request Mrs. Cumberland to round up my number.' When he saw the readiness and compla-cency with which my wife obeyed his call, he turned a kind and cheerful look on her, and said : 'Madam, I must tell you for your comfort you have escaped much better than a certain lady did a while ago, upon whose patience I intruded greatly more than I have done on yours ; but the lady asked me for no other purpose than to make a zany of me, and set me gab-bling to a parcel of people I knew nothing of ; so, madam, I had my revenge on her, for I swallowed five-and-twenty cups of her tea, and did not treat her with as many words.'"

Cacao in Trinidad. The Superintendent of the Royal Botanic Gardens, Trinidad, reports :—Several trees of *Theobroma bicolor*, introduced from Nicaragua in 1893, have fruited successively during the past three years, and seeds has been distributed to other West Indian Stations. The species may now be considered as fairly acclimatized, and there is little fear of its being lost to our flora. The produce is of no use as commercial Cacao, and is chiefly of botanical interest. Several trees of *Theobroma pentagona* introduced at the same time have also fruited, enabling us to raise a goodly number of plants for distribution. The permanent plot of this kind at the Experiment Station, has made good growth during 1900, and the Depart-ment will soon be in a position to offer in quantity both plants and seeds. The beans produced here are quite equal in size to those produced in Nicaragua, and are nearly double the size of high class Trinidad Cacao. They are white in colour in the interior, take little fermenting and of excellent flavour. Another strain brought from Nicaragua with the preceding kinds is what is known as "Nicaraguan Creole." The trees planted by us have not as yet borne fruit, but from trees distributed to planters, I lately received a pod which was quite true to the type. The pods are not large, but the beans are very large, and of superior colour and flavour.

Indian Tea in London. There has been an improvement in the demand, says the *Produce Markets' Review* of 25th ultimo, the market showing greater steadiness, while for the better class teas firmer prices were in some cases noticeable. These latter grades are getting into a gradually smaller compass, and present rates will no doubt be maintained until a fair supply of the new teas arrives. This will probably be toward the end of July, which is somewhat later than last year, and the quantity shipped from Calcutta up to date is smaller than the previous season. The reports are favourable to an increased proportion of the medium and finer teas coming by the early shipments, and these will doubtless meet with a good reception and a distinctly improved demand, particularly as the duty-paid stocks will be materially reduced in the meantime. The common descriptions continue ample to meet requirements, and as Ceylon growths are coming forward freely and show on the whole superior value, the market is likely to be more favourable to buyers than otherwise. At any rate, there is a considerable surplus in the stock as compared with last year, the latest statistical return putting it at about 11,000,000 lbs., and it is evident, therefore, that any improvement in values, especially for the lower and less desirable sorts, is not likely for some time to come. At the public sales 12,453 packages were catalogued, mainly consisting of teas of ordinary quality, and excepting in a few cases the bidding was slow, and 1,084 were withdrawn.

The Batavia Quinine-Market. Although the results of the quinine-auctions in Java have been very satis-factory, according to the *Soerabaya Handelsblad*, the object in view has only been partially realis-ed, as a definite ratio between the price of bark and that of quinine (which will be the only means of preventing exces-sive fluctuations in the bark-quotations) has not yet been

reached. For this reason endeavours are now being made to establish new markets for cinchona-auctions, in the first place at Batavia. The Bandong factory is by no means able to work up the whole of the bark produced in Java; for this purpose at least two, probably three, other factories would be required, and although the erection of new quinine works is under consideration, a long time is certain to elapse before this project will be realised. Meanwhile, the planters, being compelled to send the bulk of their production to London and Amsterdam, are not able to obtain the most favourable prices. The average gross proceeds of the Batavia auctions in 1900 were 23·21f. per kilo., equal to an Amsterdam unit of $9\frac{7}{20}$c.; but the average unit at Amsterdam in that year was $10\frac{1}{3}$c., or 1c. higher. In 1901 the conditions so far have been more favourable, probably owing to the fact that the auctions are now held six days after those at Amsterdam. The average prices obtained at the first two auctions at Batavia were $8\frac{4}{100}$c. and $9\frac{11}{100}$c., against $7\frac{1}{2}$c and $8\frac{15}{16}$c. at Amsterdam. The fact is that the larger the quantity of quinine sold at the Batavia auctions, the more the values of quinine and bark will agree.

GENERAL ARTICLES.

INDIA AND THE RUSSIAN TEA MARKET.

At the recent meeting of the Indian Tea Association, a letter was considered from Messrs. Cresswell & Co., Tea Brokers, regarding the Russian Volunteer Fleet. Messrs. Cresswell & Co. stated that they had written to the Colombo Agents of the fleet, asking if one of their steamers could be run monthly from Calcutta to Odessa, provided a full freight was guaranteed. The Agents replied that the steamer authorities in Odessa did not care for their steamers to visit Calcutta on account of Plague. The teas could, however, be sent to Colombo for transhipment to Odessa.

A representative of the *Times of Ceylon* called at the offices of the Russian Volunteer Fleet the other day with regard to this matter. Mr. Tchokoff said he had received a later letter from the Indian Tea Association pointing out that deaths from Plague were not now numerous, and suggesting that the authorities at Odessa had perhaps acted under a misapprehension of the seriousness of the disease at Calcutta. The Association asked for the good offices of the Agents in Colombo to induce the Odessa authorities to reconsider their decision, and also asked what freight would be charged for tea sent to Odessa *viâ* Colombo. Mr. Tchokoff said that it was not of the slightest use Calcutta hoping to get any of the boats of the Fleet to call there as long as Plague continued. The regulations at Odessa were absolutely firm on the point, and if any vessel of the Fleet did call, it would not be admitted in Odessa. Another point was that the Volunteer Fleet, with its eighteen ships, was often hardly sufficient for the work it had to do, and Colombo at present would have to wait beyond the ti expected for a vessel, owing to the pressure. Of course, later when Calcutta got clear from Plague, the matter of sendin vessel from Calcutta to Odessa might be favourably considered, Calcutta were to guarantee a satisfactory cargo. With regard Indian Tea being exported from Calcutta *viâ* Colombo, he w engaged at present in answering the question of the Tea Assoc tion regarding freight charges. He thought that arrangeme might be made with the Messageries Maritimes or some ot Steamship Company for through charges. At present there w no direct trade in tea between Calcutta and Odessa, but there w a growing trade through London. The Agents of the Volunt Fleet in Colombo would do all they could to meet Calcutta in matter of freight charges.

THE TEA TRADE.

According to an old newspaper, the tea habit is much more u versal than is commonly supposed, as the following schedule prove:—

People of all classes take tea. Dead people take eterniT; people, festiviT; nice girls, puriT; free people, liberT; fashiona folks, socieT; good people, pieT; successful candidates, major editors, honesT; solemn citizens, graviT; funny roosters, levi orthodox citizens, deitT; polite people, suaviT; bashful fello modesT; kind ones, chariT; bachelors, singulariT; short peo breviT; cunning folk, rascaliT; romantic simpletons, novelT; pectable people, ChristianiT; artistic people, beauT; strong peo responsibiliT; criminals, penalT; vicious cusses, enmiT; groc varieT—but the T-pot cracked at this juncture.

Among the fragments were found: Wedded couples, felic Mormons, multipliciT; Quakers, tranquiliT; the asylums, insa mediciT, poverT, etc.; pretty girls, incomprehensibiliT; lov uniT; everybody, longeviT; the one who does not pay his subsc tion, T-total depraviT.

Blended tea is more apt to suit the average consumer tha straight tea. It takes a connoisseur of flavour to appreciate delicate aroma of the rarest tea. We have seen experts spew of their mouth tea that cost $5·00 per pound in China, sim because the flavour was new to them, and their palate ignoran what constitutes an exquisitely-flavoured tea.

The main object in making a blend is to have the tea give up qualities in the boiling water; and that the flavour shall be grat to the palate. All the better if it has a distinctive flavour, a t different from the general run of tea. This enables the consu to identify your special blend, and to so accustom the palate particular flavour that the user will become wedded to it; and t continuous demand is insured.

Hard water, such as is impregnated with lime, will not m good tea. Soft water is more apt to draw out the extractive ma in the leaf.

In order to build up a trade in blended tea, the taste of the sumer must be studied. If the popular demand is for a tea diffe from the standard desired to be established, patience will required if you are to educate patrons to the use of something Don't try to force the change. Begin by serving a cup of blen tea when they come to the store; or, if you have a lunch coun serve a fine tea properly infused, and thus pave the way to change.

An old tea merchant says the best way is to "fall in with prevailing taste of customers, and then introduce or sug improvement gradually, from time to time."

While cup quality should be the first consideration, it is bes combine good style of leaf with fine drawing quality. The ey a factor that cannot be ignored.

If you give your customers an opportunity to drink fine they will soon refuse to have anything else, no matter how m pounds of tea competitors may sell for $1·00.

Mr. A. R. Robertson says: "The tea trade is dead—wors two years. I am looking, though, for speedy improvement, feel confident a general advance will come all along the line wi three months."

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

TEA IN THE DOMINION.

Mr. Ross W. Hayter, of Toronto, writes to the *Home and Colonial Mail* :—

"Being an old Indian Planter, and having been engaged in the Indian and Ceylon tea business in Toronto (Canada) for many years back, I have taken a great deal of interest in the many proposals made to better the state of the tea market. And while watching with much interest the very energetic campaign that has been carried on by Ceylon for some years, and which has shown such great results, especially here in Canada, I have been surprised, as well as disappointed, that as much at least has not been done by India. They did have an energetic and able representative in the United States for three or four years with a small amount of money at his command with which to advertise and he effected wonders, I think, with the amount at his disposal. But what is wanted to turn the consumption of the one hundred million pounds of Japan and China tea, that is now consumed annually in the United States, into a consumption of Indian and Ceylon tea, is the expenditure in advertising, for the next three or four years, of at least forty or fifty thousand pounds sterling per annum. This, well spent in the daily Press, would force Indian teas on the attention of all tea-drinkers; and I venture to say that, in five years from now, over fifty million pounds of Indian tea per annum would be consumed in the United States.

You will ask how this money is to be raised. Well, why can it not be raised as I understand the planters of Ceylon have raised theirs for years back? The imposition of an export duty of one-sixteenth of a penny per pound on all tea exported from India would create a revenue of £45,000 per annum; that is, basing the calculation on the output of Indian tea last year, and the expenditure of such a sum would enhance the value of Indian tea twenty-fold the amount expended.

It may be said that the Planter is not in a position to stand this one-sixteenth of a penny per pound. The question just occurs to me, who would pay it? Would not the consumer pay it in the long run, instead of the grower or exporter?

In any case I consider that a real live campaign, carried on in the United States, is the only feasible plan that will bring about the position so much desired by us all.

If one wants to see a recent result of advertising, I have only to point out the progress which Ceylon green teas have made in Canada during the past eighteen months. One firm, to my knowledge, the "Salada" Tea Company, has for months back taken, on regular orders from one garden in Ceylon, over four hundred half-chests per month. Practically every wholesale house in Canada is now handling Ceylon green teas, and they are all predicting that they will entirely displace Japan teas. This has been brought about, first, by superior quality, and, secondly, by the tremendous advertising that "Ceylon green tea" has received. To the Indian Planters the moral is: "Go thou and do likewise."

THE SURFEIT OF TEA.

More than enough perhaps has already been written about the ailing condition of the tea industry and there have been many suggestions as to the treatment to be applied. It is obvious however that the advice has not always been based on a true diagnosis of the case.

The letter of our correspondent "One deeply interested" published last week, should do much to clear away any lingering misconception as to the real cause of the evil. His straightforward and uncompromising avowal that over-production is mainly responsible for the present trouble, cannot fail to carry conviction to the mind of every impartial reader. The fact is that the tea community in this country has got to exercise strict self-denial at once and for some time to come. We do not mean simply by giving a rest to parts of a garden or by finer plucking. Those are partial remedies and do not cover the whole evil. What is wanted, to speak summarily, is an absolute cessation from sowing, we mean of course no increase in the actual tea-bearing area. Ever since the last boom in tea, companies have been incontinently adding acre to acre, and a striving after quanity rather than quality of output has been the rule. And yet there is wonderment among those engaged in tea that the industry has fallen on evil days, and even now some have hardly grasped the fact that the whole trouble has arisen simply because the overplus was created before a new market was found for its disposal. Now the cry is all for opening out new markets. It is better raised late than never, and the sharp lesson of the past two or three years will not have been in vain if it teaches as a hard and fast rule that it is new-found markets which call for large extensions in tea and not *vice versâ*.

We have said that the tea industry will have to exercise considerable self-denial. There is room for it in more than one direction. We are aware that at present the Agents are hard hit in common with all whose interests lie in tea. But it is notorious that in times of fair weather Agents' commissions are often a dead weight on the working of gardens. For example, there is no obvious reason why garden stores should not be ordered direct from the garden instead of through Agents, except that the custom has always been otherwise. No reason, that is, in the case of a garden paying its way. We should prefer too to see the salaries of garden managers, when better times come, *fixed*. Let them be liberal, but let the customary commission on the yearly outturn or on the profits be abolished. At all events, the commission on the outturn, for there will then be less temptation to the manager to favour extensions or to pluck coarsely regardless of the quality of tea produced. We believe that it is commissions which are the veritable tax on tea, it is idle of course to assert that the increased duty has brought about the fall in prices. Over-production once more is the root cause, and it is a fortunate circumstance that this year natural forces have largely checked it. But we do not hesitate to add that the charges on the industry which intervene between producer and buyer will have to be sensibly lessened if a majority of gardens are to recover, otherwise it will be a case of continuing to bleed a patient who has lost too much blood already.—*Capital*.

THE APRIL COFFEE MOVEMENT IN THE U. S.

The deliveries of coffee in April were heavy, and have only been exceeded once in the United States since January, 1900; but in Europe they fell below the monthly average for this year. The month was notable for a bear movement, which carried prices from $6\frac{3}{4}$ cents to $6\frac{1}{8}$ cents for No. 7 Rio, closing at 6 5-16 cents. There was a decrease of 53,165 bags in the world's visible supply. Receipts at ports in Brazil surpass any former record. The world's crop added to present visible supply will furnish over 22,000,000 bags—possibly 23,000,000 to 24,000,000 bags, to meet annual requirements of about 15,000,000 bags. The future of the market must eventually be governed by the relation of supply to demand, rather than by minor incidents, such as a rise or fall in Exchange or speculative manipulation. The safe plan is to buy for present and nearby wants.

Messrs. Duuring & Zoon (Rotterdam), in their last circular upon the situation, estimate the 1901-1902 Brazil crop at 12,000,000 bags. They note the fall in the price of Santos coffee since April, 1900, of $52\frac{1}{2}$ per cent., against an advance of 58 per cent. in Exchange. They say:

"It is true that to some extent lower railway freights and cheaper labour, owing to higher exchange, are benefiting the fazendeiro, but not to the same proportion, and the question has to be studied up to what price coffee can be grown and shipped. Are commissarios willing to advance money? What about exchange, a further advance till July 1, and afterwards? These questions sufficiently denote how involved the position of coffee has been getting—a crisis, indeed, which is bound to lead to a solution; the sooner the better. The only remedy is low values—sufficiently so as to carry the full weight of the position on Brazilian shoulders, as the natural consequences of excessive production. Higher values mean more coffee and encouraging cultivation of coffee.

"San Salvador.—The present crop is now estimated at 165,000 bags (70 kgr.), against 230,000 bags last year, and Nicaragua at 70,000 bags (70 kgr.), against 87,000 bags last year. Negotiations between France and Venezuela are likely to lead to a satisfactory result, so that the differential duty on coffee from said republic into France may soon be abolished. Difficulties between Germany and Haiti have decided the German Government to double the duty on merchandise arriving from Haiti, thus practically preventing shipments of coffee from the latter country to German ports."

The following statement shows the April movement and general position of the article:

	Bags.	Bags.
Stocks, April 1, 1901—		
United States	1,154,094	
Europe	3,813,183—	4,967,277
Receipts during April—		
United States	659,948	
Europe	743,879—	1,403,827
Total supply, May 1		6,371,104
Less stocks, May 1, 1901—		
United States	1,195,858	
Europe	3,876,254—	5,072,112
Deliveries, April—		
United States	618,184	
Europe	680,808—	1,298,992
Deliveries, April, 1900—		
United States	444,554	
Europe	687,956—	1,132,510
Increase as compared with April, 1900 ...		166,482
Deliveries (United States and Europe), April ...		1,298,992
Do. do. do. March ...		1,280,733
Do. do. do. February ...		1,067,607
Do. do. do. January ...		1,328,216
Do. do. do. December ...		1,180,838
Do. do. do. November ...		1,281,638
Do. do. do. October ...		1,340,059
Do. do. do. September ...		981,198
Do. do. do. August ...		917,608
Do. do. do. July ...		1,219,058
Total for ten months, 1900-1901		11,895,947
Do. do. 1899-1900		12,916,080
Decrease as compared with 1900-1901 ...		1,020,133

The April deliveries in the United States consisted of 511,486 bags of Brazil; 106,698 bags of all other sorts.

The visible supply of the world on May 1,1901, was 7,359,112 bags, against 7,412,277 bags on April 1 (a decrease of 53,165 bags), and 6,144,418 bags on May 1, 1900.

The visible supply on August 1,1900, was 5,817,759 bags, so that in ten months it has increased 1,541,353 bags.

The total receipts at Rio and Santos for the first ten months of the trade year were 9,906,000 bags, against 8,453,000 bags for the same time the previous year, and 7,870,000 bags in 1898-99.

Trading in options on the New York Coffee Exchange in April reached a total of 646,750 bags. The lowest price for options was 5 cents for April and May; the highest, 6·20 cents for March. Spot coffee, No. 7 Rio, fluctuated between 6¾ and 6 cents.—*American Grocer.*

"NOTHING LIKE TEA"

We extract the following from the *Grocers' Journal*:—

There has been so little said or written on the subject of tea lately, that one is in some danger of overlooking the fact that tea is still, as it has always been, the chief glory of a grocer's business. Whatever the impetus secured for sugar by the new impost, the fillip given by the medical profession to the consumption of cocoa, the advantages or otherwise derivable from dealing in packet or proprietary goods, and the thousand and one articles added to a retailer's stock-in-trade with the assurance that they will command a ready sale and secure for the shopkeeper a marvellous profit—when all these have been duly weighed and taken into account, we believe the grocer will agree with us that there is absolutely nothing like tea, that alike from the retailer's and the consumer's point of view there is nothing to take its place as the leading commodity of the grocery trade. China tea has long been under a cloud, and this year we learn that even Russia is no longer a buyer except for the best quality of Keemuns. As to Australia and America, they have seemingly followed the example of Great Britain, and are confining their attention exclusively to the Indian and Ceylon growths, so that prospects for the Celestical Empire's product are by no means encouraging. Long-established customs, nevertheless, die hard, and there is still a spark left of the old-time frenzy at the advent of the new season's teas; moreover, certain connoisseurs declare that for delicacy of flavour and aroma no tea can compete with those grown in the Far East, and it may be th fickle fashion will some day decree a return to former predilecti in this line. Anyway, be it China, Indian, or Ceylon that is to chief in favour, it is hoped that the tea market will speedily sha off its lethargy and adopt a brisker tone. We are convinced th quality is the great desideratum; buyers want better teas wi which to tempt their customers, and where these are procurabl good and paying business is assured. For some time past most u pleasant rumours have reached this country of damaged, and the fore injurious, teas being craftily blended and manipulated, pri to being sent over here as sound commercial articles. Su rumours may not be authentic, on the other hand they have not be officially contradicted, and the public taste is so easily disturb that should there be a continuance of these reports the trade mu inevitably suffer. Prevention is ever better than cure; and in th matter the certainty that all imported teas were carefully sup vised at the bonded warehouses would do much to restore con dence where it has been shaken. The complaint, so often hea now-a-days—"I can't drink tea," should be made impossible, for, we have already asserted—there is nothing like tea.

CEYLON AND JAPAN TEAS IN CANADA.

The following letter, signed "P. C. Larkin, Toronto appears in the *Canadian Grocer*:—

"We read with much interest in this week's issue your arti headed 'Japan Tea Market Injured.' In it you state that Japan tea market has been 'difficult to understand,' and you go to state that, 'in spite of the material diminution in the amount imports, the market has weakened rather than stiffened.' personally, and without prejudice, cannot see that there is a reason for surprise. It is quite apparent to us that you have ov looked the strongest factor of all in bringing about the decrease the demand for Japan tea, and that is, the green teas of Ceyl Every wholesale house has, by this time, recognised the fact th there is no future for Japans, and that there is a great future Ceylon greens in Canada. Consequently, not only the wholes houses, but every bright retailer as well, are afraid to lock up w Japan teas, wishing rather to adopt a hand-to-mouth policy."

CEYLON GREEN TEA IN FRENCH CANADA.

Mr. Wm. Mackenzie writes to the *Times of Ceylon*:—

I send you some cuttings from letters from Mr. Larkin, and t of his branch offices. Perhaps you may find space for some of th You will see the work of trying to convert Montreal is a tedi and costly process. We cannot "*sweep*" the Japan teas into ocean. Our failure in that respect is what causes your conte porary to wonder. How I wish he had an opportunity of wav the magician's wand over those conservative French people! might first try his hand at inducing coolies with dysentery to t the sago and arrowroot their *dorais* give them, instead of beloved curry they have been accustomed to:—

William Mackenzie, Esq., 39, Netherhall Gardens, Lond England.

DEAR SIR,—I thought that perhaps you would be interested knowing how we are getting along with the sampling and wh results we are feeling from it, although it is a little early yet for to be able to intelligently speculate on the outcome.

The carrying out of this scheme is quite a task; nevertheless cannot but feel that it is a good investment and one that will us ultimately.

Some streets that we have already covered—such as Panet, Ples St. Hubert, Lagauchetiere, and others—we have succeeded in sell a little to nearly every storekeeper, but they will only purchas very small quantities. As an example, we sold to eleven men Plessis Street, and the total amount of the orders only amounte 90 pounds. They seem to order with fear and trembling.

Take the sampling, our advertising, salesmen's time, and delive we make nothing out of it, and I am sure in some instances it leave us a loss on the individual transaction any way; but, nev theless, we are accomplishing just what we have most desired accomplish, namely, getting the tea out, no matter how small quantity, so that when a person that we have sampled inquires it, they will be able to get it; otherwise to inquire for it in one

two stores and be disappointed would mean that our efforts went for *nil*.

It is the way with the French here; they are a slow, non-progressive people, but once they take hold and a demand is created, they will be equally slow to let go; at least I think so. Of course, everything hinges upon whether the tea is liked or not, and there is little doubt but what it will be; in fact, we are almost daily getting some evidence and encouragement in this respect.

I hope ere long to be able to write you more definitely in connection with this matter, as there will be a lot more samples distributed, and the result of the first orders sent out will have been made manifest.

I have just engaged another man to go into the French country districts and see what he can do. I am very hopeful that he will prove a success, but it is so hard to tell. However, we can only keep on trying, and if we are disappointed with one man, or in one course of action, we can only keep on changing until we get the results desired. The consumption of Japan in this Province is so great that, if we once get the upper hand of it, we shall be amply repaid for efforts put forth, but we shall have to keep on everlastingly hammering away—timidity now would be fatal.—Yours truly,

GEO. MANN.

MONTREAL, *May 7th.*

This letter will show you how laborious missionary work is, and that only *faith* in the future, as in religious missionary work, would justify its trouble and expense.

This firm is engaged in sampling as nearly as possible every house in Montreal with Ceylon green tea. Being business people, they know that there can be *no "sweeping"* out of the Japan teas. Patience is needed—and a deal of hard work.

Here are the other two extracts:—

DEAR MACKENZIE,—I have your valued favour of the 3rd instant to hand, for which many thanks.

Extremely glad to hear the good reports of the Ceylon greens all over. I can add to them that the week ending May 4th was the biggest we ever had with Ceylon greens. Our gross sales amounted to 4,592 lbs. The week before they were 3,304 lbs., and the week previous to that again 4,497 lbs. We have not heard fully about the sales last week yet.

In addition to the above figures there must also be taken into consideration the quantity of Ceylon green that we sell loose, and also that which is disposed of in our mixed tea.

If Mr. Owen predicts that a good percentage of his trade will in the not far distant future be Ceylon greens, we can predict also that we shall ultimately double our trade with them. We used to talk about some day selling 15,000 pounds a week [*i.e.*, black and greens], but while we were saying this we were apt to feel a little faint-hearted as to how long it was going to take to bring this about, just the same as we felt when we spoke about 10,000: but 15,000 does not look such an unreachable achievement now. We do not mean by this that we are going to get it with a few grasps, but we are going to get it, just the same, as sure as the sun shines; although we realize very very fully that we shall have to keep up the fight in order to break the hearts of those that are now opposing us.

Perhaps you will print this from Mr. Larkin in the *Canadian Grocer*.

The American mail this morning brought me many letters from United States and Canada, praising our green teas.

A New York firm writes:—"Don't let them ship poor cup stuff—no one here wants it at any price. If your good people don't keep us in a better position as to stock, it will be annoying and cause lots of trouble; this has been the fear all along, and has kept many from touching those greens."

Another New York firm, writing on 14th May, says:—"We have received orders from 136 retailers for the Ceylon greens, and our salesmen who at this season usually solicit orders for new crop Japans to arrive, are using their influence to induce customers to take Ceylon greens instead. Our orders are all for the Orange Pekoe grade, and we believe we can cause this tea to supersede Japans very largely in our Western States." It is only two months since they bought the first chest.

In the States the four grades are in request. This is the case also in Canada with grocers who deal in *loose teas*. For packet teas coarser grades are preferred—because cheaper; and because, in packets, the *eye* does not so much influence the purchaser. Not demand, but a regulated supply, is now the difficulty.

THE INDIAN TEA SUPPLY CO., LD.

The report of this concern is melancholy reading, says *Capital*. The wonder is that the company continues to carry on, year after year, such a pottering and unprofitable existence. After trading for thirteen years, it has managed to get rid of two-thirds of its capital, and to all appearance, the remaining third is doomed to follow, if the current style of doing business is to be carried on. During the year ended 31st March, 1901, the net loss is given as Rs.2,667, which brings up the total loss on capital to the tidy sum of Rs.66,544. The business done was not large, only about 200 maunds of tea per month. A quantity which any first class native pedlar could have sold with great ease and much profit. But to carry on their small trade the company spends Rs.860 per month on establishment and other charges, which is a tax of 10 pies on every pound of tea sold. The accounts show that the average cost of the tea, including packing and forwarding charges, was about 4 annas 7 pies per lb. and the price obtained, 5 annas 2 pies, showing an apparent profit of 7 pies per lb., which, however, was all eaten up and 3 pies more, by the establishment charges aforementioned. The actual loss to the company was one-quarter anna on every pound of tea they sold. Surely those responsible for the management of the concern can put their hand on the loose screw, which must be somewhere about, causing this continual leakage. Had this company been managed with ordinary tact, and push, and business enterprise during these past thirteen years, it could have successfully exploited every market in India for the sale of tea, and thus have saved the necessity for calling into existence the Agency now about to be started by the Indian Tea Association for the distribution of the article throughout the length and breadth of the peninsula. According to present appearances it is likely that the young and vigorous rival will give the *coup de grâce* to the lingering existence of the old concern. The Indian Tea Supply Company have had a free field and magnificent opportunities for a lengthened period, and having failed to take advantage of them, they need not be surprised if theirs should be the doom of the barren fig tree.

BRAZILIAN NOTES.

(From the *Brazilian Review*.)

Exchange.—*5th May*, 1901.—Ninety days' Bank rate on London opened on Monday, 29th ultimo, at 13 1/8d. rose to 13 15/32d. on Wednesday 1st and closed this evening at 12 7/8d.

The message is read and the flourishing condition of finances appreciated here as everywhere, and immediately after down flops the rate. To the simple minded, accustomed to search for current causes in explanation of every phenomenon, the fall is associated with the message, and that with failure or trickery. Certainly it was unfortunate that exchange should drop so promptly after the message had been read, but looked at from a purely business point of view, it was perfectly natural that after it had been energetically boomed on the strength of the impression the message was expected to create a re-action should set in as soon as operators commenced to let go. From 12 3/4d. upwards most of the selling centered on the effect of the message which, howsoever good and hopeful it may be, will add nothing to our immediate stock of bills nor even do much to reduce demand.

Besides the message deal, the bull account for the current month was believed to be particularly heavy, so that when covering for the former began the bears, assisted apparently by one of the banks, had it all their own way and rates slumped hopelessly and irresistably. The opportunity could not be better for bearing the rate, just when the supply of ready produce bills was lower than it had been for a long time and demand for private remittance by Italians and Turks at S. Paulo and other small fry that, though individually insignificant, mount up to formidable figures in the aggregate. Last year bills for over £2,000,000 were taken in this way and though, if repeated, it is likely to be on a smaller scale this year, it is certain to be reflected in rates. One of the S. Paulo banks is said to have imported £100,000 in sovereigns in anticipation of last year's performance, when sovereigns were sold at 5$000 over their market value!

During the past week *embarques*, too, were much smaller, £216,700 at Rio and Santos as against £400,000 the previous week, whilst sales were also smaller, 107,000 as against 122,000 bags.

Rubber shipments, as we said last week, are now comparatively

insignificant, and for the seven days 26th April to 3rd May, only 445 tons of the value of about £120,000 for both Pará and Manáos. At Pará stocks were reduced to only 62 tons. For some time Pará seems likely to be a source of weakness in the exchange market, especially if, as the balance sheets of 31st March seemed to indicate, that market is heavily oversold.

The tendency is evident, and we regard it as particularly fortunate that a drag should be put on in time to prevent disaster. The present fall will no doubt have the effect of frightening out a good many of the guttersnipe fraternity, that are so dangerous an element in a speculative market. It is said that liquidations have been very numerous and heavy during the last few days and may continue for a week, which, in the absence of any considerable supply of ready produce bills, may provoke a still further fall or maintain the market weak for some time, but as soon as they are over a reaction seems unavoidable, because during the coming month at latest new coffee will commence to come in in large quantities and heavy sales swell the supply of bills, which have not, to all appearances, been anticipated this year to the usual extent.

At present the market appears to be in a dangerous condition in which there is no fortelling what may occur. An energetic "bear" onslaught might send it slumping for a time, just as a new loan or piece of good fortune might send it booming. Ultimately, we do not doubt that we shall see higher rates, but just at the present the market is in a nervous condition and best left alone to right itself.

The coffee cleared during the past week is valued at £225,048 and since the 1st January at £5,500,405 as against £4,080,646 last year. For the current crop the value of shipments to 3rd May is £17,580,295 as compared with only £13,129,609 for the same period last year.

Coffee.—During the week ended May 3rd, entries fell off considerably both at Rio and Santos, being in the aggregate 44,759 bags under those of the previous week, but, in spite of all, 43,013 bags or nearly 90 % over last year's. From 4th May to the 30th June entries last year amounted to 740,740 and, should they continue to the end of the crop on the present scale, (190 % of last year's) the amount of coffee still to arrive would be over 1,400,000 bags and the aggregate for the Rio and Santos crops be raised to the enormous figure of 11,413,611 bags! Even were entries to be identical with last year's for the balance of the crop, which is unlikely for many reasons, the total would reach over 10 3/4 million bags.

The Rio market was dull throughout the week and very little doing for either Europe or the States.

Friday being a national holiday, business, was somewhat interrupted and sales, though up to the previous week's average, fell 15,000 bags under its aggregate. Quotations during the week ruled 6$300 to 6$400 per arroba a few sales being reported as low as 6$000. To-day prices improved somewhat in consequence of lower exchange 6$500 being asked but without finding buyers. Colory coffee for Europe obtained 6$800 to 6$900 for type No. 7.

We quote cost, freight and commission 30s. 6d to 31s. and for New York 6 1/4 to 6·35 cents, which is about 1/4 cent. over New York parity.

So far only samples of new washed coffees have been seen on the market, for which fancy prices are being asked by deluded dealers. The weather continues good but cold, although frost has been reported in S. Paulo. What truth there may be in it we are unable at present to say, but however in some districts the prospects of the 1901-1902 crop might be affected, the area is now too immense for any frost to be general enough to do much harm. It is likely that a good many reports will be circulated during the next month or so regarding the damage done by frost, which, however, should be put into quarantine until confirmed.

A friend from Santos writes us as follows :—

"Why the coffee of the last crop comes down is clear and has nothing to do further with the actual cost of production.

"What do you mean by saying "Is there any minimum cost at all?" A query neither I nor anybody else here can understand. I suppose freight, commission and such like outlay are the minimum, and when planters with their wives and families can gather a crop of 7,000,000 bags without the help of outside labourers, that outlay *plus* the cost of their maintenance, would be the minimum as far as I can see. But that is an absurdity.

"Why should prices go up when exchange continues to rise after having disposed of our stock?

"You say 2,800,000, of which 1,200,000 invisible stock, are still to be disposed of *plus*, say, 800,000 bags from other countries, which at a low estimate makes a total of 3,600,000 in two months.—The consumption of the world is about 1, 0,000 bags per month, so we should find ourselves with a visible supply not smaller than now but with the difference that there are 1. 00,000 bags now on the other side to gamble with and put prices up or down at their heart's content and not trouble about Brazil at all. We are, therefore, at a loss to understand how you can speak of short supplies.

Importers have twice paid dearly for accepting the theory that exchange rules coffee prices and not supply and demand, and will not fall into this trap again."

Wages on Plantations.—However it may be resisted, if exchange keeps up wages are bound to come down. The process, indeed is already commencing, some of the larger planters in Minas having given hands the choice of accepting a reduction of 20 % or stopping work altogether Whilst the colonos, or labourers before received 2$ per *alqueire* of berry they will now get only 1$600. This reduction of 400 réis per arroba of berry is equal to 800 réis per arroba of beans.

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION.

The following are extracts from an abstract of the proceedings of a meeting of the General Committee held on the 4th June :—

There were present :—Messrs. H. S. Ashton (*Chairman*), A. Tochet (*Vice-Chairman*), H. W. Boyd, W. Brown, D. A. Campbell, R. H. A. Gresson, and R. R. Toynbee.

Messrs. W. Holder and R. Magor were unavoidably absent.

RED RUST.

Mr. H. H. Mann, B.Sc, F.I.C., the Agricultural Chemist employed by the Association, attended the meeting to discuss with the Committee a proposal which had been made, that he should visit immediately a certain Tea Estate in the Nowgong District Assam. It had been represented to the Committee that the Estate in question had been badly attacked with red rust, every section of the planted area being affected. A request had also been made that Mr. Mann should be permitted to visit the garden in order to make investigations, and, if possible, to suggest a remedy.

After considering the matter with Mr. Mann, the Committee came to the conclusion that the results of such an investigation as that proposed would be to the general advantage of the industry. Red rust was admittedly one of the most serious blights of the Lower Assam Valley; and that it should be studied with a view to its prevention was very desirable. This they understood could only be satisfactorily done during the months of May and June. They accordingly sanctioned the proposed visit, which, Mr. Mann stated would not extend over a longer period than four weeks. The soil analyses, upon which he was engaged in Calcutta, were to be resumed on his return.

EXPLOITATION OF CHINESE TURKESTAN.

Considered a letter No. 168, dated Kashgar, 25th April. from Mr. Geo. Macartney, C.I.E., Special Assistant for Chinese Affairs to the Resident in Kashmir, with reference to the question of extending the sale of Indian tea in Chinese Turkestan. This question was last referred to in the proceedings of the meeting held on the 12th March last. It was there stated that the Committee had been in correspondence with Government respecting the different route from India to Kashgar. A copy of the letter from the Government of India to the Government of Bengal, which was summarised in the proceedings referred to had been forwarded to Mr. Macartney, with a request for his opinion upon the points raised in it. In his reply he stated that the Association could not do better than push the trade by the Leh-Yarkand route to Kashgar. Travellers in limited numbers were allowed to use the Gilgit-Hunza route. But scarcely any goods were brought by it although there was no prohibition on their transit. This was probably on account of the difficulties of the road along the Hunza river, and by reason of the absence of transport facilities on a portion of the route. The Indian teas usually imported into Chinese Turkestan had not found special favour. This was probably a stronger reason why the trade had not grown, than was the existence of the physical obstacles on the Leh-Yarkand route. If Indian planters wished to have a share in the trade, they should

he suggested, try to introduce teas similar in taste and shape to those sent from China. The trade was, he thought, susceptible of expansion, if the requirements of the markets were studied. The present appeared to be a favourable opportunity for action on the part of Indian growers. It was true that there was a large stock of China brick tea in the Kashgar markets. But it had arrived before the disturbances in China proper. Since then there had been a general rise in the price of Chinese goods, tea not being excepted. As Indian tea was officially prohibited in Chinese Turkestan, the advisability of establishing special agencies in Yarkand and Kashgar was questionable. Operations should rather be conducted through the Hindu and Mohammedan traders engaged in the Indo-Chinese Turkestan trade. As an experiment, a few maunds of brick tea of suitable quality might be sold at a reduced price to some of these merchants at Leh. They would probably take the tea on to Kashgar for sale. If the experiment succeeded, the traders in question would no doubt be willing to repeat it, and Indian teas would thus become known in Chinese Turkestan

Mr. Macartney also forwarded a sample of China brick tea for the information and guidance of Managers who might wish to engage in the trade. The Committee decided to forward a copy of the letter to the Kangra Valley Planters' Association, with a suggestion that the experiment proposed should be made. They considered it to be of great importance that Indian teas should be introduced into Chinese Turkestan, seeing that the consumption of tea in that country is very extensive. In the proceedings of the last meeting of the Committee, reference was made to samples of Indian and China green teas which had been received from the British Consul at Batoum. It was stated that the sample said to be of Indian growth closely resembled China green tea, and that it was to be sent to the Kangra Valley Planters' Association for an expression of opinion as to its origin. This had been done; and in a letter dated 27th May, the Honorary Secretary of the Kangra Association stated that the tea was a very badly adulterated mixture of green and black leaf, faced with gum and soapstone. From its smell it seemed to be China tea. It was possible that it had come from China to Bombay, where it had probably been re-faced. This opinion was to be conveyed to Mr. P. Stevens, the British Consul at Batoum.

THE RUSSIAN VOLUNTEER FLEET.

Considered a letter, dated 28th May, from Messrs. W. S. Cresswell & Co., regarding the Russian Volunteer Fleet. Messrs. Cresswell & Co. stated that they had written to the Colombo Agents of the Fleet, asking if one of their steamers could be run monthly from Calcutta to Odessa, provided full freight were guaranteed. The Agents had replied that the Steamer authorities in Odessa did not care for the steamers to visit Culcutta on account of the plague. Teas could, however, be sent to Colombo for transhipment to Odessa. Messrs. Cresswell & Co. suggested that the Association should take the matter up, and ask the Steamer authorities to reconsider their decision. After discussion, the Committee resolved to enquire from the Colombo Agents of the Fleet as to whether the prevalence of plague was the only reason for the steamers not calling at Calcutta. Enquiries were also to be made as to the rates of freight for tea from Colombo and from Singapore to the Black Sea Ports.

Messrs. W. S. Cresswell & Co. were to be informed accordingly.

THE COST OF WAR.

From the day when Achilles fasted three days and nights over the body of Patroclus, slain in the ten years' siege before the stout walls of Troy, have we learned of war's sorrows.

The Duke of Wellington wept like a child when he surveyed the bloody, hard-won field of Waterloo. Methuen, it is said, broke down at the ghastly sight of Magersfontein, and returned to his tent that the men might not witness his grief.

"Who dead is must be buried," says Homer, and, we might add, "who ill is must die."

So thought Private John Smith, living now at 19, South Uxbridge Street, Burton-on-Trent. The *Aurania* steamed out to the Cape on December 27th, 1899, with this soldier aboard her (that was before she steamed back with the gallant C. I. V.'s) and in telling me of his trials, on August 29th, 1900, Private Smith says that *that* part of his duty was pleasant enough.

"Shortly after Earl Roberts' famous march into Kronstadt, we were stationed between that town and Jacobsdal to guard the line of communication. Towards the end of April I was laid low with that fell disease enteric fever.

There were hundreds of men down with it. It has laid low more men than all the shot and shell that was ever fired by Boer Artillery. For several weeks I was in the fever hospital. My stomach was converted into a manufactory of torturing pains and I grew as weak and helpless as a new-born babe.

"I was for *days unconscious*, but gradually recovered sufficiently to be invalided home."

Yet the suffering of Private Smith was not over. "I went aboard the Hospital Ship *Nineveh* in June," he says, "and shortly afterwards sailed for home. During my short stay in South Africa, I lost over 20 lbs. in weight. Nothing that I took relieved the constant vomiting, or increased my strength."

"After," he says, "I had been home a few days, my brother, who is an engine-driver on the Midland Railway—not of *an armoured train*—advised me to try Mother Seigel's Syrup. I got a bottle. I found it was doing me good. The vomiting *ceased*, and I was able to enjoy all kinds of food. My appetite is now enormous."

"Altogether I have taken four bottles of Mother Seigel's Syrup, and gladly give you permission to use and publish my statement. This Syrup is a fine tonic and a great medicine for the stomach. I can especially recommend it *to soldiers returning from South Africa* in feeble health."

Wellington knew the bitter cost of war in 1815.

Methuen in 1899 and 1900.

And the hero of this narrative in 1900, too. His was a personal cost. "Green vomit." Charles Reade writes, "laid her sickly hand on him."

A BROKEN MAN.—Until the kindly offices of Seigel's Curative Syrup put him on the steppingstone of "first wealth," which is health.

MARKET REPORT.

[*Per Mail advices of 31st May* 1901.]

COFFEE.

The London Commercial Record says:—The public market after having been closed since the 22nd instant, re-opened yesterday, when supplies to a moderate extent were offered, and meeting with fair competition were chiefly disposed of. Fine and choice grades were very firm, but medium and common decline 6d to 1s per cwt. Futures have been flat under the influence of large receipts and declining exchange, and prices are easier: yesterday July delivery Santos sold at 30s 7½d, September at 31s 1½d to 31s, December 31s 7½d to 31s 6d, and March at 32s 1½d to 32s. We quote:—

London ...	Santos ...	July delivery	... 30s 9d.
New York	No. 7 Rio...	,,	... 5·40 cents.
Hamburg...	Santos ...	,,	... 30¾ pf.
Havre ...	Santos ...	,,	... 37¼ francs.

To-day's auction supplies consisted of 5,746 bags Costa Rica, 173 bags Nicaragua, 212 bags Salvador, 2,125 bags Guatemala, and 22 bags Colombiam. A good market for all colory sorts, and prices rather dearer. Common sorts quiet and unchanged to occasionally a little lower.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons	23,696	19,791	27,977	21,595
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	8,694	7,821	11,332	8,724

The preceding figures exhibit— Tons.

In the Imports an increase this year of ...	6,382
Home Consumption an increase of	873
Export an increase of	2,608
Stock an increase of	3,905

Auctions yesterday passed off as under:—

CEYLON.—*Plantation.*—4 casks 7 tierces 7 barrels 1 bag mostly sold, middling greenish 75s 6d, bold 90s to 92s.

EAST INDIA.—1,480 bags partly sold as follows:—*Mysore*, smalls 38s to 63s 6d, low middling to middling 41s 6d to 51s 6d, common to fair bold 57s 6d to 64s, fine to very fine bold blue 95s 6d to 112s, peaberry 47s 6d to 98s 6d; *Coorg*, smalls 36s to 39s 6d, low middling to middling 43s to 46s, bold 53s to 54s, peaberry 51s to 58s 6d; *Wynaad*, smalls 36s 6d to 37s, low middling 43s 6d, bold 49s 6d to 58s 6d, peaberry 52s 6d to 56s; *Neilgherry*, triage 35s.

JAMAICA.—55 barrels 120 bags mostly sold, smalls 33s to 36s 6d, good to fine ordinary 33s to 40s, fine fine ordinary to low middling 41s to 44s, middling to good middling 49s 6d to 56s, bold 65s to 85s 6d, peaberry 46s to 55s.

COSTA RICA.—Of 2,115 bags catalogued 1,830 bags sold, smalls 35s 6d to 41s, low middling to middling 45s to 50s, good middling 52s to 61s, bold 63s to 70s, very fine bold 86s 6d, peaberry 49s 6d to 72s.

GUATEMALA.—347 bags sold, smalls 36s 6d to 38s, middling 46s, good middling 52s to 52s 6d, peaberry 53s 6d to 55s.

VERA PAZ.—65 bags half sold, fine to very fine bold 90s to 112s 6d.

NICARAGUA.—167 bags practically all sold, smalls 34s, low middling to middling 42s to 46s, peaberry 54s to 56s.

SALVADOR.—Of 230 bags catalogued 160 bags sold, low middling greenish 42s.

VENEZUELAN.—30 bags retired unsold.

PERUVIAN.—77 bags sold, smalls 33s, middling 44s, good bold 54s, peaberry 49s.

COLOMBIAN.—50 bags bought in.

BRAZIL.—32 bags washed Santos sold, smalls 34s, medium 41s 6d, peaberry 41s 6d.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99 Bags.	1897-98. Bags.
Rio ...	2,670,000	3,156,000	2,969,000	4,127,000
Santos ...	7,652,000	5,486,000	5,261,000	5,998,000
Total...	10,322,000	8,642,000	8,230,000	10,125,000
Crop ...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 12⅛d, previous day 12⅜d.

HAVRE, *May* 30.—Good average Santos June opened steady at 37¼f. and closed quiet at 37f., September opened at 38f. and closed at 37¾f.. December opened at 38½f. and closed at 38¼f., March opened at 39f. and closed at 38¾f.

HAMBURG, *May* 30.—Good average Santos June opened steady at 30¾pf. and closed quiet at 30½pf., September opened at 31¼pf. and closed at 31pf., December opened at 32pf. and closed at 32pf., March opened at 32½pf. and closed at 32½pf.

NEW YORK, *May* 29.—Closing prices of No. 7 Rio were as follow:—

	May.	June.	July.	Aug.	Sept.
May 29...	—	5·35	5·40	5·45	5·55
May 28...	5·45	5·45	5·50	5·55	5·65

COCOA.

No auctions have been held this week and we do not hear of a material sales privately.

PEPPER.

In pepper the sales reported are restricted to some small lots Penang *White* on the spot at 8 3/16d per lb. Singapore *Black* f arrival is quoted at 6 5/32d March-May, and 6 3/16d per lb. May-June.

To-day inanimate, and business small.

QUININE.

A dilatory advance of ½d per oz. was announced by Germa makers on Tuesday, which brings the "official" quotations to 5d per oz., at which figure makers had done business for some tim previously. This advance is considered quite inadequate by sp culators, who think it ought to have at least been 1½d to bring t article to the parity of bark. It is understood that they are selle to consumers only. This slight movement has, in consequenc given a firmer feeling to the second-hand market; but only a sma business has been done (owing to the holidays and the slig advance), including August delivery at from 1s 4 5/8d to 1s 4 7/8d, a October at 1s 4 7/8d to 1s 5d. To-day 20,000 ozs. have been sold f August at 1s 4 7/8d, with buyers of October at 1s 5d. Howard make no change in their quotation for sulphate, but advance the salts in conjunction with other makers. Howard's price for t sulphate has not been changed, but they have advanced their figu for other sorts as follows:

	s.	d.
Arseniate	2	4
Hydrobromate	2	3½
Hydrochlorate	2	3½
Iodide	2	5
Phosphate	2	5½
Salicylate	2	3½
Ditto, Physiologically Pure	2	7
Valeriante	2	6½

VANILLOES.

At auction to-day 420 tins were catalogued, but demand w irregular, holders finding difficulty in making progress even at decline of 1s to 2s per lb.; about 175 tins sold under the hamm as follows:—Mauritius, good color and flavor, 8½×9 inches 24s 6 7½×8 22s 6d, 7×7½ 22s, 7 inches 21s, 6×6½ 19s, 6 inches 18s 6 5½×6 18s; second quality 6½×7½ inches 19s 6d, 5½×6½ 17s to 18 Bourbon, fair 5×5½ 17s, 4×4½ 16s 6d, mixed lengths 3½× 12s per lb.

INDIA-RUBBER.

Considerable sales of fine hard Pará have been made on America account at a slight reduction. Hard June-July delivery 3s 9½d 3s 9¾d, July-August 3s 10d to 3s 10¼d, closing quiet. Negrohe quiet. scrappy 2s 8d, Island 2s 2d, Cameta 2s 5½d. Sales of fi Peruvian 3s 9d, ball 2s 3½d up to 23 6½d for superior, slap 2s forwar 1s 11¾d spot.

In auction a fair part sold steadily.

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

CROSSE & BLACKWELL'S, LTD.

By Special Warrant Purveyors to The Queen AND Empress of India.

CELEBRATED OILMAN'S STORES.

[w. 1-10-98 -t.f o.]

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

VOL. VI.] MADRAS, SATURDAY, JUNE 29, 1901. [No. 26.

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ADVERTISEMENTS.—The charge for line advertisements is As. 4 per line for the first; As. 3 for the second, and As. 2 for the third and succeeding insertions. Five-line (or shorter) advertisements from Subscribers will be inserted for three issues for One Rupee; non-Subscribers will be charged Two Rupees.

DOMESTIC OCCURRENCE.—The fee for inserting a domestic occurrence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 5th proximo. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad.

June 25th, 1901.—*Weather*—Pleasant and sunny, with small showers, temperature ranging 62° to 76°. *Works*—Many estates started planting last week, but most have discontinued on account of the small rainfall. A 1st weeding and borer have been completed in a few instances. *Plant diseases*—Coffee very healthy, but borer bad. *Health*—still bad, fever very prevalent. *Interesting items*—It has been notified that Captain O. D. Rigg, 1st Batt. Royal Warwickshire, is to be Adjutant of the Coorg and Mysore Rifles. The news that Monsieur Yves Guyot, editor of the Paris Siècle, has caused by his exertions the removal of the prohibitive tariff on British Indian coffee imported into France, will gladden the heart of many a planter, and should be suitably acknowledged by our Associations.

PRODUCTS FOR COFFEE LAND.

Writing to the *Madras Times* last month, "Planter" inquired (1) if Egyptian cotton, Java tobacco, castor, (presumably the castor-oil plant) cocoa-nut, areca-nut, barley, potato, dammar, and gallnuts will grow to advantage on the hills in coffee soil; (2) what else could be grown on the same soil with the same effect, and (3) what percentage of profit is likely to accrue from each? This is a big order, and it is not without qualms of conscience that we attempt to answer the numerous questions involved. There is a happy provision of nature which prevents the spontaneous production of too many good things in one place. Were it not for this, men would become indolent and effete—conditions that are certainly not in harmony with the intensity of life and movement around us. Thinking seriously for a moment, it would occur to "Planter" that the special products he refers to

are already cultivated in situations which long experience has proved to be the most suitable. Viewing the matter from this standpoint it will be found that very few of the products mentioned are likely to be of maximum value in the coffee zone, although a few of them could, no doubt, be cultivated with some advantage. The climatal conditions of a South Indian coffee estate are, for instance, very different to the delta of the Nile, where Egyptian cotton attains perfection. Although improved by occasional irrigation in localities where there are rivers and canals, cotton is, practically a dry crop of the plains ; and, in this country at least, the bulk of cultivation is confined to extensive tracts of what is known as black, cotton, soil. To obtain climatal conditions in this country somewhat similar to the Egyptian season, it has been proposed to cultivate Egyptian cotton from October to May—that is during the dry season. But when coffee is grown the early part of the dry season is characterised by mists and fogs, while the latter part is subject to rain, an element which is ruinous to cotton.

Tobacco grown in Java possesses a high reputation, as the volcanic soil in that country is eminently adapted for the purpose. This is so much the case that the plant is grown extensively in some localities without being manured. Where the necessary inorganic substances—such as potassium carbonate—are present in a solvent condition there is nothing so good as virgin soil to produce the finest quality of leaf. Indian tobaccos are mostly grown on the plains, where they are known to appreciate heat and moisture. Organic soils such as prevail to a great extent on coffee estates, are unfavourable to tobacco cultivation. But the experiment is worth trying in warm situations where there is no drip from overhanging trees, and where the soil is known to be rich in alkaloids. But the difficulties of curing the leaf in a moist situation must be duly weighed, as also the trouble to be expected from insect pests. The castor-oil plant, especially the red-stemmed variety, often springs up spontaneously in new coffee clearings. But it would require to be grown very extensively to be of commercial value to the planter. Far inland, the cocoa-nut tree is not of much value ; especially when the elevation rises to 3,000 feet above the sea. It is on the shores of the latter, in all tropical countries, where the cocoa-nut attains its maximum value. The areca-nut tree is very productive in some of the coffee districts of Mysore, where it is extensively planted by the Mulnad ryots. It is one of the bye-products which planters would do well to foster at elevations of 2,000 to 3,000 feet. Associated with this cultivation, especially in its early stage, bananas and plantains are usually grown to afford shade. At the same time this fruit gives an early return for initial outlay and commands a ready market everywhere. Other secondary products such as pepper, coca, cocoa, and croton-oil might also be profitably grown while the nut trees were attaining maturity. As a masticatory (with lime and the betel-leaf) the demand for areca-nut is practically unlimited. Mysore nuts are valued, in Bombay, at Rs. 80—100 per candy.

Barley cannot be so profitably grown anywhere in the south as it is in the north of India. Potatoes should grow well on the hills. In fact they are grown to a large extent at most of the hill stations. The crop needs fairly level land, and should be put down in virgin soil ; if possible, cultivation should be near a railway to facilitate cheap export to the nearest market. Specimens of the black, dammar, and gallnut trees are not uncommon on coffee estates, where they are also indigenous to the forests. The same may be said of the w dammar tree, *Vateria indica*. But the produce of these t is reserved by Government, and the planter, if permitte raise new plantations, would have to wait for many years a return of outlay. What can be grown most profitably abandoned coffee land is a problem which can only be wor out by practical experience and the requirements of the mar If Mahomet will not go to the mountain, the mountain m come to Mahomet !

THE ANNAMALLAI HILLS.

An Ex-Ceylon Planter writes from the Nilgiris to a Colon paper that Cardamoms grow luxuriantly on the Annamal Coffee, as far as looks go, promises very well, but pri and the present outlook are certainly not very bright. Pla ers are going in for shady trees, grevilleas, dadaps, sau, a others, and planting cinchona along the roads and in t coffee, too. The oldest clearings in the district gave a lit crop last year, but it was mostly sacrificed by strippi There are one or two natural shady clearings, too, and so these seem quite a success. The tea clearings planted l year are coming on really well, too, and, thanks to a go monsoon last year and good rains this year during the d months, are certainly very encouraging. An experime has been made with cinchona, and, judging by a you clearing on a neighbouring estate of Succ, Ledgers plant last September, should do very well. The soil is deep a porous, with lots of good natural drainage and little or clay anywhere. Experts have pronounced favourably as the possibilities of cinchona on these hills. Another expe ment is being made with about 15 acres of rubber ; possib the land is too high for this, but along the river sid and flats it should have the best chance. Altogether the are on the Annamallais some 360 acres of tea, 100 acr of coffee, 300 acres of cardamoms, and 50 acres cinchon The latter, Ledger from Java seed, and a hybrid (Robust chiefly). All this was practically opened last year, with t exception of 50 acres cinchona and 50 acres cardamoms ar about 15 acres of Pará rubber.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I

The Export Tea Trade of China.

The following extracts from an article in "The Board Trade Journal," dated 23rd May, 1901, on the foreign trad of China in 1900 are reprinted as a circular by the India Tea Association (Calcutta). The article is based on th "Report of the Trade of China, and Abstract of Statistics for 1900, which was recently issued by the Chinese Imperi Maritime Customs.

The export of Black Tea was 863,374 piculs, which was 72,2 piculs less than in 1899, but, 16,241 piculs more than in 1898. Hankow the demand was brisk at the opening of the season buye for the Russian market paying good prices for the higher grade and the purchases for America and Canada being largely in exce of those of 1899. Quality, with the exception of Ningchows, w good. There were no direct shipments to London from Hanko during the year. The Foochow teas did not do well, as the marke in Europe were overstocked and the lowest prices on record we realised. In the United States it was believed that the Boxer tro bles would interfere with the export, and the closing of the Tients

oute to Russian buyers threw a large quantity of common teas on he market at low prices. Speculators therefore bought largely for merica, where the markets have been overstocked. Green tea lost 3,373 piculs as compared with the total of 1899, but gained 15,119 iculs on that of 1898. The year was a bad one for brick and tablet ea. The first consignment sent by the overland route to Kalgan as almost all lost, and exporters then shipped to Nicolaievsk *viâ* Valdivostock. Unfortunately the steamers on the Amoor were so ccupied with Government transport that the greater quantity emains stored at Valdivostock. In consequence of the change of oute, the brick and tablet tea sent to Russian Manchuria amounted o 256,019 piculs, as against 78,231 piculs during the previous year, ut only 72,656 piculs of all kinds of tea were sent *viâ* Kiakhta, as gainst 537,771 piculs in 1899. No brick tea was sent to England, s the Yenesei route has been found disappointing. Great Britain ook 135,139 piculs of all kinds of tea, or 100,882 piculs less than in 899. The United States took 255,156 piculs, as against 218,535 iculs, and 10,524 piculs, went to South Africa. The shipments *iâ* Odessa rose from 195,449 to 269,230 piculs.

The Report also gives particulars of the export of tea direct to oreign countries. The total quantity thus exported for the last our years is stated to have been as follows:—

—	1897.	1898.	1899.	1900.
	Piculs.	Piculs.	Piculs.	Piculs.
Black ...	764,915	847,133	935,578	863,374
Green	201,168	185,306	213,798	200,425
Dust	1,628	619	1,288	575
Brick	558,298	498,425	474,026	316,923
Tablet	6,149	7,117	6,105	3,027
Total piculs ...	1,532,158	1,538,600	1,630,795	1,384,324
All kinds overland to Siberia and Russia from Hankow *viâ* the Han River and Fanchong ...	71,938	81,282	55,761	89,138
Grand total... { Piculs	1,604,096	1,619,8820	1,686,556	1,473,462
Grand total... { lbs. ...	213,879,000	215,984,00	224,874,000	196,462.000

The following table shows the countries of destination of all kinds of tea exported in the last two years—1899 and 1900:—

Exported to—	1899.	1900.
	Piculs.	Piculs.
British Empire—		
United Kingdom	236,021	135,139
Hong-Kong *	117,727	119,328
India	9,698	1,6069
Singapore and Straits	3,704	3,595
Australia and New Zealand ...	45,697	45,608
South Africa and Mauritius ...	8,629	10,524
British America	11.959	20,635
Total British Empire ...	433,435	350,898
Russian Empire		
By sea to Odessa, etc.	195,449	269,230
Overland *vid* Kiakhta ...	537,771 †	72,656
Russian Manchuria	136,653	323,390 †
Overland from Hankow ...	55,761 †	89,138 †
Total Russian Empire ...	925,634	754,414
United States of America	218,535	255,156
Europe (except Russia and United Kingdom)	54,821	59,293
Other countries	54,131	53 701
Total .. { Piculs ...	1.686,556	1,473,462
Total .. { lbs. ...	224,874.000	196,462.000

* Including tea exported to Hong-Kong from Kowloon by junk, which amounted to 64,934 piculs in 1899, and 55,056 piculs in 1900.

† Chiefly brick and tablet tea.

The General Committee of the Indian Tea Association (Calcutta) have issued the following Return of Sailings and Daily Customs Entries of Tea from Culcutta, and also a Return of Exports of Ceylon Tea for four years up to 3rd June, 1901.

Exports of Indian Tea from Calcutta.

	1901. Lbs.	1900. Lbs.	1899. Lbs.
Sailings to Great Britain in May ...	979,376	2,482,786	4,510,467
Sailings to Great Britain from 1st April to 31st May ...	1,423,693	2,610,656	4,929,869
Sailings to Australia and New Zealand in May	5,140	*Nil.*	55,138
Sailings to Australia and New Zealand from 1st April to 31st May..	40,980	80	162,369
Sailings to America in May ..	65	14,980	*Nil.*
Sailings to America from 1st April to 31st May	13,188	14,980	135
Sailings to other places in May ...	198,169	163,534	67,902
Sailings to other places from 1st April to 31st May	755,129	291,071	167,615
Total Sailings from 1st April to ... 31st May	2,232,990	2,916,790	5,259,988

		Lbs.
Daily Customs Entries for Export to Great Britain from 1st April to 31st May	1901 ...	1,389,932
Do. do.	1900 ...	3,084,306

Exports of Tea from Ceylon.

Total Exports from 1st January to 3rd June,			1901 ...	62,113,511
Do.	do.	do.	1900 ...	62.755,814
Do.	do.	do.	1899 ...	49,007,483
Do.	do.	do.	1898 ...	50,940,576

Statement showing the Exports of Tea to Sundry Ports during the month of May, 1901.

FOREIGN PORTS.

	Lbs.	
Hamburg	115	
Mombassa	720	
Zanzibar	600	
Cape Town	515	
Aden	1,110	
Shanghai	500	
Bushire	3,000	
Singapore	393	
Bussora	19,000	
		25,953 lbs.
Bombay	152,240	
Kurrachee	1,260	
Other Indian Ports	18,716	
		172,216 ,,
Total		198,169 ,,

BOARD OF TRADE RETURNS.

MAY, 1901.

The following tables show the Imports, Consumption, and Exports of the undermentioned articles for the 5 months ending May 31 in the present and 2 previous years, compiled from the Board of Trade Returns, with stock in U.K. on May 31.

Coffee.—Imports stand near the high level of 1899, and stocks are heavy notwithstanding a large increase in Home Consumption and Export. The statistical position is not strong.

—		1899	1900.	1901.
Import ...	cwts.	664,890	532,446	658,537
Home Consumption	,,	116,576	133,077	152,025
Export	,,	231,098	214,115	272,571
Stock	,,	598000	503,000	552,000

Cocoa (Raw).—Imports have been fairly steady, but demand continues to develop rapidly, and stocks are not too heavy.

—		1899.	1900.	1901.
Imported ...	lbs.	25,491,336	25,730,634	25,605,366
Home Consumption	,,	16,217,154	18,110,323	21,613,890
Export	,,	5,046,124	5,252,365	4,812,091
Stock	,,	19,852,000	14,550,000	15,969,000

Cocoa (Prepared).—The figures are smaller than those relating to the raw product, but tell a very similar tale.

—		1899.	1900.	1901.
Imported ...	lbs.	2,332,772	3,006,654	3,622,017
Home Consumption	,,	2,510,610	2,688,824	3,445,945
Export	,,	327,007	425,162	402,889
Stock	,,	691,000	166,000	104,000

Tea.—Very large imports have more than counteracted the increase in consumption, and stocks are still heavy. At the same time they are by no means excessive, nor is there anything in the figures to arouse fears of a decline in prices.

TEA.		1899.	1900.	1901.
Import ...	lbs.	77,846,724	96,904,976	101,104,284
Home Consumption	,,	103,985,804	119,543,608	123,933,424
Export... ...	,,	11,939,951	19,026,464	19,064,942
Stock	,,	60,243,000	66,157,000	79,348,000

NOTES.

Tea Samples in the U. S.

The U. S. Treasury Department has ruled that tin tea boxes, imported, filled with tea, and not designed for use other than the *bonâ fide* transportation to the United States, are not dutiable as unusual coverings.

Java Quinine.

According to Mail advices received in New York on May 29, the entire 3,000 kilos. offered at the Batavia auction on May 15 were taken by one London buyer at an average of 23⅞fl. The next sale was scheduled for June 19.

Indian Tea Exports.

Indian tea exports to the United Kingdom for the first half of June were 2,630,991 lbs. compared with 2,666,723 lbs. last year. The total for period between April 1st and June 15th was 4,020,923 lbs. as against 5,745,029 lbs. last year.

Coffee.

Predictions of coffee developments are not always certainties, observes the *American Grocer*. Estimates of the wise ones gave 2,500,000 bags of Rio and 6,250,000 of Santos for this season. Present appearances indicate 2,750,000 bags of Rio and 7,500,000 of Santos—a total difference of 1,250,000 bags.

The Canadian Tea Market.

Messrs. P. C. Larkin & Co., of Toronto, state that the Ceylon Commissioner has "entirely captured" the Canadian Market, so far as *Black Teas* are concerned. There is practically no China Congou Tea coming into Can this year, and there was very little last year.

Indian Tea Exports.

The Calcutta Collector of Custo annual report for last year sho that the shipments of tea were the heaviest on record, be over 182 million pounds, an increase of 8 per cent.; but average value of tea for the year disclosed by the Calcu export shipping bills is the lowest recorded since 1891-92.

Coffee.

A grocer's man away down Richmond, Va., has broken out verse thus :

"Of all the things the grocers sell,
'Tis coffee makes your profits swell."

Would that the planter of coffee could compose as joyous couplet !

Brooke, Bond & Co., Ld., London.

Messrs. Brooke, Bond & C Limited, pay a dividend of fifte per cent., together with a bonus sixpence per share; £100,000 is placed to reserve, whi includes the share premium; and £2,474, is carried forwa Whatever may be said about the cultivation of Tea it obvious that there is still money to be made out of distribution.

Yokohama Exports of Tea.

In 1899 Yokohama exported T to the value of £546,836; in 1900 the value of £556,986. The asso ment" in the latter year was as follows :—

	lbs.
Green (pan fired)	16,897,783
(basket ,,)	6,169,887
Dust	2,936,921
Sundry	292,868

The Dumont Coffee Company.

The Dumont Coffee Company, Lim ed, pays a dividend of 2½ per cent. account of Preference share intere £20,000 is placed to Reserve, and £10,263 carried forwa Ordinary shareholders have to wait a bit. The Debentu holders are paid up to date, the Preference shareholders a some two years in arrear of their dues, and the Ordina shareholders, since the first 10 per cent. paid in 1896, ha received nothing.

Combinations and Competition.

Thus the *American Grocer*: T result of "combinations" is seen a Chatham street restaurant sig It reads "Combination coffee, 2 cents a cup." Instead increased cost to consumer, note the decrease. It is not stat how much of the combination is preferred or common stoc or how extensively watered. There are grounds for belie ing that common has the call and the cup. With "Ariosa and "Lion" quoted at a dime, trade in the famous bran should surely 'gin to climb.

Ceylon Green Tea in Canada.

Messrs. P. C. Larkin & Co., Toronto, wrote last month :—*Ceyl Green Teas* are wanted here, a there is none to he had. If certain gardens have "giv up" the making of these teas because of their being "un munerative," it surely must have been because they had n made them properly, judging from the prices at which bla teas have been sold, and the prices we have paid for Ceyl

reens. We think wonderful progress has been made in anada with Ceylon Green Teas during the past year.

uinine.

The increase in the London stock, which stands at 3,558,000 oz., against ,465,000 in May, 1900, and the great discrepancy between ie landings (238,720 oz.) and the deliveries (11,712 oz.) has epressed the speculative market this week, and only a small usiness has been done at lower prices, spot value having eclined to 1s. 4d.; October has sold at 1s. 5d. down to s. 4½d. The exports of "quinine, quinine-preparations, tc.," from Germany during the three months ended March mounted to

	1901.	1900.	1899.
Kilos	49,800	64,100	65,900

The British Tea Duty.

In the House of Commons Mr. Kearley moved for an *ad valorem* tea luty not exceeding sixpence per lb. Sir Howard Vincent noved the remission of one-fourth of the duty on British teas. Both amendments were negatived. The Chancellor of the Exchequer said that under equal duties, India and Ceylon had out-driven foreign producers. When he was in the happy position of being able to reduce taxation, he would certainly reduce tea in preference to beer and spirits. When that good time comes it may happen that Sir Michael Hicks-Beach is no longer Chancellor of the Exchequer, so our readers need not attach much value to the above promise.

A proposed Otto-of-Rose Combination.

A meeting of Otto-of-Rose producers from the districts of Karlovo, Kezanlik, Brezovo, and Panagjurischte was recently held in Karlovo to consider the question of a combination of the essential oil-industry in Bulgaria. After discussion it was resolved that a Committee, consisting of eight members, be appointed to thoroughly study the question and the means of forming a combination; also to draw up a series of rules, and to issue an appeal to all producers to ascertain what support such an Association would receive. The appeal has already been issued, and the further fate of the project will depend on the answers received by the Chairman of the Committee, Mr. E. Netschew, of Karlovo.

Prize Essays on Coffee.

The *Canadian Grocer* remarks:—"Experts have been heard to say that there are a good many in the grocery trade whose knowledge of coffees is more limited than it should be. Whether it be true or not it would be a valuable contribution to the literature on the subject of coffee if those whose knowledge in regard thereto is extensive would transfer this knowledge to paper. With a view to inducing the qualified ones to do this we have decided to give $30 in cash for the best essays on the subject of the "Buying, Handling, and Selling of Coffees." The 1st prize will be $15, 2nd $10, and 3rd $5. Besides this, to each of the five essayists whose productions rank next to those winning the cash prizes will be awarded a copy of *The Canadian Grocer* for one year." The prizes are not large but they will probably cause pretty active competition.

The London Tea Market.

Weekly special telegram, dated 20th June, from Messrs. Gow, Wilson & Stanton to Colombo reports that the market generally is steady, and that the market for medium liquoring Pekoes and Broken Pekoes is weak, while that for Common Pekoes and Broken Pekoes is also steady. The price of fair liquoring Ceylon Pekoe Souchong is 5d. (same as last week) and the average price of Ceylon tea sold on garden account this week was 6⅜d. (⅛d. down) as against 6d. and 6½d. respectively in the corresponding week last year. Reuter reports that fine qualities of Ceylon tea are steady, and common to medium, dull. Pekoe Souchongs are quoted at 4¼d. and the average for the week at 6⅜d. (both an eighth of a penny down). 30,000 packages of Ceylon tea were offered for sale, and 28,000 were disposed of; while of the 10,000 packages of Indian tea offered, 9,000 found purchasers.

"Futures" in the U. S.

The *American Grocer* of 22nd May, 1901, quotes:—

FUTURE DELIVERIES OF TEA.

	Closing Prices. Bid.	Asked.
January...	...	...
February	...	...
March	...	...
April	...	...
May	12·00	12·20
June	12·10	12·20
July	12·20	12·30
August	12·20	13·30
September	13·30	13·40
October	13·30	13·40
November	13·40	13·70
December	13·40	13·70

CLOSING PRICES OF COFFEE.

	May 21.	Year ago.
January	5·80@ 5·90	7·15@ 7·25
February	5·90 „ 5·95	7·20 „ 7·25
March	6·00 „ 6·05	7·25 „ 7·30
April	6·05 „ 6·10	... „ ...
May	5·30 „ 5·35	6·65 „ 6·75
June	5·35 „ 5·40	6·65 „ 6·70
July	5·40 „ 5·45	6·70 „ 6·75
August	5·45 „ 5·50	6·75 „ 6·80
September	5·50 „ 5·55	6·80 „ 6·85
October...	5·55 „ 5·60	6·85 „ 6·90
November	5·60 „ 5·65	6·85 „ 6·90
December	5·75 „ 5·80	7·10 „ 7·15

GENERAL ARTICLES.

TEA AND THE CURRENCY.

It is not a little amusing, writes "X" in *Capital*, to find your correspondent, Major E. P. Marriott, writing in *Capital* of the 9th ultimo that "no one interested has fully grasped the fact that the currency legislation does act as a crushing tax on the industries of India." If producers have been for the past eight years wrapped in a kind of slumber, I can only say they have been talking very loudly in their sleep. It is a little strange if Major Marriott has not heard their mutterings—*vide* the letters of Mr. J. A. Wadia, Mr. Robert H. Elliott, Mr. Acworth's evidence before the Currency Commission, the letters which have appeared quite recently in the *Times of India* on the cotton industry and the bounty to China and Japan—to say nothing of scores of other communications, opinions, and utterances, which from time to time have come before the public. If I am not mistaken I think Mr. Forbes-Mitchell wrote a whole book to prove the iniquity of the Currency Legislation—and besides this we have Major Marriott himself. No, No. There are plenty of people grasping the fact; but unfortunately there are other facts to be grasped too. It has been alleged that planters have been somewhat apathetic regarding Sir Michael Hicks-Beach's last 2d. on tea, but this hardly seems a fair charge to bring against the tea producing community. It is extremely difficult for a body of capitalists in India effectively to organize an opposition to a budget impost of this kind. After the event they may and of course do raise their voice. The simple fact—or one of the simple facts about tea is, that as a revenue-producing commodity it has

been for years *too heavily taxed*. At the present moment every pound of tea which enters the United Kingdom pays approximately a duty of 100 per cent. *ad valorem*. Such an impost is a confession that our statesmen are not financiers. It presses hardly on the *poor* consumer at home; it almost crushes the producer abroad and when we reflect that both the produced abroad and the consumer at home are citizens of the Empire, the folly of such drastic taxation should be at once apparent. The position of the consumer and producer was very fairly put in an article entitled "Garotting the Tea Trade," which appeared in the first number of *Tea*, a new paper, just started in London. Your young contemporary observes: "It may be argued that the duty cannot be paid both by consumers and producers. They may divide the burden, but in any case its evil effects have to be borne in some measure by both. Last year the Chancellor of the Exchequer remarked in his lofty way that he did not believe the people minded paying the 2d. additional on tea. Sir Michael probably thinks that a two-penny surtax on one of the necessaries of life is no more to a day labourer than to a Cabinet Minister. But the people know that it is. So instead of paying the 2d. per lb. more as a patriotic Chancellor expected them to do, they have to content themselves with inferior tea at the same price. The result is that the producer pays the extra duty, and the consumer probably adds dyspepsia to the multifarious ills that already afflict him."

The tea-taxation problem is a very simple one, and highly discreditable to the Home Government. On the one hand you have the spectacle of private enterprize which has built up a big industry and invested £30,000,000 therein. To this army of productive workers the State says, in effect, if you can land tea in England at 8d. a pound you must give me 8d. too, a national example of appropriation of other people's energy and labour which is a fine specimen of predatory economics. But let us look at the problem a little further. The output of tea for all India, as Major Marriott tells us, has been estimated for the coming year at 180 million pounds. The duty on this at 8d. a pound would realize six million pounds. A duty of 4d. would realize three million pounds. But there are the war expenses. Quite so. At the same time I think the Chancellor of the Exchequer is paying a very dear price for that extra three millions. In the first place a solid reduction in the tea duty would, if anything, materially assist in consolidating the currency policy of India, a policy which has been largely pushed along by Home influence, and the success of which is understood to be of vital importance not only to India but to Great Britain. I do not advocate merely taking the extra 2d. off tea. I advocate a solid reduction of 4d. in the duty. This would immediately help an industry represented by a capital of £30 millions Gain No 1 From this would flow increased purchasing power for India, and a good deal of opposition to the currency policy would cease. Then, again, the consumption of tea in Great Britain is one of the very best means of weaning the people as a whole from the excessive use of alcoholic drinks. It is needless to enlarge on Great Britain's drink bill—good tea, cheap, well made and properly served is one of the greatest agents the temperance cause could possibly wish for. That a change in the popular taste is steadily spreading, no one, who compares the London of a quarter of a century ago with the London of to-day, can doubt. Big concerns like Lyons, the A. B. C. shops and scores and scores of tea houses all over the place prove very conclusively that the average Briton is ready to drink tea where his father would probably have asked for something stronger.

And among the *very poor*, tea may very truly be said to be the one chief creature comfort that to some extent makes amends for the absence of many others. Sir Michael Hicks-Beach evidently does not understand the part which tea plays in the national taste. A lowered duty would help us all along the line. I do not know why Major Marriott estimates the selling price of tea @ 8d. per lb. From some figures published the other day by the Indian Tea Association in London I extract the following:—

	1899.	1900.	1901.
Indian Pekoes	7·73d.	7·20d.	5·97d.
Ceylon Pekoes	7·38d.	7·25d.	5·21d.

I am not going to argue from this, as has been done, that the fall in price is owing to the enhanced duty. It is in my opinion owing to supply having overtaken demand, under existing conditions, and the supply has largely been stimulated by the low rate of exchange, which prevailed prior to 1893 and for a little time after.

There is a passage in Major Marriott's letter which might enlarged upon a little to show how unsuitable the gold standar for India, in her present economical condition. The writer sa "Six millions sterling should be worth about twelve crores of ru (or a little more at the present price of silver). At the pric which the Indian Government manufactures and sells rupees sum realizes 9 crores only. The planter is, therefore, mulcted crores of rupees." Major Marriott must know, as well as I that from the Government point of view the way of stating case only looks at half the question. But the point is this. S posing the tea industry in India exchanged its tea for six mill sovereigns—actual coins. It would be paid in full then. So no question of convertibility would have arisen. But—what go would those six millions sovereigns be to the planting indust They would not pay labour—and labour is the chief obligat the planter has to settle with. If the planter could pay in g his labour would adjust itself to a gold price, for by degre gold prices and not silver prices, would settle the exchanges of commodities—labour included. But the Indian markets are dom nated by silver prices. This really means that the price of labour in India has been raised by legislation since 1893. F whereas, in 1893 the man who received Rs.15 a month was or getting about 16 shillings, the same man is to-day without a nominal increase in wages getting £1 sterling; and the only w his employer can pay him that fifteen rupees is by purchasing th sum with £1 sterling worth of produce. The worst of it all is th the £1 sterling the labourer receives does him not a bit more go at present than his 16 shillings did before. When it does commen to do him more good, then labour will come down. But the go never can do him any good until gold replaces silver as currenc and until a limited tender is placed upon silver.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange.—*May 11th*, 1901.—Ninety days' Bank rate on Lond opened on Monday the 6th instant. at 13d. and closed this evenin at 12 11/16d. and 12 25/32d.

As we anticipated, the rate has been oscillating between com paratively narrow limits all the week, and seems likely to contin so long as liquidations are incomplete. It was well known th selling had been particularly heavy for this month and June, a it was only natural that there should be some check to an almo unprecedented and uninterrupted rise.

Indeed, it may be considered very fortunate that the check can in time to clear the decks and shake out weak jobbers before t real action commences.

By obliging "bulls" to liquidate a good deal of their sales t situation of the market at the end of this or the coming mon should be materially improved and, instead of a violent reaction July or August, it is now possible that the rate may be maintain or even improved, throughout the current year. Of course a goo deal depends upon sterling coffee prices; but even these do n seem so hopeless as formerly.

How considerable speculation in Exchange must have lately bee is shown by the following figures supplied to the *Camara-Syndic* by the different local banks:

Sale of Bills on London.

	£	£	£
January	2,397,551	1,714,987	2,841,0
February	1,479,034	1,932,502	3,190,3
March	1,860,301	2,322.552	2,996,2
Quarter ...	5,736,886	5,970,041	9,027,6

These figures, it must be remembered, represent the moveme of this market only, whilst the total value of coffee bills at Rio a Santos together did not reach £4,000,000 during that period.

Pará advices state that entries there during the past week we only 117 tons, including Bolivian rubber in transit. Shipments Pará and Manáos amounted to 505 tons (exclusive of 75 tons Peruvian origin) the value of which is about £130,000. Stocks Pará on the 11th May were reduced to only 44 tons. Steame are now commencing to return from the sertão with but very sma cargoes and the Rubber season may be regarded as over.

At present, and for some time to come, the position of Pará mu be a source of weakness to Exchange. With a considerable ove

sale to be liquidated and little or no rubber bills to do it with, that market seems likely to be a taker here not only for ordinary trade purposes but as cover for oversales; whilst Bahia and Pernambuco seem to be likewise oversold.

At Bahia, the tobacco crop is said to be heavy, but was mostly discounted in January and February and is not likely to affect exchange. In spite of the heavy movement during the past month, the Bank of the Republic shows an increase of only 1,000 contos in cash and also of its indebtedness to London Bankers.

During the past week shipments or embarques of coffee at Rio and Santos were to the value of £234,599, as against £154,773 the previous week, and £60,723 for the corresponding week last year, thus giving with Rubber about £380,000 in coffee and Rubber bills only. Imports may be put down roughly at about £300,000 per week and Government remittances at £75,000. So that were it not for a probable reserve of bills that have probably been held back, there would be a deficiency of ready bills just at present.

Declared sales during the past week were also larger, 143,000 as against 107,000 bags for the previous week, and seem to promise fair shipments during the current week. But until both entries and shipments of coffee increase considerably there can be no justification for anything except a speculative further advance. Summing up, the situation is reduced to this: markets generally heavily oversold and remittances likely for some time to exceed the supply of ready produce bills. This disequilibrium may, however, be redressed by new money from Europe on account of the *Melhoramentos* scheme, which, it is said, will be launched on the 15th instant the Pará loan and the City Improvements for which last an issue of £200,000 debentures has just been made for extension works here.

It is to be trusted that the balance-sheets at the close of the month will show that a good deal of the oversale for this month, at least, has been liquidated, as indeed there seems every reason to expect; and, should the same prudence be observed by the banks in June, a renewed rise may be reasonably looked for in July. Of course it may come sooner, but that must chiefly depend on the banks themselves.

Coffee.—Joint entries at Rio and Santos during the week ended 10th May showed a slight revival at each of these ports, being 15,836 over those of the foregoing week and 52,388 or nearly 120 % greater than for the corresponding week last year. Entries since the 1st January amounted on 10th inst. to 2,959,900 bags as against 1,831,271 last year and for the current crop to 10,120,813 bags as against 8,546,862.

If Entries are indeed extraordinary for the time of the year, Shipments are, fortunately, no less remarkable and more than keep pace with stocks, which on the 22nd March stood at the gigantic total of 1,458,844 bags but are already down to 942,249 and hold out a prospect of still further reduction. So that after all it is possible that the new crop may be entered on with local stocks no bigger than last year's. If so, with consumption growing as it is, in spite of the crop promising to be larger than any before, the situation does not seem so entirely hopeless, especially with syndicates on the alert for a favourable moment to start a new corner and projects of every kind on foot, of which no one can tell the outcome. There is a decided feeling not only that prices have touched bottom but that they are low enough to make a corner possible and profitable if properly managed, and under such circumstances it is impossible to tell what the course of prices may be.

For our part we are inclined to take a more hopeful view of foreign prices, but as every improvement abroad must react on exchange and send it higher still, it is difficult to see how currency prices can improve except by restricting supplies.

The powerful manner in which Coffee shipments must have influenced exchange is evident from the fact that their value from 1st January to 10th May is £5,837,653 as against £4,080,640 last year, and for the current crop £17,917,251 as against, only £13,129,602 on 10th May last year.

The Rio market during the past week was somewhat firmer, prices ruling from 6$400 to 6$800 per arroba, and closed on Saturday between 6$600 and 6$800 with 200 réis premium for colory coffees The demand for the United States was fair but confined mostly to the speculative trades.

In the local market liquidations have been also heavy and added in maintaning prices. We quote cost, freight, and commission 3/8 cents for the States and 30 to 34s for Europe.

A report is current of a great combination of 25 commission firms to form a single syndicate dispensing with Dealers or Ensaccadores altogether, as at Santos.

Nothing new has transpired about the coming crop, nor have further reports of frost been circulated. Rain has recommenced and will probably interfere somewhat with harvesting and drying and perhaps throw entries back a little later.

The Market at Santos was quite but well sustained, as stocks in first hands are not large and more than is coming in can be disposed of daily. Dealers are not such free sellers as formerly and hold out for their price. The demand for export on the other hand is not very brisk but sufficient to keep the market from falling. We quite:

Primes	4$500 to 4$700
Superior	4$200 „ 4$300
Good	4$000 „ 4$100
Regular	3$600 „ 3$800

There was a better demand for peaberry, that for superior being more general, but fine qualities were neglected. Europe is now quieter and sends few orders, even Havre which before bought so largely, being now out of it. We quote cost, freight and commission:

Superior 30s. 9d. to 31s. 6d.; Good average 30s to 30s. 6d.

A little better demand was noticeable from the States but at figures too low for execution. The quality of receipts is poor and lower grades of indifferent character art most frequent It is generally believed that new crop arrivals will not be particularly early. Reports from the interior are to the effect that the weather has turned warm but rainy.

The Report of the Agricultural Department for March states that during that month the average temperature observed at Campinas was 1° under normal, but that the minimum of 11°, 9 registered on the 26th March was the lowest known for 11 years. The prevailing winds were S. E. whereas they are usually N. E. at this time of the year. The rainfall amounted to 132·9 millimetres, or only 70 m/m, over normal, rain having fallen on 15 days or 1 more than usual. The Inspector of the Second district reports everything to be satisfactory with notable diminution of rain in most sections. In the third district the coffee trees are well loaded and a good crop is expected. From the 4th district the Inspector does not report so favourably and states that the quantity of *chocho* or parched coffee will be considerable in many sections, especially at Jaboticabal. Preparation for harvesting is already advanced on many plantations, where it is expected to commence in April. Labourers are still very scarce in this district. From the 5th district reports are also good, but the black bug has made its appearance and is doing damage on some plantations. Nevertheless the crop is expected to be good and, excepting at São Roque, earlier than last year's.

BRITISH-GROWN TEA.

WHY THE PROPOSALS TO RESTRICT PRODUCTION FELL THROUGH.

When the proposals approved by the Committees of the Indian and Ceylon Tea Associations for the restriction of the output of tea were first formulated, we ventured to question the practicability of the scheme, and later history has proved the correctness of our anticipations. The proposals, it will be remembered, fell through on account of the lack of support from the Ceylon planters, who failed to guarantee the stipulated reduction of 8,000,000 lbs. in the output of the island It is generally admitted that over-production is the chief cause of the low price of tea, and, in view of the unfortunate results shown by so many of the tea companies, the outlook is one of no little interest to the shareholders. To obtain light on this point a member of our staff called yesterday on Mr. Leake, the secretary of the Ceylon Tea Association in London.

"Yes," said that gentlemen, "the scheme fell through owing to the lack of support from Ceylon. We could only get an undertaking for a total reduction of 3,500,000 lbs., while the stipulated quantity was 8,000,000 lbs."

"But the proposals emanated, I understood," said our representative "from the Ceylon interests. How was it that the island planters declined to agree to their own scheme?"

"There are, as perhaps you are aware, a great many small companies in Ceylon, and a considerable number of the Boards of Directors seems to have regarded the question from the individual standpoint of their respective companies. There are some companies which made satisfactory profits last year, having

sold their teas at good prices, and it is easy to understand that they would object to reduce their output. They, of course, made the better qualities of tea."

"But under the scheme was there not an allowance to be made for high-class teas?"

"Yes, in the case of teas which realised 11d., per lb, but unfortunately, such prices are not realised now-a-days."

"Then I suppose, now that the scheme has been given up production will continue at the same rate as before?"

"No, I think not. Planters have now realised that it is useless to continue on the old lines, and while they declined to sign the undertaking, they will, I believe, restrict the output on their own initiative. Indeed, shipments are already falling off from Ceylon."

"Is it true that the green tea industry is proving a failure? It is stated that one Ceylon company is giving up the manufacture, and has stopped erecting further machinery which it had purchased for the purpose."

"A great deal too much has been made of the fall in green tea. Our agent in America writes most hopefully on the subject. The decline in the demand, he says, was due largely to special causes, and he advises planters to continue manufacturing green tea. There are obstacles, of course, to be encountered, the strongest being the vested interests in China and Japan of those who control the grocers, as the brewers do tied houses."

Our representative next called on an expert in the tea trade, whose interests chiefly lie in Northern India. His views of the position and outlook were that, although the Committee's proposals had failed, planters would of their own accord pick finer and thus restrict the output. The industry, he considered was subjected to many injustices. "In the first place," he said "tea was taxed to an unfair extent. For instances, last week 252 chests were sold in London at 5d. per lb., on which the duty works out at 200 per cent. No other commodity is taxed to such an extent. Then it was only a short time ago that another burden was laid on the tea industry when the Government action caused an appreciation in the rupee. All this tends to retard the increase in consumption. It is largely to the light duties that I attribute the growing demand in Australia. In most of the colonies in that group a moderate tariff is charged. In West Australia tea is admitted duty free and the same liberal policy is pursued by Canada. If tea growing is to be carried on successfully in India under present conditions more attention must be paid to details. We must have intelligent managers—managers who will study the position and adapt their policy to meet circumstances and not simply aim at producing so many more pounds of tea than in the previous year. Then, expenses must be more closely looked after The charges of agents on both sides are too high. Under the old system 2½ per cent. on the gross returns was the usual rate, but there are plenty of houses which now work very much cheaper and there is still room for further reduction under this head. Freights are also too high and the dock dues are excessive. In regard to freights Ceylon has a considerable advantage, and it must be admitted that economy is more studied by her planters. But the island industry has another element in its favour. It has the cess tax, amounting to about £20,000 a year, which is spent on pushing the tea trade. This tax was originally imposed on tea growers in Ceylon to pay for improved transport facilities, and after the indebtedness was cleared off the planters agreed to the continuance of the tax on the understanding that the amount was to be handed back to them to be utilised in pushing the tea trade. A cess tax has been advocated for India, but it would be impossible to get all the tea planters to agree to it, and consequently the Indian Tea Association is dependent on voluntary contributions."

"Then you consider that indifferent management is responsible for the poor returns by the companies?" said our representative.

"In some cases, undoubtedly," was the reply.' "How else can you account for companies apparently on even terms showing such widely different results? Take the case of the British India Tea Company and the Doloo Company. The former has a capital, including Preference shares, of £77,000. Last year its output was 1,045,770 lbs., or 127,770 lbs., above the estimate, and 90,000 lbs over the crop of the previous year The tea realised 5·43d, or 1¼d. less than in 1899. Yet the net profit was only £250, and the company so far from making any distribution on the Ordinary, was compelled to pass its Preference dividend. Now, the Doloo Company has a capital of £80,000, including the Preference shares. It made 1,029,000 lbs. of tea last year, which was an increase of 24,000 lbs. over the previous crop Its tea realised 5·72d., or 1¼d. per lb less than in 1899, but made a profit of £6,270 and paid a dividend of 7½ per cent. on Ordinary shares, after providing 7 per cent. for its Preferen interest. Yet the Doloo Company's plantations are all in the Cach district, while the British India Tea Company has about 25 per ce of its acreage in Assam, where a better quality of tea can be grow Now, if the fault is not in the management, how is it the Compa which apparently has the greater advantages is unable to do as w as the other? But there are other changes which are eminent desirable in the management at home. In their balance-she some of the companies set out the items in details, while othe lump several together in one sum, so that it is impossible for t shareholders to ascertain where extravagance, if any, has be committed. So long as a company makes good returns the shar holders are content to let matters drift, but when bad times set they are not likely to submit to being kept in the dark. They w naturally, and very properly, too, want to see how their expens compare with those of other companies."—*Financial Times.*

THE PRIVATE TEA SALE-ROOM.

The London correspondent of the *Times of Ceylon* writes that th Tea Brokers' Association sent out a circular on the 31st ultimo cal ing attention to the establishment of the Private Sale-room which the outcome of all the previous talk and committee meetings abou a Tea Exchange. The rules for the conduct of business are e tremely stringent; and all details are left in the hands of th Brokers' Association. Admission is by ticket only. The ticket are issued by the Brokers' Association, and are printed in tw colours, one for the members of the firms co-operating, and anothe for the employees who attend the sales. These tickets must b signed by the firm to whom they are issued, who will be held re ponsible for the fulfilment of the conditions laid down on them List of the names of employees must be sent to the Secretar of the Tea Brokers' Association, and any alterations must b notified at once. That Association also decides how many ticket will be allowed to any firm, and all complaints of infringements the rules must be made to them.

The rules on the tickets run as follows:—

1*st.*—Prices of all contracts made in this room are to be kep strictly private as between the parties concerned in any such co tract, and shall not be divulged by any ticket-holders other tha those strictly concerned.

2*nd.*—In the event of tea being withdrawn from the sale, th highest prices offered in the room is to be kept strictly private i like manner.

3*rd.*—It is also understood that the sellers making use of thi room are not to disclose the prices obtained for their lots except i quarters where it is deemed necessary to do so.

4*th.*—Tickets must be produced when asked for.

THE INDIGENOUS MARKETS FOR TEA.

The question of selling tea in Calcutta and its environs seems be attracting some attention but, says "J" in *Capital*, there a several points in connection with it which do not appear to hav been clearly brought out. First and foremost, we noticed in contemporary, that tea was being given at 4 annas per lb. to retailed. Had the tea been a common dust even, then the price too low. What is wanted is to get rid of a quantity of common te but the price netted to the estate should not be less than 4 ann per lb.; else, no relief will be given. There are very few estat that can turn out their teas at 4 annas per lb., and it is no u putting a price upon the tea to be disposed of unless it gives som benefit to both parties. Another thing is, that even if the native take to drinking tea they will later on be averse to paying more f it than they did at first. It would surely be a far wiser policy start at a price that can be reduced, and, we hope, that those mo interested will endeavour to start at something not less tha 8 annas per lb. for our best Pekoes, down to 5 annas for Souchon and 4 annas for dusts. Even at these figures enormous profits c be made if tea was retailed by the cup even at a pice a drink. T

native of India is like Hodge at home, he does not value a thing unless he has to pay well for it; we do not mean an exorbitant price but one that will leave a fair margin of profit to the grower, middleman, and retailer. There are numbers of ways in which teas might be distributed at very small cost, and with good results. For instance, in the North-Western Provinces if small packets were made up in lead, and labelled in Urdu and put up for sale at all the railway stations it would, we believe, pay. No doubt Wheeler finds his bookstalls pay, but it is as much due to the natives as to the Europeans, in fact more so, that this is the case. Cigars and tea often make a combination at home, so why should not books and tea be joined together with mutual advantages. Again, on board the huge fleet of inland steamers the sympathies of the serangs and butlers might be enlisted by a commission on all they sold, and if packets were got up attractively and sold on board the steamer think of the advertisement it would be. The labels should all be in Urdu or Bengali—Urdu, in the North-West Provinces. Bengali, in the lower Provinces. In the north-west the native is a great traveller, and if packets were taken by even one-third of those travelling, in a very short time tea would be found in every village in the Punjab. The writer of this so long ago as 1875 purchased China tea in small packets done up attractively (but with Chinese character on the labels) in the bazaars in Tirhoot, so why should one not be able to get Indian tea if a little 'push' is shown? For two ounces of dusty powder the price asked was 4 annas, or at the rate of two rupees per lb.; this makes the lips of our planter friends water; we do not say that anything like this is obtainable now-a-days, but if even 8 annas per lb. could be got, we imagine we can see the somewhat lugubrious face of the planter who groans over a 4 to 5 anna rate, almost relaxing into a smile, and assuming the rubicund countenance, one associates with an Assam planter. The planters' lot has not been a happy one lately, but with a little combination, which is quite as badly, if not more, wanted in Calcutta than in the districts, we see no reason why a good time shall not set in for the distressful industry. But combination is the first step to success, and unless we get this it will be a case of the survival of the fittest and grief to a good many. The miserable results that every day's newspaper almost reveals, should surely have a salutary effect and bring about what no amount of writing could do; for there is no better instructor than adversity. Change of management, which has been hitherto resorted to as a panacea for all ills, should be relegated to a back seat, and hearty co-operation solicited in its place, and the result we feel sure would be more satisfactory and beneficial to the interests of all concerned, be he proprietor, agent, manager, or assistant. In Ceylon unity was the outcome of the coffee disaster. Surely, with this in their memory Calcutta agents, proprietors and managers of estates, are not going to allow such a disaster to overtake Indian tea for want of sticking shoulder to shoulder, for depend upon it, disaster will come unless all interested are up and doing; so let no time be lost, let the Tea Association show that it can do something in the interests of the vast capital it represents, and if it succeeds in capturing the indigenous market of India, it will have deserved well of every one connected with Indian tea from the largest owner to the lowest-paid assistant in the country. To bring about this result all that is necessary is the adoption of the motto "Unity is Strength."

CEYLON GREEN TEA IN AMERICA.

The Secretary of the "Thirty Committee" in Ceylon has placed at the disposal of the Press the following copy of letter received by Mr. Edward Rosling from Mr. Wm. Mackenzie on the subject of Ceylon Green Teas.

London, *May* 24.

Dear Rosling,—I have yours of 1st May. I see it stated, and am often told it, that the prices offered for Greens in America are too low to encourage their manufacture. The average price in this market is 6½d. This week a large quantity of low green teas were sold under 5d. These teas would have brought at least 6d. in America as Greens and have earned the bounty. Mr. Bosanquet told me to-day a Broker in London estimates there is a market in London for about 2,000 chests a month. Now these would go partly to displace Chinas used here, and partly be shipped to Morocco and other countries. In a letter received from a New York Broker Firm yesterday, they say "if your good people do not keep us better in stock it will be very annoying and cause lots of trouble. This has been the fear all along and has kept lots of people out of the business." They write this in reference to the Greens. It is the supply that should be looked after and regulated. It is difficult I know, but hardly impossible, and the result would to many gardens mean salvation. I am afraid Messrs. Whittall & Co. will give it up. But I enclose a letter from Mr. Thomson which, I think, points out a road to success. It is Orange or Broken Pekoe they want in the U. S. because there it is sold in chests as loose tea. Therefore the eye has to be pleased. In Canada coarser grades, because cheaper, will do, as the tea to a great extent is sold in packets I hope by giving canisters to get many grocers to sell it as loose tea, instead of packets, because the bulk of it is sold in Canada at 25 cents and as packing in lead, labels etc., cost 2d. per lb., the grocer can give the vendor a better price for loose tea. I have now about 2,000 canisters in grocers' shops, marked Ceylon Green Tea; surely a splendid advertisement. I have applications now for 400 canisters from New York Firms; but, as I do not believe there is any stock of Orange Pekoe Greens, I must ascertain before giving them.

Wm. Mackenzie.

BOLSTERING-UP COFFEE.

The *Brazilian Review* remarks :—

Of late the papers have been full to nausea of suggestions of every kind, from State monopoly to partial destruction of plantations, intended to sustain or to raise prices and bolster up the ottering industry a little longer. Everytime things go wrong and planters begin to suffer, such suggestions are repeated, but never, fortunately, come to much because they are generally impracticable and nearly always vicious *ab origine*

Even so, such discussion is not altogether useless, because it serves to widen planters' views and ultimately to teach them to take a healthier view of things and helps them through hard times.

Of all the many expedients, the latest, that comes from S. Paulo, is, perhaps, the most insidious and dangerous, because the most plausible and insinuating. At first glance the idea of reducing supply by means of a 20 % tax payable in kind and the destruction of its product, seems an irresistible panacea that, at the cost of but slight sacrifice, would secure to planters high prices and happiness right out.

Some propose to burn the coffee out of hand, whilst others, to whom such waste is repugnant, claim that it should be held in stock on account of Government or of a Syndicate.

No doubt if 20 % of the supply were held back or lost, prices would react in a powerful manner. The scale on which coffee is being shipped, even in this the usually slack season, is sufficient proof of the manner in which consumption has been stimulated by low prices.

For some time, at least, should supplies be suddenly cut off, prices would inevitably rise. Whether they could be maintained for long, however, must depend on the manner in which consumption were affected thereby; the probability being that the planter under no circumstances would secure the whole of the advantage, but that an improvement in value would in the long run be counteracted by the sacrifice of volume. From this point of view the whole question hinges on two eventualities: would the rise of price compensate the sacrifice of 20 % taken from the lowest grades? and, secondly, if it did, would not exchange immediately rise in consequence of such an addition to the supply of coffee bills and thus counterbalance the improvement in sterling prices?

Besides, whether from a moral, social or even economical standpoint such a measure is indefensible.

The deliberate destruction, without real gain or advantage to anyone, of the product of so much labour, cannot be right and this should alone be sufficient to condemn the scheme. Socially, no Government or combination has the right to so usurp individual functions as to dictate how the product of men's labour shall be disposed of, or to so limit the right of property. If every planter is to be indifferently mulcted of 20 % of his produce without distinction of kind or quality, the chief stimulus to improvement of method and mechanism would be lost and qualities be either

reduced to a single type, or planters waste time and labour on the production of a low grade article in sufficient quantity to yield their particular percentage.

The real remedy for what is termed "over-production" is, as has been often pointed out, to perfect our methods in such a manner as to reduce the cost and improve the quantity and quality of production and thus oblige others to imitate us or drive them from the markets. Such a proposal as is now entertained would do just the contrary and prove a regular premium to laziness and incompetence. Economically, the wilful destruction of Wealth, that is the outcome of labour and capital, is repugnant and indefensible. Before coffee could be burned, it must be planted and tended for weary years, weeded and harvested and then cleaned and carried to a market, all at huge expense of human energy. When there, it must be stored and sold, and then bunr't! For what? How is this waste of *one fifth of all the enormous energies employed* in the industry and commerce of coffee to be made good, or the wanton destruction of her gifts to be made up to bountiful Nature? Mere money cannot do it! To burn wholesome food, however it may be disguised, is wanton waste and an offence and crime against Nature and Society!

But supposing such reflections to be of no avail and sordid interest to overcome all scruples, could such a scheme succeed? We believe not. Not only because, as has been already pointed out, any considerable artificial improvement of prices would certainly be reflected in consumption and provoke an ultimate reaction, but because it would be impracticable to fiscalize the working of such measure in a way to ensure its loyal execution and the reduction of supplies that is aimed at.

A new type of "Coffee" would be inevitably created consisting chiefly of husks and twigs and stones, in quantities sufficient to satisfy the tax, and instead of a diminution there would be a positive increase of "production." Nor would storage by a Central Committee or by Government be much better. Within a short time the quantity would become so enormous as to weigh like a nightmare on the markets. In a single year twenty per cent. would represent over 2,000,000 bags and, with such a stock ceaselessly overhanging and increasing irresistibly day by day, what chance could there be of anything but a transitory rise of prices?

On no grounds, even of expediency, can such a measure be sincerely defended, and if planters are to ever extricate themselves from their difficulties they must give up all such delusive Will o' the Wisps once and for all and make up their minds to conquer by hard work and determination, as so many have before them, *Virtute et Labore.*

CENTRAL GREEN TEA FACTORY IN COLOMBO.

PROPOSAL BY AN AMERICAN FIRM.

The following proposition was contained in a letter, dated the 20th May, received by a Colombo firm from its United States agents, and published by the local "Observer":—

Of late a good many so-called Ceylon Greens have been sent to this market, and have attracted some attention, but we feel convinced that there will not be a ready sale for this new description of tea unless their manufacture is somewhat altered. If the leaf can be made to closely imitate Japan Teas, both basket fired and pan-fired, we believe that there would be a great opportunity and a small fortune for those who are first in the field. To accomplish this, it would be necessary to have a firing establishment in say Colombo (and Calcutta, if the Indian Teas prove serviceable for the purpose) the same as exists in Yokohama and Kobe. The leaf would be brought down in the semi-raw state, *viz.*, once fired, and then treated and manipulated in the same manner as Japan Teas. It would also be necessary to have the teas packed in half chests matted and faced in the same way that Japan Teas are treated. We are forwarding to Japan a small quantity of Ceylon Green Tea for the purpose of ascertaining whether they can manufacture this leaf to imitate closely in appearance Japan Teas. If they can do so, the cup quality of Ceylons would certainly give them a distinct advantage over Japans. The annual export of Japan Teas is approximately 40,000,000 lbs, and if this trade can be diverted to Ceylon and India, the Associations interested in these classes of tea would certainly be greatly benefited. Our suggestion is th Company be organized for the purpose of establishing fi establishments in both Calcutta and Colombo, provided, of cou that we are able to ascertain by experiment that our suggestio imitate Japan Teas is a feasible one. In a venture of this kind should be willing to subscribe liberally, and we think that the Indian and Ceylon Associations should make some consider concessions to the pioneers. The question is as to the best most expeditious method of taking up such a venture. It se to us that it would be necessary to form a small Company of th interested, and obtain some skilled Japanese labour to initiate start the manufacture. Speaking in general terms we th that the export of such teas should be confined to one or two ho in the States and Canada.

We are sending you by to-day's mail samples of Japan Teas we suggest imitating. You will notice that one is a long bl leaf tea called "Basketfired" and the other is the regular style called "Panfired." We feel sure that the latter can be imitated v closely. Whether or not leaf is obtainable in Ceylon and In similar to the Basketfired, is another question, of which you the best judge. Please advise us as promptly as possible w suggestions you have in this matter.

RUBBER IN TRINIDAD.

The Superintendent of the Royal Botanic Gardens, Trinidad, reports:—

The St. Clair experiments in the growth of Rubber trees are a fairly extensive scale. During the past year the Castilloa plot grown well. Trees planted in July, 1898, and consequently two years and five months old, average nearly 18 feet in heig and give a girth of twelve inches. A paper was prepared for West Indian Conference held at Barbados in which the results to the present time, of Rubber cultivation in Trinidad, was gi in detail. This paper will probably be published in the W Indian Bulletin for the information of intending planters. Capt Short, of Tobago, has published results obtained in Tobago in Ceylon Tropical Agriculturist, giving considerable information.

Hevea.—Hevea brasiliensis grows rapidly at St. Clair, the tr being taller but not quite so large in girth as the Castilloa pla Our supply of seed has been ample for our requirements.

Funtumia.—This kind has made splendid growth, and has alre flowered and fruited at St Clair, which has enabled the Departm to have the trees accurately determined by the Kew authorit A goodly number of plants have been raised from home-grown s Our trees at two-and-a-half years, average 13 6 feet in height, have a stem circumference of 7·2 inches. Some of the trees w lightly tapped, and at this early age were found to produce Rub of excellent quality.

Manihot or Ceara.—We have only a single row of this kind Rubber, but they do not present a very robust appearance. single old tree of some twenty-five years has given us a small sup of seed. Rubber taken from young trees is of good qual Report describes this rubber as growing well, on hill sides ab the valleys formed in our northern range of mountains.

CACAO DISEASE.

In a Bulletin issued by the Trinidad Botanical Departm we read:—

Some time during the end of the year 1900, I received an enqu from Surinam as to whether I had noticed in Trinidad a dise attacking the branches af Cacao trees and causing growth in bunc like the European "Witches Brooms" or "Hecksenbesen." I glad to answer that I had not yet seen such an appearance am our Trinidad trees. It was reported from several independ sources that the disease was very prevalent and did a large amo of damage to the trees, seriously affecting the crop. Specim were kindly procured for me, and these on examination proved be infected with one of the Fungi known to cause abnormal gro of the branches, running into knots or "brooms" The specim

were sent on to the Director, Royal Gardens, Kew, and attached is the Report of Mr. Massee the Mycologist who examined them:—

"Exoascus Theobromae, Ritzema Bos, is the provisional name given to the Fungus parasitic on the Cacao branches, and causing witches broom thereon. The author of the species could not find the fungus in a fruiting condition, neither did the material forwarded to Kew furnish fruit. Material should be sent at the time when the tips of the twigs are only slightly swollen, and covered with a white delicate bloom. In much swollen branches the fruit of the fungus has entirely disappeared and the persistent or perennial mycelium of the fungus can only be found. Owing to the perennial mycelium a crop of spores is produced each season on the diseased branches, such spores being spread to neighbouring trees by wind, etc., extends the disease. If it were possible to remove all diseased branches, the disease would soon disappear, but as this is hardly possible, in addition to removing as many diseased shoots as possible, it is advisable to spray with dilute Bordeaux mixture from time to time, so as to prevent the inoculation of young twigs and leaves"

It would be nothing short of a serious calamity were the infection introduced into this Colony, and steps have been taken with the view of securing effective Regulations to prevent such an occurrence. Similar growths are to be observed in many trees growing in this Colony, Arabian coffee being considerably troubled, but not so as to seriously affect its growth or productiveness. This however is not the same as attacks Cacao, but is related thereto. It is probable that in the course of nature many diseases exist amoung our indigenous trees which on the occurrence of suitable conditions might attack, and destroy many cultivated plants as did the Hemelia with Ceylon coffee, and a careful watch is necessary for the first indication of disease, so that measures can be devised for its suppression before the damage becomes too extensive to be effectively dealt with. The disease of which we write is an easily recognised one and cultivators may see a preserved specimen showing its character in the Herbarium of this Department. In any case where trees appear to be suffering, the Department would be glad to receive and secure the determination of specimens which may be thought to be diseased.

BEVERAGES CALLED TEA.

Arabian Tea or Kat.—Sundried leaves of the Catha Edules, much esteemed by the Arabs for beverage purposes.

Australian Tea.—Leaves from the climbing vine Smilax Glycyphylia and formerly much used by early settlers.

Cracker or Sassafras Tea.—The fragrant bark from the root of a native American tree belonging to the laurel family. Tea from sassafras roots was and is still used by the poor whites and negroes of the South.

New Zealand Tea.—From a small shrub of the myrtle family, the leaves are picked, carefully cured and used in preparing a pleasant drink.

Labrador tea.—When full of sap, small branches of an evergreen shrub are harvested, dried and used in making a hot drink that is taken with food.

Tea.—The generally accepted definition of the word tea is any infusion or decoction of herbs, or roots, although in reality it being Chinese, means an infusion made from the dried leaves of the tea-tree. The word tea, according to authorities is derived from the Amoy dialect of the name of the plant which is Tê, and pronounced tay. The tea-plant or shrub, Thea or Camellia, Chinensis, belongs to the Camellia family, and lives under cultivation, from thirty to forty years.

Maté or Paraguay Tea.—Maté is the dried leaf from the shrub Ilex paraguensis, commonly known as the Brazilian holly. In the early spring branches of this plant are gathered, piled upon the ground, and partially dried by great fires that are built near, afterward they are spread upon frame-work a few feet above the ground, and subjected to a curing process from the heat and smoke of the fire built underneath.

During the Centennial Exposition of 1876, Maté was exhibited, and considerable effort was made to introduce its use into the United States, without favorable results. During the Commercial Congress Exposition in Philadelphia, a more successful attempt is reported, in bringing it before consumers.

COFFEE CULTURE IN QUEENSLAND—No. 8.

In his eighth paper on this subject in the *Queensland Agricultural Journal* Mr. H. P. Newport deals with Pitting, Filling-in, Planting, and Shading. He says:—

Pitting and holing for coffee should be carried out during the preliminary showers of the rainy season. Generally the weather will be favourable during January, but, even if dry, unless the hardness of the soil makes the cost prohibitive, an effort should be made to complete the work before the regular and heavy rains set in, so as not to delay the planting.

The object of pitting is primarily to allow the taproot of the delicate young plant to have a free and unobstructed start in its downward course, and secondly to give the same fair start to the lateral roots, and is not essentially, as many think (especially coffee planters of the old school), to give the seedlings richer or better soil to start in. This is, in fact, a dangerous error, as will be shown later.

The shape of the pits may be either round, that is, cylindrical, or square—cubical. The cubic pits of the same diameter give more room for the plants than the cylindrical, but there is not very much difference, and the cylindrical form, being easier, is more generally adopted.

Pits should not be either too wide or too deep, because the soil filled into such becomes hard, even harder than before from its fineness, before the plant can take advantage of it, on the one hand, and because of the expense on the other. The size of pit necessary for coffee has been found to be from 1½ to 2 feet according to the soil; 18 inches by 18 inches is as small as is allowable with benefit to the plant, and 2 feet by 2 feet as large as it will pay to make, under ordinary circumstances; 2 feet deep by 1½ feet wide is a good size of pit for coffee. The bottom need not be as wide as the top, as the lateral roots do not go lower than 1 foot from the surface but in 18-inch cube pits very little is gained by making the lower 6 inches narrower than the top foot. When finished the bottom of a pit should always be broken up with the holing bar to prevent the formation of a pan as well as to see if any large stone or root exists just below, in the latter case it should be removed. Pits that are too shallow are the cause of many failures in clearings. The young taproot should not be required to start off into unturned and more or less hard subsoil at once on being put out—a few inches of soil that has had anything that might prove an impediment to the taproot removed will admit of a stronger and healtheir root to work its way down afterwards, while if the root is put straight away at the bottom of the pit, especially in a young plant from a nursery bed and possibly after being cut back, the end of the root is very apt to turn upwards. For the effect of this and the results, see article on "Coffee Root Growths," *Queensland Agricultural Journal*, March, 1900, p. 214.

The width of the pits may be reduced, but never the depth, for it must be borne in mind that the width of the pit can be remedied at any time—the depth never. Should it be found, therefore, that, the planting season coming on, there is no time to complete the pitting of the clearing with pits of a proper size, the work may be expedited or cheapened by the digging of narrower pits. Coffee may be planted in post holes, provided only the depth is kept to, with perfect success, the width being made up to the plant again during the year when time admits. It must not be imagined that narrow pits are on this account generally advisable. On the other hand, it is far better to pit at once to the full size.

By contract, pits should not cost more than 1d. to 2d. each—that is, a labourer should be able to do so from thirty to sixty pits a day, according to size, condition of the soil, and the presence or absence of stones, roots, or gravel.

In the old days of coffee planting, and occasionally even now, plants are put out without pits by a method called "dibbling." This consists of sticking a holing bar or stake into the ground for a foot or so, and working it about until a small hole is made, into which the plant is put. Of course, the plant can have no earth round the roots when planted thus. Sometimes several holes are made in this way and broken into one, but the dibbled hole, while making a way for the taproot, hardens and cakes the soil around the lateral roots. This method is in advance of one I have seen adopted in this State, which consists of making a small hole with a hoe, only a few inches deep, into which the plant with its earth is seated, and the earth trodden hard round it. In this way the tap-

root must inevitably be bent. Another method, much used on the Continent in forestry, is to make two cuts crossing each other in the earth with a spade, as deep as possible, and then with a third insertion, somewhat to one side gently prizing up the soil or sod. The earth cracks naturally at the cuts, and the plant is inserted at the point where the two cuts intersect, and the sod gently pressed back. This eliminates the hardening or caking of the soil for the lateral roots, but does not afford the plant any assistance in the way of removing obstructions. Under given circumstances, and in specially favourable soils, pitting might be dispensed with, especially if, as in forestry, a hardy indigenous tree is to be planted; but generally in the planting out of more or less delicate exotic trees such as coffee, any method that does away with the pitting is uncertain, dangerous, and to be deprecated.

The pits once dug should be left open for a time, if possible, until after a good shower of rain, so that not only the sides and bottom of the pit, but the earth excavated may be sweetened and rendered fertile by sun, air, and weather.

Filling-in.—The filling in of the coffee pits is one of the most important works in coffee culture. It is often carelessly and badly done; yet the health and strength and often the very life, of the young tree depend on the start it gets in the field. Like shallow pitting, or bad planting, filling-in, once badly done can never be remedied. The filling of the pits should never be left till the planting time arrives, but be done in good time. Not only should showers be waited for after filling in, if possible, to allow of settling, but the filling in also should be done after a shower, when the soil is uniformly moist. The soil should be put back into the pit in much the same order that it came out. It is a mistake to fill a pit, that goes down into a sub-soil at least poorer than the surface soil with a rich surface mould or manure. This, though often done and frequently advocated, leads to a drawing downwards of the lateral roots to the plant's subsequent detriment, and the too quick growth of the taproot which is rendered more delicate rather than hardy. A quick and apparently healthy growth for a year or two is the immediate result, but eventually the check received by both taproot and lateral roots, when the growth requires them to spread beyond the "pot" that the original pit has thus become, will result in a marked fall off in the third year, a speedy drooping in dry weather, and often in a plant that dies in bearing its maiden crop. The first thing to do in filling in is to remove roughly with the hoe, yet as carefully as possible, all roots, stones the size of a walnut or upwards, and weeds or rubbish, break all lumps and lightly mix the soil taken out of the pit; then to put it in again after having seen that no stones, sticks or rubbish have fallen into the pit itself. The use of a sieve or screen ensures good filling, but is slow, expensive, and unnecessary.

The breaking in of the sides of the pit is unnecessary, and often causes a wide hollow round the tree. The scraping in of surface soil is also to be avoided, as either ashes and roots are filled into the pit, or grubs and insects collected which attack the plant as soon as it arrives. If the earth is not sufficient to fill the pit and heap it over, a shovelful or two of earth from between four pits may de taken to complete it. The pits must be carefully filled; it is of no use digging pits if they are only partially filled again. The earth should not be pressed down but heaped up over the pit and allowed to settle naturally, which it will quickly do after a shower of rain. The stake used previously in lining should then be stuck in the heap to indicate the centre of the pit, the edges of which will not be visible, and to prevent the plant from being put anywhere but in the middle of the pit. A very frequent mistake that is made is to fill, or almost fill, the pit with ashes, under the impression that ashes are a valuable manurial agent. Ashes are valuable. Wood ashes consist very largely of potash, among other valuable ingredients, which is one of the constituents, of the coffee tree, but the young plant requires it diluted, and in small quantities. In large and unmixed quantities the roots cannot make headway, get stunted or worse, and the plant will not grow. The effect of too much wood-ash at the roots of the plant is to encourage and often cause fungoid growth, moss, etc., on the stem, and a stunted and sickly appearance, while nothing can be seen wrong with the roots except that they have not made the growth that they should have made. In moist or cold soils a chemical reaction sets in, which burns the tip of the taproot, and often the lateral roots also. In clayey soils the excess of ashes is often evidence by a growth of small yellow fungus on the ground round the stem of the tree, and occasionally I have observed minute be of crude saltpetre.

Trees having yellow, striped, or variegated leaves, indicating excess of potash or insufficiency of nitrogen, often show wh wood-ash in excess has been scraped into the pit. Later on growth of rank grass or coarse weeds of a deep green colour w appear on the pit. A little—very little—wood-ash mixed in w the soil, especially with a little charcoal, will do no harm; but excess wood-ash, at this stage of the life of the coffee-plant, disastrous.

The cutting out of plants from the nursery bed and their selecti has been dealt with in the article on "The Nursery," *Queensla Agricultural Journal*, February, 1900. p. 120. An instrument call a transplanter is sometimes used for the cutting out of plants fr the nursery beds, and a short description of it here may be usef

The transplanter, for which there are, I believe, several paten in England, India, and Ceylon, is very like an ordinary spade wi the blade bent round until the edges nearly meet, forming cylinder except for a gap of about three-quarters of an inch width. There is then a sort of lid to the cylinder having a "I shaped" gap in it (where the stem of the plant goes), movable, a fastened to the spade by means of a small iron rod. This lid moved up and down the length of the cylinder, inside it, by mea of a small handle at the end of the iron rod which works in tw small staples in the spade-like handle of the transplanter. Th instrument is about 3 inches wide at the cylinder, and being p over the plant in the bed is pressed down with the foot as a spad the plant levered out with its ball of earth, and the lid, moved b the small handle, then pushes the plant out of the cylinder on the tray or barrow in which the plants are transported to the fiel This transplanter can be used for many other small plants, and very useful, saving time and trouble where large quantities ha to be dealt with.

In taking plants to the field, care must be taken first to preser intact, if possible, the ball or brick of earth, and second to sha from direct sunlight. A few leaves of banana or castor-oil over th plants will be sufficient, but a few moments of sunshine will oft wither them and give them a check which it is the planter's object avoid. The plants may then either be placed one against each hea of earth covering the pits, or be kept in the tray or barrow an taken out as required when planting. If raining at the time, may be just as well to keep the plants together and covered t prevent the breaking or washing of the ball of earth. The plant should be carefully selected as pointed out previously. Relinin after filling in, as is sometimes done to get the stakes in perfe line, is to be deprecated. If a pit is not dug in line no advantag is gained by putting the plant in one corner of it, but rather th reverse. If there is any doubt of the heap of earth being in th middle of the pit, the edges of the latter may be felt for with th stake, and the centre then determined at the time of planting.

Planting.—Planting should be done as early in the season a practicable, to get as much of nature's watering for the plant a possible. The artificial watering of even an acre is expensive, an of large areas is out of the question. Enough rain should have falle to moisten all the soil in the pits before planting is commence as well as to allow of natural sinking of the new earth. If th soil in the pits on being turned over be dry in parts, wait for mor rain. If possible, plant on a cloudy day or while drizzling, bu not when the ground is sloppy or the soil clinging and muddy.

The plants being then brought out to the field the heap of eart should be roughly levelled off and a small hole, a little deeper tha the ball or brick of earth on the plant, dug in the soft earth wit the hand, a stake, or trowel. This little pit should be sloped toward the planter, but have the side away from him perpendicular. Th plant is then taken, with the ball of earth lying in the palm of on hand and the stem of the plant on the wrist or forearm, and hel against the perpendicular side of the little excavation, while th earth is gently pressed under and on the other three sides of th ball of earth, the hand that was holding it being gently withdraw The earth is then again gently pressed in with the finger tips, an the edges of the pit pressed gently with the feet, the spare so being levelled round the plant.

Another way is, while holding the handle of a hoe close to th ground, to press the blade into the earth about the middle of th pit and pull for 6 or 7 inches towards you, proceeding subsequentl as before, but removing the hoe before returning the earth.

The plants should be put in level and upright. If they had bee

properly cut from the nursery bed there will be no fear of the taproot being bent. If the earth has fallen away care must be taken to see that the taproot is straight

If planted too deep, the lateral roots already made become useless, and new roots have to grow from the stem; if too high, the lateral roots are also lost by exposure, sooner or later, and the plant's growth is checked in either case until these roots are replaced.

The top of the pit, again, should be level with the surrounding ground, for if left higher, it will wash level in the first heavy shower and the plant's roots will be exposed, or if a hollow or depression is left, water is collected there, which either rots the roots, ringbarks the stem, or "boils" the plant in the first burst of sunshine.

The stake should then be put in alongside the plant. If on sloping ground, above it; if on level ground, on the windward side, partly as a guard against rolling stones, or twigs and leaves blown along, and partly as a guide for the supply in case of failure.

Shading.—Unless the cloudiness of the weather is very reliable, shading should be done Where bracken fern is available, this is easily collected and manipulated; if not, any green stuff with a fairly stiff stalk to it will do. Two or three pieces should be stuck in at the edge of the pit, bent over the plant, and interlaced with each other so as to stay in that position.

Except in an especially exposed situation, it is only the vertical sunshine that has to be guarded against. Before planting, a bundle or two of such green stuff for shading should be cut and kept to hand. Dry material is not so good for shading, and the putting of a handful of straw or hay on top of the plant does more harm than good. Shading is quickly done, and the work is not so expensive as might appear. It is amply repaid. The growth of plants that have come through the planting-out process, and "struck" in the field without an intermediate droop, is rapid and gratifying.

TEA AT HANKOW.

In his report for 1900 the British Consul at Hankow writes :—

For the following remarks on the staple product, tea, I am indebted to a British firm :—

The total supplies of Hankow teas during the season were 698.897, against 753,077 half chests in 1899, and the settlements 677,738, against 728,680 half chests. From Kiukiang came 210,228, against 217,674 half chests last season. Shipments to Shanghai on native account amounted to 34,686, against 30,653 half chests in 1899. The subjoined table shows that the United Kingdom and Russia took considerably less than the amount required last year, while the figures for America and Canada doubled owing to anticipated changes in taxation which were not fulfilled. A certain amount of tea goes *viâ* the Han River to Mongolia and Siberia; in 1900 the total rose from 7,300,000 to 11,860,000 lbs., and the value from 795,001 to 1,470,001 :—

Destination.	Quantity.			
	1900.	1899.	1898.	1897.
	Lbs.	Lbs.	Lbs.	Lbs.
United Kingdom ...	8.271,788	10,210,283	8,052,584	9,940,839
Russia	35,447,580	25.940,112	22,874,747	19,610,645
Tientsin and North ...	6,905,756	23,889,948	26,553,905	19,037,180
America and Canada ...	10,583,182	5 264,276	4,567,052	5,811,527

The market opened on May 7 by the settlement of all the crack chops of Kheemuns on offer up to 50 taels. The condition of the crop, on the whole, was good, and, perhaps with the one exception of Ningchows, every district was in demand right through the season, and settlements were on a far larger and quicker scale than any previous year. Ningchows were a shade inferior to last season and Kheemuns a little better; Kutoans and Wenchows were poor; Hohows quite up to the average. Hankow teas, as a whole, were of good average quality, and Ichangs proved to be choice teas. Oonfaas were fair and Seeangtams good. For the first year on record not a single settlement was made in Kiukiang; last year quite 15,000 half chests of the first crop were brought there. Second crop teas began to arrive on June 14, but only a few Ningchows and Kheemuns found buyers at Hankow, there being a much better demand in Shanghai. Hankow teas of good quality came forward to much the same amount as last year and met with a good demand for America. Third crop was very small owing to continuous dry weather, and the difficulty the teamen found in financing owing to the political troubles in the north.

The first teas were put on the London market on July 17; fine Kheemuns and Ningchows did fairly, medium grades were only moderately well taken but met with a fair export demand, common teas were in small supply. Towards the end of August the market slackened and has continued to droop in consequence of large supplies of common Indian and Ceylon teas.

There was no direct steamer for London for the first time on record; the through rate for conference steamers *viâ* Shanghai was 57s. 8d. per ton, against 52s. 6d. last year, but the "Glen" and "Ben" lines took 55s.

ECONOMIC PRODUCTS: VANILLA.

A. P. writes in *Capital* :—

To judge by occasional notes, which appear in our planting journals, this product appears to be having its full share of attention at the hands of those planters, who are on the alert for anything in the shape of a profitable auxiliary to the main crop they may be growing. In certain planting districts it is being propagated year by year with the view of raising a sufficient number of plants to form a plantation of an acre or so, in order that a regular squad of people may be told of specially to look after the plants. This is absolutely necessary, and is the right way to go about the matter, —where there are only a few plants scattered here and there about a compound, they cannot get that special attention which is necessary to forming an opinion, as to whether the raising of them on a larger scale will be a profitable undertaking Of course there is always the probability of over-production, and this ought to be steadily kept in view, and nothing but the very best quality of pods put upon the market. If we may take South Sylhet for instance, which, by the way, we are inclined to place in the very first front rank amongst planting communities, in the matter of the introducing and cultivating of valuable plants from other regions with an analogous climate and habitat, we can see no reason whatever why that district should not make a name for itself for a good quality of vanilla.

The large majority of our planting districts in Assam will grow vanilla. There are a few districts in Upper Assam, which are sometimes too cold and damp during the Winter months, and the plants get what is known as "spot." This is not what we should call a disease, but simply a "hurt" caused by water resting upon the leaf when the atmosphere is at a low temperature. The vanilla "plant" will stand a much lower temperature than any we ever get in the valley of Assam, but it will not tolerate dampness as well. Even in the South Sylhet district, where we never get such a degree of cold as is usually experienced in Upper Assam, vanilla will not succeed in a low-lying situation where there is a sufficient moisture during the dry season to cause a continual raw feeling during the day.

That it grows, flowers, sets and grows pods of as good quality as are produced in the Seychelles Islands has been already proved. The prices have been well maintained for many years past, despite the invention of vanilla (the coal tar product) which has not commended itself as anything likely to be a competitor, where the real vegetable product is to be had. There are lands more suitable for its cultivation than others, but any ordinary forest land with a good surface accumulation of vegetable mould will be found adaptable for the cultivation of vanilla. At the same time, vanilla growing being one of the most concentrated of Agri-Horticultural industries, can be grown upon the most barren of lands, in the

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

absence of other unfavourable conditions. The writer is not aware as to what size the vanilla plantations of Reunion and Mauritius run, but we may take it that a 5-acre vanilla garden would be considered a very large "auxiliary" indeed to a 500-acre tea garden. And if 5 acres of first class forest land could not be had 5 acres of scrub jungle could very easily be made almost as suitable by carrying fresh jungle soil to plant the vanilla plants in. It would cost no more than it does to make large pits and fill them with fresh soil—a necessary work when filling tea vacancies if any measure of success is to be counted upon. The Mexican system of allowing the vines to grow under trees nearly wild appears to be almost universally adopted now, and is a decided improvement on the old system of training the vine on artificial supports. According to a report on the vanilla growing in Seychelles nothing pays better than vanilla Its production costs the planter about Rs.3 per lb., and as prices vary from Rs.8 to Rs.16 per lb., a net profit of from Rs.5 to Rs.13 is the result. The average price was Rs.15 in 1898 and at the present time runs much about the same. The yield may safely be taken to be 200 lbs. an acre according to the report above alluded to. "Taking therefore an average of Rs.10 only, an acre of vanilla should produce Rs.2,000." Five acres of vanilla at this rate would not come amiss to plenty of large tea concerns, to say nothing of small ones.

It would even pay them to keep a European who thoroughly understood the plant, its growth, fertilisation (which has to be done artificially) and last, but by no means least, the curing, sizing, and packing. The object of this article is not to make planters believe that they have nothing to do but procure vanilla plants, stick them in and wait for the pods to come. We may go the length of asserting that out of every 100 planters who attempted vanilla growing 98 would very probably not succeed. It requires special knowledge all through as to the habit of the plant and its requirements. The curing alone requires considerable study, care, and experience. The plant when growing, although preferring to take its own sweet will during its adolescence, is entirely helpless when it comes to maturity. It will keep on growing certainly, but is quite incapable without human aid of reproducing its own species, consequently if this process is not understood the growers will have no produce in the shape of the fragrant vanilla pods of commerce.

Whatever may happen in the future the industry is not suffering at present from over-production to the extent of affecting the profitable nature of the industry. In 1898 the vanilla crop of the Seychelles amounted to 63,000 lbs., and was sold for Rs.9,36,000. It cannot be gainsaid that the large output of vanilla has given a fresh impetus to its cultivators, and large quantities have been planted during the last two years. Still, according to the chemist and druggist, the consumption of vanilla pods is increasing every year and likely to continue to do so for a long time.

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION (CALCUTTA).

Extracts from an Abstract of the Proceedings of a Meeting of the General Committee held this day. PRESENT :—Messrs. H. S. Ashton (*Chairman*), A. Tocher, H. W. Boyd, W. Brown, D. A. Campbell, A. C. Lawrie, and R. R. Toynbee.

A letter dated 23rd May from the Secretary, Indian Tea Association, London, was brought up for final consideration and disposal after previous circulation. With it had been forwarded a copy of a report dated 14th May by Mr. William Mackenzie, the representative in America of the Indian and Ceylon Associations, upon the work which is being carried on in that country. Mr. Mackenzie dealt in some detail with the question of the quality of the green teas suitable for the American market. He advised that proprietors in India should make green teas resembling as nearly as possible those manufactured in Ceylon. He also thought that in order to ensure the systematic working of the business, consignments should be handed over to one or more special firms, who would take quantities of about 100 half chests at a time, at intervals to be determined. Mr. Mackenzie further suggested that in order to avoid the sending to America of small lots differing more or less in quality, the teas should be bulked in Calcutta, and that arrangements should be made, through a syndicate or other agency, to receive them f shipment. This would ensure more uniformity, and would enab orders to be duplicated without difficulty.

The General Committee had noticed that there appeared to h some difference of opinion as to the suitability for America "green" teas of the Ceylon type. For while Mr. Mackenzie (a indicated above considered there was a promising market for suc teas, it was understood that opinions to the opposite effect had bee received by some firms in Calcutta. In these circumstances th Committee decided to ask the London Committee to obtain, possible, some further information on the point.

Reference was made in the proceedings of the meeting held on th 7th May, 1901, to the following resolution which had been adopte by the Central Travancore Planters' Association, *viz.* :—

"That this Association do ask the support of the Indian Tea Associa tion and the United Planters' Association of Southern India in urgin on the Government of India the immediate necessity of putting an im port duty on foreign grown teas."

In reply to the enquires which the Committee then decided t make, they had been informed that the Travancore Association wished to see the existing Indian import duty enhanced to a pro tective rate, or the Ceylon import duty on Britsh-grown teas re moved. The latter seemed to be the principal object in view; and the Travancore Planters thought it could be best attained by asking the Government of India to impose an import duty at a protective rate. say 4 annas per lb, on all tea brought into this country. The Ceylon duty was said to be prejudicial to Southern Indian teas mainly because it practically excluded them from the sales in Colombo. For though they might be sold there in bond, this restriction had an adverse influence upon prices. Again, when— during the South-West Monsoon—the West Coast ports were un availabe, Tuticorin was always open. A railway between Travancore and that place had been projected; and if Colombo were a free port, this new route would prove to be of great advantage to Southern Indian Planters.

The Committee were inclined to favour the suggestion tha action should be taken by the industry with the object of procuring the abolition of the Ceylon duty. They were willing to approach the Government of India to that end. But they were doubtfu whether the most effective mode of procedure would be to sugges the enhancement to a protective rate of the existing Indian duty They accordingly decided again to address the Central Travancore Planters' Association on the subject, stating these views, and suggesting that in the first place the abolition of the Ceylon duty should alone be pressed for.

The Committee had before them a letter dated 12th June, from Captain Webb Ware, I.S.C., of the Quetta Agency, suggesting that the period (four months) allowed for Mr Foley's mission should be extended. Captain Webb Ware pointed out that to enable Mr. Foley to carry out the duties entrusted to him it was essentia that he should remain in Birjand for six weeks or two months, and at Meshed for at least a month. He would require leisure to study the question of the tea trade on the spot; to interview the various merchants interested; and thoroughly to master the whole subject This could not be done in the time allotted for the journey.

In view of the fact that two large caravans of Indian tea would be shortly going through to Meshed, it did not appear to the Committee to be absolutely necessary that Mr. Foley's mission should be so extended. Moreover, the funds at their disposa were insufficient to admit of any extension. They also thought tha the sending through of the caravans in question would prove to b a more satisfactory method of developing the trade. Captain Webb Ware was to be informed accordingly.

Considered demi-official correspondence between the Chairman and the Hon'ble Mr. Slacke, C.S., Secretary to the Government o Bengal, Revenue and General Department, with reference t section 3 of the Assam Labour and Emigration Act VI of 1901.

The section in question empowers the Local Government to issu a Notification prohibiting recruiting either absolutely, or other wise than in accordance with the provisions of the Act. The Local Government may, at its discretion, give six months' previous notice of such an order, or it may direct that the order shall take effect at an earlier date.

The Chairman had pointed out to Mr. Slacke that in the recruiting districts it was rumoured that the Local Government propose fully to enforce the Act as from the 1st July. If so, it seeme that the issue of a Notification to take effect within a shorter perio

ıan six months was contemplated. Mr. Ashton had asked if he ɔuld be informed as to the intentions of H. H. the Lieutenant-overnor upon this point

Mr. Slacke had replied on the 10th June, to the effect that the st July had been recommended to the Government of India by ıe Government of Bengal, on the suggestion of the Hon'ble Ir. Buckingham. It was understood that the engagements made y the Planters with their agents in the recruiting districts rminated on or about that date. The views of the Government India upon the point had not however been so far received.

The intentions of the Local Government did not appear to be clear om this reply; and it was pointed out that Mr. Buckingham's ıggestion was that the Notification should be issued when the Act ecame law, *i.e.*, on 8th March. After discussion, the Committee ecided to forward copies of the letters to Mr. H. Gordon, the uperintendent of the Tea Districts Labour Supply Association at urulia. Mr. Gordon was to be desired to state what the position ould be if a Notification with immediate effect were issued; and so what notice, if any, would, in his opinion, be required. In ıe event of Mr. Gordon considering that serious inconvenience ould be caused by the issue of a Notification with immediate effect, ıe Committee would again approach the Local Government on the ıbject.

Considered a letter dated 10th June, from the Honorary Secre-ry, Dehra Dun Planters' Association, with reference to the ɔssibility of the gardens in that district joining the Indian Tea ssociation. It was asked in the letter whether, in the event of the rger concerns becoming members, they would be permitted to ɔpoint a representative on the General Committee. Also whether ıe Local Association would then be recognised as a branch of the alcutta Association.

In reply it was to be pointed out that under the Rules of the As-ciation it was not possible for the General Committee to add any rson to their number. They were elected annually by the mem-rs; and their powers and duties were defined and limited by the ules. The Dehra Dun Planters might, however, arrange to establsh their district a branch of the Association on the lines of the ssam or other Branches.

Considered a letter dated 13th May, from Mr. Chas. Duncan of innipeg, asking to be put in communication with a leading alcutta Tea Agency House. Mr. Duncan stated that he had been ndling teas for many years; and had recently opened a brokerage siness. He wished to secure the agency of a first-class firm.

A list of the members of the Association was to be sent to Mr. ıncan for his information and guidance in the matter.

MARKET REPORT.

[*Per Mail advices of 7th June* 1901.]

COFFEE.

The London Commercial Record says:—The tone of the market dull, and supplies at auction have met with less demand; prices nerally have been in favour of buyers to the extent of 1s to 2s on mmon to medium qualities, and at the close the trade shewed s disposition to operate. With continued heavy Brazilian ceipts and a further decline in Exchange the market for "futures" s been declining one, and although at the close there has been a rtial recovery prices for the week are again easier; yesterday ntos September delivery sold at 30s to 30s 3d, December at 30s , and March at 31s 3d per cwt.

ndon ...	... Santos ...	July delivery	...	30s 0d.
w York	... No. 7 Rio...	,,	...	5·20 cents.
mburg...	... Santos ..	,,	...	30 pf.
vre ...	... Santos ...	,,	...	36¾ francs.

No auctions were held to-day, this being "Oaks" day at the som Race Meeting. Brazil futures opened steady and continued changed throughout the day.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	23,504	19,574	28,804	22,164
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	9,164	8,097	11,881	9,235

The preceding figures exhibit—

	Tons.
In the Imports an increase this year of ...	6,640
Home Consumption an increase of	1,067
Export an increase of	2,646
Stock an increase of	3,980

Auctions have passed off as under:—

Ceylon.—*Plantation.*—4 tierces 4 barrels 1 bag partly sold, smalls at 33s, bold 66s.

East India.—4,020 bags partly sold as follows:—*Mysore*, small 34s to 51s 6d, low middling to middling 40s to 48s, good middling 50s 6d to 56s, bold 68s to 82s, peaberry 48s 6d to 65s. *Coorg*, smalls 38s to 49s 6d, low middling to middling 43s to 46s, good fine middling blue 59s to 62s 6d, bold 53s to 59s 6d, peaberry 45s to 70s. *Neilgherry*, middling greenish 43s to 44s 6d, bold 51s. *Wynaad*, smalls 37s 6d, bold 54s, peaberry 55s 6d.

Jamaica.—84 barrels 8 bags sold, smalls 35s, ordinary to good ordinary greenish 30s 6d to 38s, low middling to middling brownish 40s to 50s, fair bold colory 60s.

Costa Rica.—Of 6,350 bags catalogued 3,600 bags sold, smalls 31s 6d to 42s, good ordinary 37s, fine ordinary 40s to 42s, low middling to middling 43s to 50s, good middling 55s to 56s, bold 59s to 73s, peaberry 42s to 64s.

Guatemala.—Of 785 bags offered 320 bags sold, smalls 35s to 39s 6d, low middling to middling 43s to 51s, peaberry 48s to 57s 6d.

Nicaragua.—133 bags sold, ordinary to good ordinary bright foxy green 35s to 38s.

Mexican.—614 bags mostly sold, smalls 38s, low middling 44s, good middling 52s, peaberry 40s to 52s.

Colombian.—320 bags, chiefly damaged, sold, smalls 35s, low middling 42s to 43s 6d, bold 47s to 51s, peaberry 40s to 45s.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99 Bags.	1897-98. Bags.
Rio ...	2,734,000	3,173,000	3,030,000	4,179,000
Santos ...	7,718,000	5,504,000	5,335,000	6,033,000
Total...	10,452,000	8,677,000	8,365,000	10,212,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 11$\frac{13}{32}$d, previous day 11½d.

Havre, *June* 6.—Good average Santos June opened firm at 36¼f. and closed steady at 36½f., September opened at 37f. and closed at 37¼f., December opened at 37½f. and closed at 37¾f., March opened at 38f. and closed at 38¼f.

Hamburg, *June* 6.—Good average Santos June opened steady at 29¾pf. and closed steady at 30pf., September opened at 30¼pf. and closed at 30½pf., December opened at 31pf. and closed at 31¼pf., March opened at 31¾pf. and closed at 32pf.

New York, *June* 6.—Closing prices of No. 7 Rio were as follow:—

	June.	July.	Aug.	Sept.	Oct.
June 6...	5·16	5·20	5·30	5·35	5·40
June 5...	5·15	5·20	5·30	5·35	5·40

TEA.

Indian.—Business was resumed after Whitsuntide on the 3rd instant, only 2,500 packages were submitted at auction, against 11,900 packages on the 20th ultimo.

There was rather more demand for useful descriptions, particularly those in closing invoices, though no material alteration in quotations can be recorded. Common sorts and parcels with mixed stalky red leaf continued to bring low prices. The first invoice of New Season's was offered, *viz.*, 69 packages of the Makum Tea Company's growth, and met with spirited competition, being superior to usual early arrivals.

The May figures issued by the Tea Broker's Association are disappointing, deliveries amounting to 6,378,000 lbs, contrasted with 7,362,000 lbs. in the previous year, while the bonded stock on the 31st ultimo was 12½ million lbs. heavier than at the corresponding date in 1900.

Ceylon.—The market re-opened on the 4th instant, catalogues including 27,700 packages, compared with 24,600 packages on the Tuesday before the holidays.

A quieter tone was noticeable in the bidding for all except the more attractive lines. Ordinary Pekoe Souchongs and Pekoes seemed less sought after and tended in favour of buyers. Medium to fine leafy grades sold without much change. Broken Pekoes went irregularly and those with inferior liquor were often lower,

though the best received fair support. Broken Orange Pekoes, as a rule, fetched fully prior rates.

The average is 6½d per lb. On the 23rd ultimo, it stood at 6⅝d per lb., and 6¾d per lb. on the 14th June a year ago.

Clearances from the London warehouses in the month were 6,495,000 lbs., opposed to 7,346,000 lbs. for the same period in the preceding May. The stock on 31st ultimo was 25,744,000 lbs. and 24,794,000 lbs respectively.

JAVA.—A little over 1,000 packages of direct import passed the hammer, and met with attention, values being about maintained.

Deliveries.—The clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 31st May, 1901 ... ... 10,705,595 lbs.
Do. do. 1900 ... ... 13,748,376 „

During the fortnight the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	8,764	699	9,463
Ceylon	25,013	2,641	27,654
Java	883	139	1,022
Total ...	34,660	3,479	38,139

Also 376 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated June 7th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1901-1902	9,639	28,089	1,022
1900-1901	—	—	—

9,639 *pkgs.* INDIAN
28,089 „ CEYLON
1,022 „ JAVA
} Total 38,750 packages were offered in public auction this week.

It will be seen by the table given at foot that the imports of all Tea into London during the season just closed were *forty million* lbs. more than was the case two years ago, in spite of a reduction of five million lbs. in the quantity received from China.

INDIAN.—The market opened on the 3rd instant, at prices about on a par with those ruling before Whitsuntide, although the tendency, especially for commonest grades, was rather in favour of buyers. Only one invoice of New Season's has, as yet, been brought to auction, *viz.*: 69 packages "Makum" which realised an average of 1/2½ per lb. 343 "last of season" invoices have been sold against 399 for corresponding period, 1900.

The official telegram gives exports to U.K. for second half of May as 727,000 lbs., against 2,000,000 same period last year, making the total from 1st April to 31st May, 1,388,000 lbs., against 3,100,000 lbs.

Week's average of New Season's Tea sold on Garden Account 1901, 69 pkgs., av. 1/2·50d. 1900,—— pkgs., av —d.

CEYLON.—The first sale after Whitsuntide was held on the 4th instant, when the quantity brought forward, although heavy, was not excessive. Buyers were not eager purchasers and the slight change in prices was in their favour, especially for common to medium Teas which sold with some irregularity.

The official wire gives shipments to U.K. during May as 9,750,000 lbs., against 10,500,000 lbs. last year, making total from 1st January, 47,750,000 lbs., against 49,500,000. The estimate for June is given as 10½d to 11 million lbs., against 12,750,000 shipped June, 1900. Average for week 6·50d.

Ceylon Tea sold on Garden Account 1st Jan. to date, 533,989 pkgs., av. 6·63d. 1900, 505,997 pkgs., av. 7·44d.

JAVA.—Only 1,022 packages were brought forward, all being of direct import; the Teas were nearly all sold in the room without material change in quotations. 13,508 packages are advertised for sale in Amsterdam on the 7th instant.

Bank Rate 3½ per cent. Exchange on London three months' sight:—Calcutta 1/4 5/32. Colombo 1/4 3/16.

COCOA.

Auctions were resumed on Tuesday, when 6,984 bags were submitted for public competition. Common West India was a trifle buyers' favour, as also was Ceylon, but otherwise there was no change. Of 1,075 bags Trinidad brought forward 600 bags sold, very fine red 76s, fair to fine 70s to 73s, being full up. Of 2,264 bags Grenada, 1,520 bags were placed at rather higher values for the better qualities, but at 6d reduction for common; fine to very fine red realised 67s to 69s, good 64s 6d to 66s, common to fair 61s 64s. 48 bags fine Demerara brought 71s. 271 bags Jams nearly all sold at 63s to 65s 6d for fine fermented, and 59s to for common to fair. 176 bags Dominica practically all sold—fai good 61s to 64s 6d. 36s bags St. Vincent brought 66s 6d to for superior, and 57s to 63s 6d for common to good. 16 bags St. Lucia, half sold at 64s to 65s. 20 bags surinam realised 72s bold greyish red. Of 443 bags Haiti, 115 bags sold at 64s for fermented, and 56s for greyish. 60 bags Puerto Cabello half s at 78s for clayed. Of 56 bags Colombian, 10 bags common sold 62s. 517 bags Guayaquil partly sold, at 62s for Esmerelda, 68s for Winter Arriba, being unchanged. Of 566 bags African o 30 bags sold at 64s, Ceylon growth still hangs fire, and out of 1,436 bags offered barely 200 bags sold at 77s to 79s for g medium and bold red, 68s per cwt. for fair, 60s 6d to 64s ordinary medium, 53s 6d for smalls and 61s for collected, be cheaper. Private sales include 350 bags African at 61s to 64s and 150 bags Guayaquil early summer Arriba 69s to 70s and win Arriba 67s to 68s per cwt.

PEPPER.

BLACK.—Has moved in buyers' favor, but sales only small. the spot Singapore sold at 6⅛d to 6 1/16d and 40 tons dene to arri April-June (s.) at 6⅛d and January-March (s.) at 6⅜d, but there sellers of June-August at 6⅓d, and September-November 6 3/16d per lb.

The shipments of Black Pepper for the month of May compa as follows:—

	1ST-HALF.			2ND-HALF.		
	1901.		1900.	1901.		19
	Tons.		Tons.	Tons.		To
U.K.—Sing. ...	50	160	160	*nil*	30	40
„ Penang ...	110		160	30		80
Continent ...	30		30	60		
United States ...	170		*nil*	800		
Total ...	360		350	890		

WHITE.—Is steady but not active On the spot modera quantities of fair Singapore have changed hands at 9⅜d. and Pena at 8 13/16d per lb. For arrival 60 tons sold—Singapore July-Septe ber (s.), 9¼d, and Siam, June-August. 9 5/16d to 9¼d per lb.

The shipments of White Pepper for the month of May compa as follows:—

	1ST-HALF.			2ND-HALF.		
	1901.		1900.	1901.		190
	Tons.		Tons.	Tons.		To
U.K.—Sing. ...	10	40	*nil*	40	50	70
„ Penang ...	30		30	10		30
Continent ...	50		30	20		1
United Etates ...	*nil*		*nil*	70		
Total ...	90		60	140		2

GINGER.

COCHIN.—Is steady, with a little business doing in good mediu and small washed rough at 38s to 38s 6d and Calicut rough So at 37s 6d to 38s per cwt.

CINCHONA.

To the Amsterdam auctions to be held on June 13, 1,584 bales a 167 cases weighing 155,295 kilos., Java cinchona have been adde which brings the total to 5,356 bales and 264 cases totalli 485,286 kilos.; 4 cases quinine will also be offered. The expo from Ceylon from January 1 to May 13 have been:—

	1901.	1900.	1899.
Lbs.	283,550	159,611	288,381

It will be noticed that there is a substantial increase over t figures for 1900; so far this year America has imported 23,834 l direct from Ceylon, which is a new development. The N.V. Ned landsche Veem cinchona bark department at Amsterdam repo the shipments from Java to Europe as follows:—

	1901. Amsterdam lbs.	1900. Amsterdam lbs.	1899. Amsterdam lbs.	1898. Amsterd lbs.
May	746.000	816,000	943,000	672,00
January-May ...	4,169,000	3,252,000	3,964,800	3,884,00

In auction 50 serons Peruvian bark sold readily at from 1s 7d 1s 8d per lb. for the good bright Luxa quil (two serons), and 6 to 6½d for sound Huanoco, and 5d for damaged.

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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DOMESTIC OCCURRENCE.—The fee for inserting a domestic occurrence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 12th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Coorg.

Polli Betta, *3rd July.—Weather*—Since yesterday the monsoon has once more become strong. Over two inches of rain recorded this morning. Previously we had a break extending over eight days, but there was a little rain on some days. If the monsoon does not make it up this month, the forecast for these parts will be falsified. Borer still being removed. All seasonable works are progressing favourably. *General Health*—Some imported cases of cholera have occurred. *Labour*—Sufficient.

THE TAXATION OF TEA, COFFEE, ETC.

There is probably no more vexed question of commercial and political economy than the question upon whom the burden of an import or an export tax on a particular comestible really falls: whether the produce or the consumer. Under what may be regarded as primal, if not as normal, conditions, we need no science to lead us to a plain answer, "the consumer." But this reflects a narrow view. The main principle of the exchange of commodities is that the producer should be able to earn at least a fair wage. He ought to receive the full value of the employment of his labour and his work. Yet when he comes to sell his produce the interests of the consumer have to be considered. Virtually, all trade originated in, and is based upon, a system of barter. If, then, the consumer be called upon to pay a duty upon a special product, his remaining purchasing favour is reduced *pro tanto*; and if the principle of barter be properly applied it will eventually be found that producer and consumer both pay. The nearer the equality of the payments the nearer the transaction is to an ideal standard of perfection. Complications arise, however, when the transaction is with a

foreign supplier or a foreign consumer; again, when the product taxed has to compete with similar products, untaxed, from other countries; and under various other circumstances. It needs but a moment's reflection, for instance, to satisfy us that there is a wide difference between the conditions under which Tea and Coffee have to bear taxation in Great Britain.

At the last Annual General Meeting of the Tower Tea Company—a large tea, coffee, and cocoa distributing concern in London—some interesting remarks were made by Mr. THOMAS LOUGH, M.P., the Chairman. He rightly observed that the great articles of consumption now subject to a tariff in Great Britain are so few that the public will watch with interest the effect produced even on one of them by those abrupt increases of taxation with which the nation has become familiar. Studying what has been the effect of the large increase, amounting to 50 per cent., in the taxation on tea, Mr. LOUGH remarks that this has now been in existence for over a year, so that we are in a position to judge. It is the only increase that has been made in the tax since tea became one of the leading products of the British Empire. In 1865 the tea duty was reduced to 6d., and in 1889 to 4d. per pound. The same result followed the reduction in each case. Within two years consumption increased by 15,000,000 lbs. The duty remained at 4d. till last year, when it was raised to 6d. In 1865 96 per cent. of the tea used in the United Kingdom was from China. The effect, therefore, of British tariffs on the trade was of small concern to the British as a nation; but last year 95 per cent. of the tea consumed was from estates in India and Ceylon, owned by British capitalists and worked by British subjects; therefore any vicissitudes that affect the business become of profound importance to the Empire. The experience of those engaged in tea production is unanimous that the increase of duty has produced disastrous results. British tea-growers had naturally made arrangements to meet a steadily-increasing demand, which they had every reason to expect; but the new duty has checked consumption, and the latest figures show, for the first time for many years, a decrease in the quantity of tea used in the United Kingdom per head of the inhabitants. In 1899 the Board of Trade returns show that the consumption had reached 5·98 lbs.; but last year, according to figures just issued by Messrs. W. J. and H. Thompson, it had fallen to 5·91 lbs. per head. This, says Mr. LOUGH, is the general result of an increase of taxation.

It may strike some of our readers that the connection between cause and effect here is not beyond question. The deduction made by Mr. LOUGH is supported, however, by facts regarding the consumption of Tea in the United States. In 1898 a tax of 10 cents per pound was imposed on tea in the United States, and the effect was that within two years consumption was lowered by 25,000,000 lbs., or one-third of a pound per head of the population. If we conclude from English and American statistics that the increase of duty has checked demand, we must also conclude that it has had the effect of raising the price asked from the consumer, and that the burden of the tax has thus leaned towards him in the first place, and not the producer. On the other hand, a check in the volume of demand is distinctly disadvantageous to the producer, and when, as in India, this is accompanied by currency legislation adverse to the interests of the producer, the result must be serious. Indian tea and coffee exported to Europe are virtually taxed twice over. The inflation of the rupee acts as a very heavy duty on exports from India; in Europe various direct import duties are levied. It impossible for anyone to urge that tea, coffee, and cocoa—t great rivals in the list of beverages—have to submit to equ burdens and are thus fairly placed for competition, the o with the others. Manifestly, therefore, the present system scientifically unsound. That it is unwise, is proved by t parlous condition into which the tea and coffee industri have fallen.

JAPAN TEA IN 1900.

A British Consular report states that for years past t export of Japanese tea has been declining. Tea from Ind and Ceylon has gradually been supplanting that of Japan the markets of the United States and appearances are th the latter will in the end lose its main customer. T quality of the leaf produced in Japan is judged by exper to depreciate year by year. Notwithstanding the enjoyme of a Government subsidy, due care does not seem to exercised in the cultivation of the plants and in the pickin of the leaves. The tea crop of 1900 showed a shortage a prices in consequence appreciated. Two reasons account for the inactivity of the tea market in general in the Unite States in 1900. The first was the uncertainty caused by t Presidential Election, the other the fact that it looked at o time as if the customs' duty on tea might, as the outcome strong agitation, be removed. Nothing came, however, the movement directed against the duty; and as it will n be abolished this year it must at any rate remain at present rate until 1902. Yet the Japanese Tea Guild a once more doing their utmost to bring pressure to bear favour of its removal. The troubles in China gave rise to speculative demand for Japanese tea, which brought abo a considerable advance in prices in July and August. Canada the beverage prepared from the product of Japa lost ground partly owing to its high price and partly account of the preference given to Indian and Ceylon tea Of the tea exported in 1900, about 32 per cent. found its wa to New York, 29 per cent. to Chicago, 14 per cent. to Sa Francisco, 20 per cent. to Canada, and 5 per cent. to Europ The shipments nominally to Europe are chiefly meant f Singapore and made on Chinese account. For those engage in the trade the season has not been a bad one, good profi being made in the early part of it.

As regards the trade of Yokohama in tea it is observed another report:—

Until the opening of the tea season on May 1 no tran actions in tea occurred, stocks of old leaf having bee disposed of by the end of December, 1899.

Prices for the new leaf averaged 10 per cent. over rat ruling at the same time the previous season, the mark continuing fairly firm on about this basis till June, when became apparent that the supply of first crop leaf would considerably less than the average. At about the same tim the troubles in China threatening to extend to the tea distric in that country, considerable speculation in the America markets ensued and a heavy rise took place in Japan, t market ruling fully 20 per cent. over last year's rates.

By the end of August, however, the demand in Ameri had ceased, and shipments made at this period reached a du and declining market, the position remaining unchanged unt the end of the year.

The position of the Japan tea trade in Canada is unsati

uctory in the extreme. The causes that led to the advance n the United States mentioned above met with no response n the Canadian market, buyers contenting themselves with he stocks of old leaf remaining over from the previous season, vhich proved sufficiently adequate for their requirements to bviate the necessity of drawing their supplies direct from the rimary market to the usual extent. The trade in the finer rades of Japan tea has been to a great extent supplanted in anada by the Ceylon product, and the only demand that xists for Japan leaf is for the commoner descriptions, which an be sold at low prices, and which are largely used for nixing purposes.

Referring to the quality of the crop of 1900 the remarks nade in the last report continue to hold good. Whilst a light improvement in the drawing qualities of the earlier rrivals was noticeable, Japan teas, on the whole, are yearly leteriorating in quality, and unless a vigorous effort is made n the part of the growers to improve the standard, the posi- ion the article still maintains in America will be seriously endangered.

The following is the total export from Yokohama from January 1 to December 31, 1900 :—

To	Quantity.	
	1900.	1899.
	Lbs.	Lbs.
New York	8,558,033	8,742,635
Chicago and West	7,591,618	7,195,275
San Francisco and Pacific Coast ...	3,614,264	3,997,756
Canada	5,297,352	7,193,776
Europe, etc.	1,403,302	839,732
Total ...	26,464,569	27,969.174

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

Imperial Differential Duties.

The Canadian Manufacturers' Association (Toronto) have ent copies of two resolutions adopted on various occasions with reference to the subject of Imperial Differential Duties. The first of these resolutions was unanimously adopted at the nnual meeting of the Association, February, 1901, and was supported by its delegates to the fourth Congress of the Chambers of Commerce of the British Empire. The second esolution was adopted at the general meeting of the Associa- ion called in September, 1901, to pass report of delegates to he above Congress. These two resolutions will serve to how the position of the members of the Association on these mportant subjects. The Association wish to do all in their ower to promote closer trade relations within the Empire.

[RESOLUTIONS.]

February, 1900.

"Whereas it is generally recognized that an advantageous com- nercial bond is the strongest link in National Unity, and that the naintenance and strengthening of trade is the keystone of a State's successful development;

AND WHEREAS the existence of an Empire is largely dependent pon the material prosperity of its people;

THEREFORE BE IT RESOLVED, That in the opinion of this Congress he bonds of the British Empire would be materially strengthened, and the union of the various parts of Her Majesty's Dominions greatly consolidated by the adoption of a commercial policy based upon the principal of mutual benefit, whereby each component part of the Empire would receive a substantial advantage in trade as the result of its national relationship.

FURTHER RESOLVED, That in order to make the foregoing operate, the Chair shall appoint before this Congress dissolves, a representative and proportionate Committee of Home and Colonial delegates to devise a scheme of this nature and report to this or a similar Commercial Congress, and that a copy of this resolution be officially forwarded to the Home and Colonial Goverments concerned in the proposition."

IMPERIAL TRADE RELATIONS

August, 1900.

Whereas: At the present time proposals are being made looking to the possibility of drawing into closer union the various parts of Her Majesty's domains and strengthening the ties of love and friendship by the addition of advantageous commercial bonds within the Empire.

Be it resolved: That this Association places itself on record as being heartily in favour of reciprocal preferential trade between Canada and other parts of the British Empire with which arrangements can be effected to their mutual benefit, and by means of which each would receive substantial advantages in trade as the result of its national relationship.

And be it resolved: That in the opinion of this Association, the first step towards the inauguration of such a policy must be brought about by the adoption of a policy by the colonies themselves on which all can unite;

And be it further resolved: That, as the present time is a particularly opportune one for the discussion of such a policy in Australia and South Africa, the Government of the Dominion of Canada be, therefore, urged to take such steps as may be possible to have the sister colonies consider the adoption of the principle of preferential trade within the Empire.

NOTES.

Yerba mate. Efforts are now being made to cultivate yerba mate or Paraguayan tea artificially, and these have it, it is said, been attended with considerable success.

Java Cinchona. Shipments from Java from May 6 to June 9, 1901, at 811,000 Amsterdam lbs., and the total from January 1 to June 9, 1901, at 3,863,825 Amsterdam lbs.

India's Trans-Frontier Tea Campaign. Mr. Foley has arrived at Seistan. The extension of his mission has been negatived for want of funds. Two other caravans of Indian tea are shortly going to Meshed.

The Ceylon Association in London. At the Annual General Meeting of the Ceylon Association in London, Mr. Henry Bois was elected President; but no one was elected to the post of Vice-President.

The Ceylon Import Duty on Tea. The Indian Tea Association have voted in favour of action being taken to secure the abolition of the Ceylon duty on Indian Tea, prior to the enhancement of existing Indian duties.

Lipton, Limited. Lipton, Limited, intend, says a Home paper, to float a subsidiary Company in South Africa, and stores will be opened in the leading centres. Mr. Julius Weil is reported to have taken a large interest in the undertaking.

Green Teas: Manufacture resumed in Ceylon.

A Colombo contemporary announces that the high tea estates which previously went in for making green teas and which ceased to do so for some time, have commenced to manufacture the greens again.

Proposed Tea Growers' Association.

At the Annual General Meeting of the Ceylon Association in London, Mr. Sholto Skrine proposed, and Mr. James Sinclair seconded, a resolution in favour of the formation of a Growers' Association for the better representation of the interests of sellers. This was carried.

Green Teas for Canada.

A Colombo paper states that a local firm lately received a telegram from Canada asking for quotations of Ceylon green teas As there were none on offer they were unable to reply. Mail advices to hand supply confirmation that Ceylon greens are making headway in Canada, although prices realised are low.

Tea Prospects in India.

Advices from south Sylhet state that the weather in June has been variable. In the early part the heat was intense and rain wanted. Insufficiency of moisture retarded the flushes. During the past few days there have been copious showers which must do good, and the temparature has fallen considerably. If this continues it will retard growth.

Colombo Tea Sales.

At the public sale of tea at Colombo on the 26th ultimo, 15,445 packages=1,208,781 lbs. were offered, of which 11,793 packges=938,986 lbs. were sold. The *Times of Ceylon* reports that the market was firm for Pekoe and Pekoe Souchongs. Common to medium broken Pekoes were dearer; but the better class of brokens were in rather less demand and were a shade easier.

Tea in French Indo-China.

The cultivation of Tea in Annam is expanding rapidly, as will be seen from the following statistics of exports :—

1897	10,000 kilos.
1898	39,000 „
1899	137,000 „
1900	180,000 „

Coffee in Italy.

The British Consul report, that although the importation of Coffee into Italy in 1900 was smaller than during the previous year, the amount was over the average of the five preceding years. Imports from the United Kingdom have gone down nearly 80 per cent. in five years; while supplies from Central and South America have during the same period nearly trebled. The other supplying countries in 1900 were Austro-Hungary and France.

Pepper in French Indo-China.

Exports of Pepper from Indo-China for "the three-quarters of 1900" were, says the British Consul, as follows :—

To	Kilos.
France	2,297,694
French colonies	1,149
Foreign countries	399
Total ...	2,299,242

which is 544,060 kilos. in excess of 1899 exports.

The Sale of Tea in India.

The Indian Tea Association nounce promises amounting 600,000 lbs. towards the scheme for extending the sale of in India. There are further conditional promises, and million lbs. are now expected. When the distribution is full progress, the proposed tea distributing agency will formed immediately, and its operations will commence fort with. It is probable that Messrs. Andrew Yule & Co. w be entrusted with the organization and working of the ne "department" for the pushing of sales in India.

A Coffee Exchange in Rio de Janeiro.

It is proposed, says the *Hand Museum*, to establish a Coffee E change in Rio de Janeiro, wi branches and depôts in Santos, Bahia and Victoria. petition has already been made to the President of the R public. This Exchange is to be managed by seven Directo to be chosen by parties interested in the trade, except t Chairman, who is to be nominated by the Government. It also proposed to establish agencies to furnish statistics of t production and consumption of coffee, in order to establish basis for arranging the prices.

Ceylon Tea in Sweden.

According to an advertisement a Swedish paper, Ceylon tea from certain estate "is to be had from all grocers throughout t Kingdom." We venture to question the truth of this stat ment. Mr. Oscar Dickson has supplied the *Ceylon Obser* with the following statistics of Tea and Coffee imports in Sweden.

	Coffee (in kilograms)	Tea.
1895	18,067,617	168,815
1896	19,675,391	165,615
1897	25,560,331	188,871
1898	25.088,349	181,978
1899	23,519,000	

It is said that, gradually, tea is being more used, but t demand is, for the most part, for China teas of inferior qualit Coffee is still King.

Cocoa in Holland.

The total importation of cocoa Holland during 1900 reached 14,3 tons in 1899. During 1900 the arrivals of the new crop which were rather later than usual, found a ready sale advanced prices, and the demand during the year continu brisk, prices remaining firm until near the close of the yea when the heavier shipment from Trinidad, Bahia, and S Thomas in consequence of larger crops caused the quotatio in our market to give way to some extent. The receipt Java cocoa at Amsterdam in 1900 amounted to 19,200 bag showing a steady yearly increase since the year 1894, wh they amounted to 8,630 bags. The price of No. 1 Java whi opened in January, 1900, at 10d. per lb., advanced to 11¼ per lb. in September, closing in December at a slightly low quotation.

Rubber in Mexico.

A Home paper says :—There a wild and cultivated rubber trees no growing on the Isthmus sufficient to make the country ric without regard to any other product. Mexican rubber is no worth 80 cents per lb. gold. A good, healthy, rubber tree w produce from two to four lbs. of rubber annually at from eig to twelve years old. A rubber forest of 1,000 acres, co taining 250 trees per acre, would yield at least $1 per tr profit, or $250,000 annually. The Isthmus is the only natur

bber-producing country within the limits of civilization. he demand for rubber is increasing at a rapid rate, and those ho are now growing rubber forests confidently expect to see lexican rubber sell for $1 per lb before their trees are in earing. Those who have invested in rubber on the Isthmus ill be well rewarded for their patientwaiting.

e London Tea Market. The weekly special telegram of 27th ultimo from Messrs. Gow, Vilson & Stanton to Colombo reports that the market enerally is steady, and that the market for medium liquoring ekoes and Broken Pekoes is weak, while that for Common ekoes and Broken Pekoes is also steady. The price of fair quoring Ceylon Pekoe Souchong is 5d (same as last week) nd the average price of Ceylon tea sold on garden account is week was 6¼d (⅛d down) as against 5¾d and 6⅝d respecvely in the corresponding week last year. Reuter reports at common qualities of Ceylon tea are firmer. Pekoe Souongs are quoted at 4¼d (same as last week) and the average r the week at 6¼d (an eighth of a penny down). 25,000 ckages of Ceylon tea were offered for sale, and 24,000 ere disposed of; while of the 9,000 packages of Indian tea fered, the whole found purchasers.

lcutta Tea Sales. At the Calcutta sales on 28th ultimo 14,000 packages were offered d most of them were sold. Quality was rather indifferent, large proportion consisting of plain Cachars, and soft eathery liquoring kinds from Terai and Duars. There were few good invoices. As regards Assam and Darjiling the ne of the market was better. There was a strong demand r all above the commonest, and prices generally showed a rdening tendency. The feature of the sale was the particularly strong demand and keen competition for the best quoring Assams and Darjilings; and for these long prices ere recorded. For the Bombay and Asiatic markets buyers ere operating freely; and of the Pekoes, 25 per cent. were sorbed by these demands. Other outside markets were terested to a considerable extent. The sales are now to be ld weekly.

a Seed from Natal. Mr. Jas. A. McMillan writes from Ifafa, Alexandra County, Natal, to e *Ceylon Observer*:—Dear Sir,—At the request of the late r. John Fraser, of Umzimkulu, formerly well-known to you of the "Brae Group" of Gardens, Ceylon, I have taken e liberty of sending you, through Messrs. King & Sons of rban, a small box of tea seed. Mr. Fraser had a quantity the seed from me and mentioned that there would probay be an opening for seed in Ceylon, so pleased was he with e jât. All the seed on my place I have imported—some m Darjeeling, some from the Kodanaard (Nilgiris) and me from Ceylon (from a Mr. Inglis). Consequently the seed am sending you is a hybrid. I shall take it as a great vour if you would kindly ask one of your friends to try the d and let me know what you think of it Our seed is dy for shipment February-April. Thanking you in antiation.

w York Tea Trust in apan's Interests. Concerning the report that the tea merchants of New York had been proposing the organizing of a tea st since about the spring of this year and that our tea merchants had been asked to join the union, the *Japan Weekly News* of the 1st ultimo states, that it appears from a paragraph contained in the *Nichi Nichi* that the proposed plan has now become an accomplished fact. The paper says that the tea trust was lately organized in New York by the joint efforts of the American and the Japanese merchants concerned, who are backed by a capital of seven million *yen* altogether. It is further stated that the general business of the new trust will be conducted by six commissioners of high standing, three of them being supplied from Japan. With reference to the above, the same paper publishes the opinion expressed by Mr. Kahei Otani in this connection. The latter is entirely in favour of the trust.

Tea for Natives. "A Native" (of Ceylon?) writes to the *Ceylon Observer* that it is now an admitted fact that the natives have almost all taken up tea drinking, not as a luxury but as a necessity of life. "In fact some of them substitute it for the morning meal I had recently occasion to travel in the interior, when I had the pleasure of seeing people freely using tea, invariably without milk but with a bit of Kitul jaggery." He adds:—"Although we are living in the midst of big tea estates, yet we are tantalized. There is not a grain of good tea to be had here for any love of money or mercy. The boutiques here sell dirt, rubbish or sweepings at 25 cents per lb. which is not fit for human consumption. It costs R1·40 to R1·50 to get a lb. of good tea from Colombo by post and it is not all who can do this. I have often heard the proprietors and the Superintendents say, retailing tea at the store is simply encouraging thieving. Surely it is not the case; a trustworthy person can be entrusted with the work with equitable advantage to proprietor as well as to buyer."

Proposed Coffee-tax in the U. S. The *American Grocer* expresses the opinion that a tax on coffee would not result in any appreciable difference in cost to consumers. "It would give the Government an additional revenue of $15,000,000, and thus permit the removal of really burdensome taxes imposed to meet war expenditures. It would tend to improve the grade of coffee. We can see no reason why a heavy tax should be laid on tea and none on coffee, especially as the latter can stand a duty much better than tea. When the Government requires less revenue, we favour the reduction of the duty on tea, and would be glad if that could be brought about at the next session of Congress. The tax on tea, together with the inspection act, has led to a decided improvement in the quality of imports, which have steadily increased since 1897 and promise to grow until the country absorbs as much as prior to that date, when tea was duty free. If the distribution has increased, it follows that more and more is being consumed, and to that extent retailers are benefited. What the retail trade needs most is to stimulate consumers to a greater use of high-grade tea and coffee." Yet the same paper writes:—"Cheap coffee has greatly stimulated consumption.

Tea Growing in South Carolina. Another tea farm is soon to be started in South Carolina. Colonel Augustus C. Tyler, of New London, camped at Summerville during the war with a regiment of Connecticut Volunteers, of which he was Commander, and took great interest in the tea farm of Dr. Shepherd at that

place. Colonel Tyler was so impressed with the possibilities of tea culture in this region that after the close of the war he organized a syndicate of New England capitalists and brought £5,000 acres near Summerville on the Savannah Railroad, which is now being prepared for planting. This year 300 or 400 acres of tea plants will be set out, and the area will be increased annually, and as rapidly as the plants can be obtained. Dr. Shepherd, who owns the tea farm at Summerville, made a great deal of money out of his crop last year, and is likely to make still more during the present season, for he, too, has enlarged his acreage. Mr. Wilson, the Secretary of Agriculture, has always argued that there is both patriotism and money in tea culture, and is lending the aid of the government to Colonel Tyler in his enterprise According to a Dutch Consular report in the *Consulaire Verslagen en Berichten* satisfactory progress is being made in the planting of tea in several States of the Union. In South Carolina there are at the present time about 60 acres under cultivation which have produced a crop of very good quality, the tea from that particular plantation selling at one dollar per pound retail. It is intended to plant 4,000 acres with tea shrubs, estimated to produce about 300,000 pounds of tea per annum.

GENERAL ARTICLES.

THE COFFEE TRADE IN THE U. S.

Cheap coffee has greatly stimulated consumption, and, if the era of low prices continues for a few more years, love of the beverage will be so strong, and the habits of coffee-drinkers so confirmed, that prices will be abnormally high when crops fall below average annual requirements.

It is reported that Brazil will carry over one million bags of coffee of the 1900-1901 crop.

Caution is needed in accepting reports, especially from producing countries, concerning coffee crop conditions and probable developments; for, in the light of past experiences, they should be received with caution, and confirmatory news awaited before investment.

Mr Hermann Sielcken, of W. H. Crossman & Brother, in reviewing the present coffee situation to a representative of the *Journal of Commerce*, said:

"Brazil has been sending sensational stories into the consuming countries, undoubtedly with the idea of affecting the prices at the commencement of the new crop. In the last four or five years of large crops, they have exhausted all schemes which the people would believe for awhile, and all of these sensations came forward regularly between May and August, the time when the crop is commencing to be harvested.

"In 1897-98, at the beginning of the crop, we had frost stories galore, and in July and August it was stated that the trees might be totally destroyed by frost. And last year the heavy rains were supposed to have reduced the outturn of the present crop very greatly, and this, together with the advance in exchange in Brazil, made the world extremely bullish at the beginning of the crop."

Mr. Sielcken attributes the over-production to the "high prices in gold paid to Brazil from 1887 to 1896," which "stimulated the production, and the fall in the value of the paper money of Brazil gave enormous currency prices as well as gold prices, and made this stimulus for values in the eyes of the Brazilian planters still greater. Planting was pursued with a vengeance, especially in the Province of San Paulo, where plenty of virgin ground was still open, and is still open, and where the planters still possess a great deal more wisdom than those of Rio by attracting immigration to replace slave labour. These efforts led to production never dreamed of.

"While values have been established on the same broad l governing other staples—supply and demand—the coffee world been trying to make out what influences of a minor nature either caused a decline or would stop it. So far, since the c mencement of the big crops in 1896, the Brazilians have been to obtain good prices, considering the size of the crop, and the he losses have fallen almost entirely on Europe and the States.

"There is no question that the consuming markets have B completely at bay. They have enough stocks on hand to en them to wait until Brazil markets conform to the necessitie they present themselves. Facts have proven that neither spec tion, the varying of exchange, nor increased consumption can with the present production. If prices fall low enough, and haps lower than the actual cost of production, it is likel work its own salvation to the coffee market of the future.

"The spot quotation is now on the basis of 6⅝ cents for No. 7 (the market standard), and prices are among the lowest on rec As a matter of fact, the lowest record is 5 7-16 cents. This reached in September, 1899, at a time when the October op sold at 4·10 cents. The question which is receiving attentio whether the current figures should be accepted as indicating era of low prices, as a result of over-production and of the che cost of production, or whether they of themselves constitute basis for an advance, on the ground that they do not pay the of producing coffee, and that the production will on that acc naturally be curtailed."

Lewisohn Brothers accept and emphasize the latter view. T are looking for higher prices. Time will tell which—the "bu or the "bear"—has the clearer predictive eye.—*American Groc*

JAPAN TEA COMBINE IN CANADA.

There was considerable excitement in the wholesale tea trad Montreal on Tuesday says the *Canadian Grocer*, when it bec known there was a well-established movement on foot to for big combination in the Japan tea trade.

The movement, which had its origin in New York, has, as its p the formation of a company with a capital of $3,000,000, the i being to do away with the current competition in the Japan trade, which forces buyers to purchase at high prices in Japan then later sell at a loss.

It appears that the chief object of the combination is to do a with the ruinous competition which the trade has recently b undergoing, and which has placed Japan tea at a distinct disad tage with the China and other teas which are fired and pac by natives.

The exigencies of competition have forced the trade to buy fr the Japanese at high prices and to sell at low prices. This particularly the case during the month of May—the opening of new season—when it is necessary to duplicate the exceedin choice samples, which can only be secured very early in the sea The extremely active competition for these grades enables

THE ART OF SINCING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, ot have no effect, and none do good. Sugar and water, or a little glycerine, g relief when the throat is inclined to be dry; this applies to persons whose thr are affected by the weather. About a third of a teaspoonful of Condy's Flui a tumbler of water, if used as a gargle every morning, will clear the throat brace up the uvula, which, in some singers, is so long that it interrupts the p emission of the voice, and introduces a grating undertone, while it also tend make a tremolo on the upper notes."—*The Idler*, February, 1900.

apanese to fix fancy prices, and the buyers have the added nducement to take all the choice grades of the early supplies, for he reason that the Japanese will then consign any surplus of these grades to this market to be sold in competition with the regular mporters.

The active competition in securing supplies of Japan teas results rom the fact that the offerings must be accepted with virtually o delay. The teas are in perishable shape and must be immediately fired and packed by the purchaser. As the supplies of the "cream" of Japanese teas may be purchased only at the beginning f the season and as the various buyers have customers for special ines of teas which can be obtained only at that period, it will be readily seen that the Japanese have excellent facilities at hand to secure favorable first prices.

The present plan is, therefore, to incorporate a regular company, having a capital of $3,000,000 or more, which shall be subscribed on an equitable basis by the various interests of the trade, including Japanese. American, and Canadian houses. Of the capital, $1,500,000 will be 8 per cent. preferred stock, and the balance will be common stock.

GUTTA PERCHA AND RUBBER.

M. A. Godefroy Leboeuf writes under date Paris, May 25th, to the *Ceylon Observer* :—

You will receive by this mail a little sample of Gutta Percha; submit it to any expert and he will report—'Gutta Percha fine quality. And yet, I can certify that neither *Dichopsis, Palaquium, Isonandra, Payena,* nor any other plant yielding Gutta Percha has anything to do with this sample.

This little sample is perhaps the solution of an urgent problem, the certitude of the supply of this substance for the future. All the Gutta Percha yielders from the "Insulande" are localised, and the crop will be quickly exhausted Their product is slowly obtained; the trees require four years and more and give 1 or 2 lb of marketable gum. The extraction from the leaves has proved till now a failure, and has not been accepted by the manufacturer of electric cables; extraction from the bark is on trial and I cannot say anything about it yet.

But chemists have recognised the presence of gutta percha in a number of plants growing in all parts of the tropical world. All the *Mimusops* contain Gutta; and *M Balata* and *M Globosa* are reported to yield 60 to 70 per cent. of pure Gutta in the gum. *M Schimperi* of Abyssinia and very probably the species from Asia, contains a limited quantity of the product. I know that other *Sapotaceous* plants and a few *Euphorbiaceous* are in the same case. The sample I send you has been obtained from Balata, *Mimusops Balata.*

I do not know the process, but I know it is a very simple and economical one. One kilo of Balata gives 700 grammes of Gutta. As the sample is valued at 7 francs per kilo, one can obtain 700 grammes of a substance easily sold at 14 francs for 700 grammes or 20 frs. per kilo. The chemist says that, all expenses paid, the kilo comes out at 12 to 12½ francs the kilo. This sample is sold here at a much higher price, for 30 francs have been paid in every case, so you can judge of the commercial value of the substance.

But just now I write with another point in view. I write only to planters, and I say all the gutta-yielders actually known are trees, slow-growing, requiring a special soil and climate, and very few will try the culture of these trees out of the regions where nature has sown *Dichopsis Isonandra, etc.*

But amongst the numerous species containing gutta, mixed with other substances, many are easy to propagate and to grow in very varied conditions of temperature, soil, and moisture. So it will be of enormous interest to know what percentage of Gutta all these plants contain, and to see beforehand if the culture can be remunerative. Till now the process has been a secret, but I believe it will not be so far long. But never mind, if this gutta-yielder becomes the subject of great enterprise, Balata gum will jump high, so the grower will be interested in trying some other gutta-yielders. Balata (*Mimusops Balata*) is a tree more easily grown than *Isonandra* or others from the same region, and other sorts of Mimusops are largely spread over the world.

Any chemist will give you the percentage of true gutta the trees contain; do not take any notice if the chemist says it will be too expensive to isolate the gutta. My inventor says that his process allows him to make a profit from the gums containing only 10 per cent. of true gutta. But we will speak of that again some day or other.

I received a few days ago two plants in a very bad state from the centre of the Orenoque region. One of these plants has begun to show a few leaves and I was very ashamed when I identified it with the numerous varieties of *Sapium Biglandulosum.* The travellers reported:—Big tree, yielding a large quantity of the rubber exported under the name of Pará rubber.

I know that Pará rubber is not the product of *Hevea* alone, and an Englishman sent me a few years ago a sample of rubber made from *Micrandra.* But *Sapium* from the hot countries has always been reported to yield rubber of very inferior quality. Strange to say, I have had in my hands plants collected by one of my collectors, M. Guillot, from English Guiana, known by such an authority as Mr. Jenmann as a bad yielder; others from Columbia, giving the virgin Caucho known as a very fine sort: others from Ecuador, just at the limit where the *Castilloa* is met: all these sorts are exactly the same in general appearance. But the area where *Sapium* gives good rubber is immense, nearly as large as its competitors, *Hevea* or *Castilloa.*

I have not been able till now to identify that new Rubber-yielder from San Luiz Potosi, Mexico. I know that the plant is a very common one in all the dry countries of the Mexican region, but I do not know its botanical name. My correspondent told me that the plant was known under the name of *Synanthera prepennia*, but Synanthera is not the name of a botanical genus, so I believe this species has been determined as a plant of the Synanthera family, which will also be called part of the "compositæ" family. The sample I have had in hand is really a plant of this family, but I have not had any flower, so I can say nothing more. As the region where the plant grows presents many plants suitable for the dry countries of North Africa, it has great interest for us.

After many trials I have received in good order seeds of the *Mangraba* rubber (*Ilencornia speciosa*). These reached me in the forests packed in saw-dust, but I believe it will never pay to import the seeds. All insects are fond of these seeds, and I have been obliged to place the pots on supports with the feet of these supports in Lysol to avoid the incursions of ants. It is a common proceeding in your countries, but not here. The seeds begin to germinate in a few days. The plants remain very delicate in our houses, but are easily propagated by cuttings.

I trust some of your planters will be enterprising and kind enough to send me through you a few samples of the gum from *sapotaceous* plants from your fine country, and if possible latex from the same. The latter must be packed in bottles mixed with 2 per cent. of formol. I believe that will be sufficient for avoiding the coagulation of the latex, for I can do nothing with coagulated latex.

[The following are the trees of the order *Sapotaceæ*, mentioned in Trimen's "Hand-book of the Flora of Ceylon," of which the author says that "all contain a milky juice, which after evaporation of its liquid portion, affords that variety of Caoutchouc known as Guttapercha:—(1) Chrysophyllum; (2) Sideroxylon; (3) Isonandra; (4) Bassia; (5) Palaquium and (6) Mimusops—Ed. *C. O.*]

NEW MARKETS FOR INDIAN TEA.

PERSIA.

Mr. E. G. Foley writes to the *Pioneer* from Seistan :—

I read with great interest your article in your issue of the 8th instant, which arrived two days after my arrival here—the "warning" against competition in sending caravans with tea into a new market like Persia under irresponsible or rather separate and conflicting interests. On my arrival here on the 27th ultimo, I had learnt that the Dehra Dun planters were sending up to Persia about 20,000 lbs. of tea, presumably that which had been sent up by two of their community to Quetta as far back as last February, or early in March, but had remained unsold for want of purchasers, and that one of the planters from the Dun was coming up in charge of it. I remarked to our Consul here the danger of these "expeditions," working irrespective of each other which would eventually end in a suicidal policy fatal to all concerned and which would benefit no one but the Persians—who are astute enough to sit tight and await the lowest bids. The object of the Indian Tea Associa-

tion is to see as much tea as possible diverted from the Calcutta and London markets and to attain this object to co-operate and work conjointly with all other Associations or Syndicates. On my way up to Persia I visited the Dun and saw all the leading planters and some of the Directors of the two Limited Companies, and explained to them that the intentions of the Indian Tea Association were by no means hostile and as a proof offered to take up with me samples of their tea to Persia to be shown round to intending purchasers, exactly the same as the samples of Assam and some Kangra Valley green teas with which I had been furnished. I saw the Honorary Secretary of the Dehra Dun Planters' Association, who is an old friend of mine and an Assam planter originally and for whom I officiated last season when he went Home on furlough and asked him for some samples to take up with me, but was informed they were not available then. In spite of this explanation to correct the misapprehension of the intentions of the I. T. A. a most virulent and spiteful and unprovoked letter appeared in the *Mussoorie Times* of the 8th March, not only as regards myself, but as to the intentions of the I. T. A. It was absolutely without foundation and contained a deal of braggadacio, as to the Dun being able to hold its own and more against all competition, owing to the cheapness of its labour, etc. The letter was signed "Planter," evidently the writer was ashamed to add his name to it. The writer apparently is not aware of the fact that there are gardens in Sylhet and the Dooars that land their tea in Calcutta at under 3 annas per lb., that some of these gardens turn out a yield, of from 800 to 1,200 lbs. per acre! In the Dun there are only three gardens that yield over 600 lbs. per acre. All the others turn out between 300 and 400 lbs. only per acre, the total crop of the Dun being under 1½ million lbs. The tea properties in the Dun are year by year steadily falling into the hands of native proprietors, and even in the two Limited Companies, comprising about 1,800 acres, nearly one-half of the total area under tea in the Dun, the native element is very strong, a large number of shares in each being held by them. In one a native has been on the directorate for several years and no doubt in time we shall possibly see natives having all the say in both these Companies by acquiring the majority of shares —which mean votes. This seems rather a digression on my part, but it is intended to show how a very small section of a community can wreck an undertaking meant for the benefit of all by holding aloof and working selfishly and adversely, a course of action which must ultimately end in their own loss if not ruin as well. To open up a new and unknown market like Persia it behoves all those concerned to work amicably and harmoniously and to co-operate and work together in a friendly spirit and to the best advantage and to combine and so overcome all difficulties. My intention has all along been—to which end I am now working and I think successfully in a measure—*not* to interfere or compete with the traders who bring Indian teas into Persia, by bringing up rival caravans, but to utilise these men as much as possible and induce others to take up the business as well by offering them facilities for obtaining their purchases at a reasonable price in British territory, and leaving to them the larger margin of profit and *risk* in selling in Persia. To put these men's backs up will lead to a combination on their part and a European with a caravan of tea might find himself stranded so that he might ultimately have to sell at the price offered by the "combination"; as they know it is not worth his while to take the tea back to India. It is to guard against a contingency of this kind and for fixing a price, that co-operation is absolutely essential—and I hope all those who contemplate sending caravans of tea will work together in a friendly spirit and to one end.

THE NATIVE ARMY.

Mr. Foley also writes:—

I see in your paper of the 5th ultimo an article from the pen of that versatile gentleman Mr. J. B. Leslie-Rogers "The Native Army and Indian Tea" wherein he condescendingly notices my communication to the Viceroy on the same subject and patronisingly says:—"Mr. Foley beyond these slight misconceptions is to be commended for bringing the matter before the public." I am glad to see that my views have met with the approval of so great an authority as Mr. Leslie-Rogers—who also remarks, "the writer, who has I hear recently visited the Dun, appears to have received his inspiration from the many previous experiences of that District in this matter." To this I can confidently and conscientiously reply that neither during my short visit to the Dun on my way up to Persia or my two seasons in the Dun as officiating Manager of the two properties of the Dehra Dun Tea Company, Limited, for wh services I hold a testimonial from the Directors of the Company, did I learn anything new, but—perhaps it is bet left unsaid. The idea of compressed tea is very old—as far ba as 1872, I remember a Cachar planter selling out of his intere in tea, going Home and investing the proceeds in tea compre ing machinery. He dropped £2,000 over it and returned tea planting. I also saw and drank China-brick tea in the ea sixties which a friend of mine used to get from China or rat from the Portuguese settlement of Macao. We also know t Davidson of Sirocco fame invented a machine for compressing into packets—samples of which were sent to nearly all those usi his tea-drying and other machines. No the idea is by no mean new one, but the kind which I advocate for use in the Army a Navy is what was given to me as a sample by the Chairman of Indian Tea Association to whose firm samples of the same we sent out only lately, the process employed for compressing bei quite different to any hitherto tried. With regard to the objectio of the Indian Army on natives in general using it, I enclose views on this as well as other subjects as laid before the As ciation, showing how this might be got over.

THE SALE OF TEA IN INDIA.

It is with great satisfaction that all interested in the tea indust will learn that tea to the extent of nearly 600,000 lbs, has now be guaranteed, by Companies and proprietors, to the scheme for tending the sale of tea in India, which is being promoted by t Indian Tea Association. The names of the principal contributo with the quantities promised are as follows:—

Companies represented by:—

		lbs.
Messrs.	Finlay, Muir & Co.	204,912
,,	Andrew, Yule & Co.	100,000
,,	Macneill & Co.	80,000
,,	Octavius, Steel & Co.	67,000
,,	W. S. Cresswell & Co.	23,920
,,	Barry & Co....	12,200
,,	Williamson, Magor & Co.	11,080
,,	Balmer, Lawrie & Co.	8,200
Mr.	C. A. Stewart	7,200
Messrs.	Davenport & Co.	5,950
,,	McLeod & Co., (one Company)	4,000
,,	Mackillican & Co.	3,600
,,	Kettlewell, Bullen & Co.	3,440
,,	Shaw, Wallace & Co., (one Co.)	2,500
,,	Kilburn & Co., (one Company)	2,385
,,	Begg, Dunlop & Co., (one Co.)	1,840
Mr.	B. Pal Chowdhury	1,120

An additional quantity of nearly 60,000 lbs. has also been promis conditionally on the scheme being fully supported by the industr

THE COFFEE SITUATION.

The coffee market is very sensitive to the slightest influence a favourable character, but to "bearish" developments it respon very sluggishly and stubbornly. These characteristics have be noticeable for months, and they are as marked as ever, now that new Brazil crop of enormous proportions is only a few weeks dista and the visible supply of the world is more than seven million bag

During the month of April the visible supply of the world fe away 53,165 bags, a less reduction than was expected in son "bull" quarters, but it was sufficient to impart a steady tone to t market, notwithstanding that the American warehouse deliveri for the ten months of the present crop year fall behind the deliveri for the corresponding period of last year, although there was considerable gain last month over April, 1900. For the ten mont of 1901 the deliveries were 4,787,715 bags against 5,233,799 bags the ten months of 1900.

The world's visible supply on May 1st was 7,359,112 bag distributed as is shown in the table below. A few years ago suc a quantity would have forced prices to unheard of depths, for it larger than the total Rio and Santos crop in any year precedi 1891-2. It is also larger than the crop in any year between 1891 and 1896-7.

Now, we not only must expect to see a seven million visible pply on July 1st next, the beginning of the new crop year, but so one of the largest crops ever gathered. How the market ands up so well under the prospect is a mystery.

The following table shows the visible supply of coffee in the orld:—

			Bags.
Stocks in Europe			3,876,254
Rio			272,000
Santos			911,000
Bahia			50,000
United States ... Brazil ...		827,013	
Do. other kinds ...		368,845	
			1,195,858
Total ...			6,305,112
Afloat for U. S. from Brazil		430,000	
Europe... ...		*Nil*	
Java and East ...		16,000	
Afloat for Europe from „ „ ...		16,000	
Brazil		445,000	
U.S.		51,000	
Embarques (coffee deducted from stock but not yet cleared)... ... Rio ...		30,000	
Santos...		66,000	
			1,054,000
Grand Total ...			7,359,112
Against April 1, 1901			7,412,277
Against May 1, 1900			6,144,418

The Merchants' Review.

CEYLON TEAS FOR AMERICA AND CANADA.

Writing on 7th ultimo, Mr. Wm. Mackenzie sends from ondon :—

I send copy of letter just received from Mr. Estabanks of New unswick, on the subject of Ceylon Greens in Canada, and a letter om New York, which gives wise advice on the manner in which ose greens should be prepared. He remarks:—

How often during the last six years have I pointed out the fatal itish error of trying to convert a nation—instead of following e line of least resistance and giving Americans what they drink d want? For years profits were too large. No one would listen. t the last 18 months must have brought wisdom to some. And t millions of pounds of Ceylon *Blacks* have been sold lately at s than 4¾d.—aye, large quantities at less than 4½d., which, as *eens*, would have fetched 6d. to 6½d. in America; would have ened a market there; and would have received a bonus of 1d. per

Is it impossible to devise a scheme whereby, under the control the Committee, 50,000 lbs. per week should be manufactured as een tea, blended to standards in Colombo, packed similarly to pan consigned to one broker in each of the cities of New York, ooklyn, Chicago, Buffalo, Montreal, and Toronto? These teas uld be held for a fair price, and if a slight loss were incurred ring the first year, Ceylon Planters could cover it. On 2½ llions at 1d. per lb. the loss would be £10,000. At present there ed be no loss as compared with the 4¾d. gross for huge weekly es of Black teas; there would be a large gain at even 5½ in New rk. Am I exaggerating in saying that, during this year, half e Ceylon crop, say 70,000,000 lbs. will be sold one penny below r value, owing to over-production giving a few dealers here the portunity of combining not to compete at the sales? If not, e loss on that quantity of tea will be £280,000. A small propor- n of that sum would give us another market—that for greens— d enable Ceylon to take the reins in its own business, instead of owing it to drift—a helpless prey to wreckers. Combine— gulate the supply of greens; sell through agents who do not ash prices to please their friends, the dealers, in America, and gust the growers. The present *fitful* method of supply is not ing us much good, as, see the third letter from a Toronto broker, ich also shows in a lively manner, how keen the demand for our eens is in Ontario. I have also several letters from New York, nplaining bitterly of the falling off in supply. One broker had ated a good demand; had many orders for teas expected; t, owing to failure of supply, had to throw up the sponge. Another made a market for the tea of a certain estate; sold several shipments of it; wired twice for more; but did not even have the courtesy of a reply. He writes:—"Ceylon people should take advantage of the growing demand, and not look too closely at the returns for the moment. The Japan men are very sick." The returns would be better than are yielded by 4¾d. in London.

William Mackenzie, Esq., 39, Netherhall Gardens, Hampstead, London, England.

DEAR SIRS,—After a careful investigation we believe that Ceylon Greens stand a good chance of displacing Japan teas, provided that the special requirements and prejudices of this country are considered and pandered to.

It is hardly necessary to point out to you that the style of package, branding or facing, and the similarity in "style" of the tea are important factors. It may be argued that in course of time the States will become educated to buy tea on its intrinsic merits, and to disregard the appearance of the leaf itself, as well as that of the ungainly package now used in Ceylon and India. Our opinion is that much quicker progress can be made by following the line of least resistance, and making Ceylons to closely imitate Japans in colour, style and package. As you are aware the annual consumption of Japans in the States and Canada is now approximately 40,000,000 lbs. Doubtless this rapid increase in their use has been due in a large measure to the fact that it is the only tea that can be manufactured to a close *match*, i.e. *blend*, hence its extensive use under brands or trade marks. The cost of labor in Japan has risen enormously of late, and if means are found to give the American retailer *what he wants*, we are convinced that much can be done towards increasing the outlet for your teas.

A "firing" establishment should be started in Colombo for the purpose of manufacturing tea to correspond, in appearance and package with pan-fired and basket-fired Japans. The leaf itself could be sent to Colombo in a semi-raw or once-fired state, although doubtless the green tea as it is now marketed could be refired and manipulated to the necessary finish.

We note from London reports that the attempt to curtail supplies by concerted action has virtually failed, and we presume that those you represent will not be adverse to considering other ways and means of relieving the situation. * * *

NEW YORK, *May 23rd* 1901.

Wm. Mackenzie, Esq., 37, Netherhall Gardens, Hampstead, London.

DEAR SIR,—I am pleased to have your favour of the 8th instant, as it shows that even though far away you are following the Canadian business.

Now in reference to my own particular business, and green Ceylons in particular the "proof of the pudding is in the eating." So far I have sold 12,540 pounds of green Ceylons. The quantity that I have received and have *en route*, estimating one chest as two half-chests, equals 512 half-chests. I am not very much ashamed of this as a beginning.

As far as newspaper advertising is concerned, as yet I have done very little, and it is not my intention to do much. I believe other methods of advertising are more effective considering the amount of money spent. What I have got better results from so far are large samples and personal letters mailed direct to the consumers. I propose following this up for a good many months hence. Those who get red rose tea know that it is Ceylon and Indian, and later I will have something to say in the press concerning Ceylon and Indian teas.

What will interest you even more, I am sure, are the following reports concerning green Ceylons. One of my travellers sends in the following reports in a recent letter:—

"M———— is selling and sampling Ceylon greens and says his customers are asking for it a second time."

"M———— My reports in *re* Ceylon greens are favourable. I find some Ceylon greens in nearly every stove and the merchants are all in favor of handling it and I have not seen anyone who has heard unfavourable reports from their customers.

From an entirely different section of country I had similar reports from another traveller and have had numerous repeat orders.

All my travellers have special instructions to canvas Ceylon greens against Japans, and they are meeting with more success so far than I expected.

I was in Toronto and Montreal recently and in the latter place I found a very different tone concerning Ceylon greens than when I was there in March in your Company. The merchants I saw seem interested in these teas, and are now rather of the opinion that they are worthy of some attention. If the price is kept below Japans, and the Ceylon Government will continue a liberal appropriation for the advertising of these teas, I believe they will make rapid strides.

Following is an extract from a letter written Messrs. Rodewald and Heath recently:—

"In Toronto, the opinion as far as I gathered, was that if prices are kept quite a bit below Japans, the sale will materially increase and eventually a large part of the Japan business will be displaced by Ceylons. This seems also to be the opinion in Montreal at which I was rather surprised as when I was there in March last, the dealers would hardly talk about Ceylon greens at all. Now they are buying them in limited quantities and seem interested.

"The best reports of all concerning Ceylon greens are in letters just received from my travellers in Ontario, in which they say the consumers are asking the retail dealers for them the second time, and this is making the retail dealers feel that the Tea suits the people who are buying it, and as a consequence they will be much more confident when selling it. The vital points are to suit the consumer and to have the prices so that it is an inducement to both the retailer and jobber to push them. Ceylon greens seem to have both these points in their favour at present. I have very much more cconfidence in the Teas myself than when your Mr. Heath was here, and it seems to me important that your Government should continue subsidy sufficient to encourage the planters to go on producing them. *To stop now would appear to be like stopping just when there was a favourable turn.* You are at liberty to use these remarks in any way you think best."

I hope to have the pleasure of hearing from you often, and any suggestions will have careful consideration, and I hope further the funds at your disposal will allow you to make me an appropriation of $2,000·00 instead of $1,000·00, but I do not want this until you are convinced that the money is being made good use of.—I am, yours very truly,

(Signed) T. H. ESTABANKS.

SAINT JOHN, N.B., *May* 22.

A Toronto broker, writing on 27th May, says:—

There is one phase of this green tea business as hitherto worked by the Ceylon men which strikes me as rather a poor business method to be pursued by men who profess to be trying to capture the American market, and that is the fitful and intermittent way they seem to handle it. Is the Japan tea trade is to be ousted, and Ceylon greens forced into consumption in their stead, then the growers, shippers, or whoever it is whose interests are at stake, should see to it, that these teas are pushed at this end, and that no let up is given to them, now that we have got the thin end of the wedge in. The loss of a cent or two in starting the trade should not deter them from continually pushing them against Japans. There seems to be a disposition to slacken up, if not even to drop the business as soon as the returns shew the slightest loss, Japans will only be displaced by something showing a better value to the consumer, and at least as good a return to the dealer, otherwise what reason is there to undertake all the trouble of revolutionizing the trade from top to bottom.

I lately had a consignment of little over 300 packages of these teas all of which I placed in Hamilton, and had there been 600 they would all have gone, and an amusing incident happened in connection with them which I cannot help relating to you. The teas were sold "to arrive," and are not yet due. I last week happened to be going round through the trade in Hamilton with the representative of a large Philadelphia house, and after our business at Balfour's was ended their buyer said to me "By the way Mr. ————when can we expect those teas to arrive; we want them badly." I told him and we left, we went over to Lucas Steel's and just before leaving Mr. Steel, said "I say, Mr.————, when shall we get those teas that are on the way?" I told him and we left. Going up the street we met W. Duncan of Duncan Bros. with whom we spoke and among other remarks Duncan said "When can we expect to get those Ceylon Greens, Mr.————?" I told him and we went on. My friend said to me "You must have sold those men some very desirable teas they all seem very anxious about them." So I told him what they were and said that I would bet something nearly every house we went into would ask abo same lot of teas. My friend next called on Macpherson Gl and just before we left they began "Oh, I say, (Mr.————,) shall we see those teas to arrive?" My friend and I both beg smile, and Glassco said "What are you laughing at?" So we him what had previously happened, and all laughed over the inci From there we went to James Turner's and to Gillard & Co. same thing happening in both of them, also much to the an ment of us all. Now I think that this was not a bad advertise for Ceylon Greens to be given to a Yankee and certainly go show that these teas are beginning to move fairly well among jobbers, who are certainly not reaping where *they* have sown, are now coming in for a portion of the benefits resulting from Salada Company's persistent advertising.

WM. MACKENZIE.

[The jobbers, however, did not buy those greens until I them the canisters, notwithstanding the advertising.—W. McK

DISTRICT ASSOCIATIONS.

NELLIAMPATHY.

Proceedings of Meeting of Nelliampathy Planters' Ass ation, held on June 24th, 1901, at the Alexandra bunga PRESENT:—Messrs. J. B. Burnett, P. W. E. Watts, Barnes, A. R. Jones, H. de Courcy Denny, W. L. Rank A. G. Murray, J. C. Abbott, *in the chair*, and G. Welchman, *Acting Honorary Secretary*.

Proceedings of last meeting taken as read.

Read correspondence *re* blackmailing of coolies by peons of British Salt and Abkari Department. The Acting Honorary Se tary was instructed to write further on the matter.

Read correspondence *re* Police stationed in Nelliampathy resolution was passed: That the Acting Honorary Secretar instructed to write, thanking the Superintendent of Police fo suggestion that a constable in charge, acceptable to the plan should be appointed, and to propose that a pensioned sepo employed, subject to the approval of the Sircar.

Also to write and thank the Peishcar for his enquiries into conduct of the Police previously stationed in the hills.

Read correspondence *re* site for infectious diseases ward. Jones said that he would recommend the Proprietors of Pa gherry to sanction site suggested by Resident Medical Officer.

Read correspondence *re* bridges and noted with satisfaction the bridge complained of in letter of March 23rd had been pu hand. The Acting Honorary Secretary was requested to draw attention of the Chief Engineer of Cochin to the state of the proaches to the bridge on the Sircar road near the Pardagh nursery, opposite bazaar.

Read correspondence from Dewan's office sanctioning forma of Sanitary Board. Recorded with satisfaction.

Read letter from President, Sanitary Board, requesting plan to report infectious cases and to place their cooly lines under supervision of the Board. The Acting Honorary Secretary instructed to write that members of the Association would gl comply with the first request but considered the latter inadvisa

Read correspondence of U. P. A. S. I. and S. I. Railway *re* c freights. The Association regrets that the reduction of frei by rail cannot be considered by the Railway Companies.

Read circular from U. P. A. S. I. *re* acreage statistics, and n bers promised to send same at an early date.

Read correspondence *re* French tariffs.

Read letter from Honorary Secretaries, Victoria Memorial F Resolved that a sum of Rs. 50 (fifty) be subscribed from funds of the Association.

Acting Honorary Secretary was instructed to write regret that the list sent by the Honorary Secretaries of the Vict Memorial Fund had not been received and that in view of bad times the Association could not subscribe a larger amoun

The Acting Honorary Secretary was instructed to write to Planting member requesting him to draw the attention of Government to the need of a larger allotment on road to Palgh

The Acting Honorary Secretary was requested to act as dele

the ensuing Conference in Bangalore, and if unable to go to find ubstitute.

Mr. Barnes gave notice that three months from date he would ng forward a resolution to reduce the rates of coolies' pay.

Proceedings terminated with a vote of thanks to the Chair.

(Signed) J. C. ABBOTT,
Chairman
G. H. WELCHMAN,
Ag. Honorary Secretary.

A STORY OF THE CENTURY.

Here is a quotation from an old friend of mine and of yours—a ctor, one of the wisest, most kindly-hearted, and successful of the en who compose his useful profession.

"One thing," he says, "I have been telling my patients for the st forty years, that, so far at least as the science of medicine is ncerned, the human mind is merely a name for a group of brain nctions. The food in the blood acts chemically upon certain rve centres, and this is mysteriously worked up into what we call ason. In other words, the condition of the mind depends upon at of the body.

"For example," continues the doctor, "there are people who are oubled by irritability, great mental depression, sleeplessness, ental hallucination, and those symptoms expressed by the general rm '*nervousness*' (and who also fear insanity), who might either oid such sufferings or be cured in a month, if they but knew that the bottom of the whole business lie the poisonous products of perfect digestion. *Ninety per cent. of all the cases of mental and rvous ailments in persons under fifty are directly due to dyspepsia.*"

Now we will listen to Mr. George Bath.

"For many years," he says, "my life was marred and spoilt by digestion. At first only slight, the attacks became more and ore severe as the years rolled by, until at last I was a mere ysical wreck, a ready prey for every disease. My head was cked with pain, fierce darting, stabbing, rending pains, that most drove me frantic. I had no relish for food, and what morsel did swallow filled my body with wind and caused a most oppres- e sense of fulness on the chest.

"What with a distressing sense of sinking in the stomach, and constant feeling of sickness, through the foul state of my tongue, elt, as I looked, 'of all men most miserable.'

"This wretched existence—it wasn't life—I dragged on for *twenty ars* with just a short respite now and then Each year the disease ghtened its grip, sapping my strength and vitality. Doctors amined me and gave me medicine. They lightened my purse t not my ills. At times I turned quite dizzy and faint, and got nervous and depressed that I scarcely dared venture out of doors. 'My whole nervous system seemed unstrun; the slightest noise stressed me. Why, the ticking of a clock, in *another room*, was fficient to keep me awake for hours, and a knock at the door uld make me jump and tremble all over.

'Friends shook their heads as they saw me tottering about more ad than alive, and said 'Bath has not long to live, poor fellow.' at was six years ago, but I'm alive still and very much alive too. hy, I seem to be getting younger every day. Though I am now venty years of age, I am so brimful of energy and animal spirits at I feel equal to anything. It was Seigel's Syrup that wrought e change, nothing else; I owe my life to its wonderful power.

'Now, forty clocks ticking wouldn't spoil my sleep, and food ust be very indigestible indeed to upset me. I would rather lose 0 than be without Seigel's Syrup, for it has made a man of me, d added years of happiness to my life." George Bath, Trefusis lla, Windmill Road, New Brompton, Kent. April 25th, 1900.

No word of the writer's can add one jot or tittle to Mr. Bath's nk and eloquent statement, the truth of which is vouched for by ny independent witnesses, among them being Mr. John Scrace, lieving Officer, Medway Union, Chatham, and Mr. A. Durrant, ort Street, Luton Road, Chatham, to both of whom Mr. Bath is rsonally known.

Now turn back to the quotation from the old doctor, and you ll learn what Mr. Bath's disease was. No, never mind, I will set down here—it was dyspepsia. Oh, if my voice could but reach the suffering men and women in dear old England, how I would out to them the old doctor's deep saying and the story of Mr. th's illness and cure. But, as it is, we must take the chances heir seeing this report in print.

MARKET REPORT.

[*Per Mail advices of 14th June* 1901.]

COFFEE.

The London Commercial Record says:—Since our last a generally flat tone has prevailed in this market, and a considerable proportion of the supplies offered at auction was withdrawn in the absence adequate bids, and where sales were made prices show a decline of 1s per cwt. A few lots of Ceylon sold at fair prices. "Futures" have been dull and prices are rather easier. Yesterday September delivery sold at 29s 9d to 29s 10½d, December at 30s to 30s 3d, March at 30s 7½d to 30s 9d, and May at 31s 3d to 31s 1½d per cwt.

London ...	... Santos ...	July delivery	... 29s 6d.
New York	... No. 7 Rio...	,,	... 5·10 cents.
Hamburg...	... Santos ...	,,	... 29¼ pf.
Havre ...	... Santos ...	,,	... 36¼ francs.

Auctions to-day offered 961 bags East India, 3,469 bags Costa Rica, 755 bags Guatemala, 511 bags Salvador 30 bags Venezuelan, 31 bags Columbian, 217 bags Nicaragua, 80 bags Mexican, and 26 bags Bolivian. The auctions passed off flatly and the bulk of the quantity offered had to be bought in. Any disposition shown to sell would have resulted in a further decline.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	23,554	19,953	29,971	23,005
	Home Consumption.		**Export.**	
	1901.	1900.	1901.	1900.
Tons ...	9,703	8,301	12,459	9,493

The preceding figures exhibit—

	Tons.
In the Imports an increase this year of	6,866
Home Consumption an increase of	1,402
Export an increase of	2,966
Stock an increase of	3,601

The following are the results of this week's auctions, *viz.*:—

CEYLON.—*Plantation.*—1 cask 7 tierces 3 barrels 3 bags partly sold, middling to good bold 85s to 99s, peaberry 60.

EAST INDIA. - 4,943 bags partly sold as follows:—*Mysore*, smalls 34s 6d to 41s, low middling to middling 43s to 53s, bold 60s to 79s 6d, peaberry 46s 6d to 65s; *Coorg*, smalls 35s to 39s, low middling to good middling 42s to 53s 6d, bold 70s 6d, peaberry 52s to 55s; *Travancore*, smalls 35s to 39s 6d, bold 61s, peaberry 46s 6d to 63s; *Peermaad*, smalls 37s 6d, middling 43s, peaberry 49s; *Wynaad*, smalls 34s to 36s, low middling 39s to 39s 6d, peaberry 47s; *Naidoobarum*, smalls 39s, middling 50s, bold 66s.

JAMAICA.—Of 6 casks 272 barrels 97 bags offered 120 packages sold - small greenish 34s, ordinary to good ordinary greenish 31s 6d to 38s, middling 48s to 51s 6d, bold 61s, peaberry 45s to 46s.

COSTA RICA.—Of 9,368 bags catalogued about 3,650 bags sold—smalls 33s to 44s 6d, good ordinary brownish 36s 6d to 38s 6d, fine ordinary 41s, low middling to middling 42s to 49s 6d, good to fine middling 51s 6d to 62s, bold 58s 6d to 78s 6d, peaberry 43s to 77s 6d.

GUATEMALA.—2,698 bags offered and 1,700 bags sold—smalls 33s to 38s, good ordinary 38s 6d, fine ordinary foxy 41s to 47s, low middling 42s to 42s 6d, middling to good middling 44s to 50s, bold 60s to 66s, peaberry 45s to 52s 6d.

SALVADOR.—1,799 bags offered and 1,100 bags sold—smalls 32s to 37s 6d, low middling to middling 40s to 47s, good middling 53s 6d to 54s, bold 50s to 61s, peaberry 40s to 54s 6d.

NICARAGUA.—213 bags sold, smalls 33s, good ordinary 36s, low middling to middling 40s 6d to 45s 6d, peaberry 42s to 50s.

COLOMBIAN.—661 bags damaged bulked mostly sold, smalls 32s 6d to 34s, ordinary to good ordinary greenish 31s 6d to 39s, low middling to middling 42s to 48s, bold 53s 6d, peaberry 41s to 49s.

MEXICAN.—812 bags partly sold, smalls 32s to 37s, low middling to middling 41s 6d to 44s 6d, bold 44s 6d, peaberry 40s to 50s.

BRAZIL.—200 bags Santos, quay terms were bought in.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99 Bags.	1897-98. Bags.
Rio ...	2,776,000	3,186,000	3,084,000	4,225,000
Santos ...	7,782,000	5,529,000	5,427,000	6,070,000
Total...	10,558,000	8,715,000	8,511,000	10,295,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 11$\frac{3}{32}$d, previous day 11$\frac{1}{2}$d.

HAVRE, *June* 13.—Good average Santos June opened quiet at 35$\frac{3}{4}$f. and closed barely steady at 36f., September opened at 36$\frac{1}{2}$f. and closed at 36$\frac{3}{4}$f., December opened at 37f. and closed at 37$\frac{1}{4}$f., March opened at 37$\frac{1}{2}$f. and closed at 37$\frac{3}{4}$f.

HAMBURG, *June* 13.—Good average Santos June opened quiet at 29$\frac{1}{4}$pf. and closed steady at 29$\frac{1}{4}$pf., September opened at 30pf. and closed at 29$\frac{3}{4}$pf., December opened at 30$\frac{1}{2}$pf. and closed at 30$\frac{1}{2}$pf., March opened at 31$\frac{1}{4}$pf. and closed at 31$\frac{1}{4}$pf.

NEW YORK, *June* 13.—Closing prices of No. 7 Rio were as follow:—

	June.	July.	Aug.	Sept.	Oct.
June 13...	5·10	5·10	5·15	5·25	5·30
June 12...	5·10	5·10	5·15	5·25	5·30

TEA.

INDIAN.—Auctions were rather heavier, comprising 13,900 packages, of which 138 packages were New Season's, compared with 9,500 packages (69 New Season's) on the 3rd instant.

There was an improved competition for almost all kinds, common grades being taken up somewhat more freely. The few new teas offered were of ordinary quality, and did not attract much attention.

Exports from this country continue to indicate a substantial increase on those of previous years, as will be seen by the figures given below, and are gradually assuming an important place in the trade of the United Kingdom.

CEYLON.—Public sales were on a larger seale, totalling 32,000 packages, spread over Tuesday and Wednesday, contrasted with 27,700 packages in the week before.

Pekoe Souchongs and Pekoes up to 5d per lb. were in better request and brought steady rates. but medium leafy sorts were not so well supported either by dealers or shippers, and sold irregularly and in many cases easier. Broken Pekoes under 7d per lb. often marked a decline but the better liquoring lines ruled generally firm, while the finest breaks elicited brisker bidding and showed an upward tendency.

Business with outside markets is expanding, partly no doubt fostered by the low prices current here.

The average is the same as on the 6th instant, *viz.*, 6$\frac{1}{2}$d per lb. On the 14th June, 1900, it was 6$\frac{3}{4}$d per lb.

JAVA.—Nearly 800 packages of direct import were submitted to the trade, and passed with spirit at fully former quotations.

Deliveries.—The clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 11th June, 1901 ... ... 3,750,554 lbs.
Do. do. 1900 ... ... 4,230,560 „

During the fortnight the following have been printed for sale by public auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offered. Pkgs.
India	12,250	1,666	13,916
Ceylon	28,518	3,569	32,087
Java	639	158	797
Total ...	41,407	5,493	46,800

Also 914 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated June 14th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian. Pkgs.	Ceylon. Pkgs.	Java. Pkgs.
1901-1902	24,201	60,509	2,032
1900-1901	2,515	32,436	402

14,562 *pkgs.* INDIAN
32,420 „ CEYLON
1,010 „ JAVA
} Total 47,992 packages were offered in public auction this week.

GREEN AND UNCOLOURED TEA.—Intelligence from America appears to indicate a passing away of the recent depression in this class of tea, which was caused mainly by the sudden increase in production of green tea from Ceylon, which led to a tempo over-supply.

There are now evidences of a readiness on the part of buye operate more freely in such kinds of Indian and Ceylon tea as prove suitable to the American taste.

If this important outlet could be captured by India and Ce it would doubtless materially relieve the congested state of black tea market.

INDIAN.—The small quantity brought forward passed wit change in prices. 366 last of the season's Invoices have been to date, campared with 400 the same time last year. The only season's tea brought to auction this week comprised 28 pack from the "Hukanpukri," 129 packages from the "Panitola" gar of the Jokai T Co., and 81 packages from the "Nurbong" Esta

Week's average of New Season's tea sold on Garden Account 138 pkgs., av. 6·62d. 1900, 751 pkgs., av. 6·61d.

CEYLON.—The heavy auction, which was divided between Tue and Wednesday, passed with good competition at steady rate all descriptions, better grades being perhaps in strongest dema

Average for week 6·44d., against 6·74 same period 1900.

Ceylon tea sold on Garden Account 1st January to date, 565 pkgs., av. 6·62d. 1900, 569,573 pkgs., av. 7·36d.

JAVA.—Amongst the Javas 751 packages were of direct imp and mostly sold in the room at fairly steady prices; a few sec hand teas were also included in the auction. Catalogues are iss for 3,772 packages to be sold during the next fortnight.

Bank Rate 3 per cent. Exchange on London three months' sigh Calcutta 1/4$\frac{5}{32}$. Colombo 1/4$\frac{3}{16}$.

COCOA.

At public sale on Tuesday, 6,214 bags were brought forward, there was not much activity, and only about 2,100 bags sold, these at generally lower rates. Of 1,431 bags Trinidad sel could only place 200 bags—middling to fine at 70s to 72s 2,214 bags Grenada about half sold—good to fine 64s to 66s, 63s to 63s 6d, common to good common 60s 6d to 62s 6d, being to 1s down. Of 214 bags Jamaica 70 bags sold—fine fermented 6d, common to good 59s to 63s 6d. 32 bags Dominica brought 6d to 63s for common to good. 122 bags St. Lucia partly sol 64s for good red down to 60s for common. 9 bags St. Vin partly sold at 65s for fine and 60s for ordinary. 10 bags Surinam realised 74s. 50 bags red unclayed Venezuelan w placed at 70s. Guayaquil slow, only 50 bags selling, out of bags catalogued, at 66s for reddish Caraquez, and 57s 6d Esmerelda. 175 bags African sold at 55s 6d to 61s for commo fair. Ceylon continues in the dull state recorded for some t past only about 350 bags selling under the hammer, out of 1 bags offered; fine bold and medium red quitted at 87s 6d to 93s dull to fair ditto 60s 6d to 75s, fair to good smalls 48s 6d to 56s blacks 41s 6d to 51s 6d, and collected 58s to 61s per cwt. Priv business embraces 200 bags Trinidad and 300 bags Grenada auction rates, 50 bags Venezuela at 67s to 70s, and about 2,000 b Guayaquil, Caraquez 66s to 67s, winter Arriba 65s to 68s, e summer ditto 69s to 72s 6d, and good red summer 74s 77s per cwt.

PEPPER.

BLACK.—The market has been very quiet this week, and o small sales are recorded, including fair Singapore on the spo 6$\frac{1}{16}$d; for arrival April-May shipment has changed hands at July-September and August-October at 6$\frac{1}{16}$d, and Septem November at 6$\frac{3}{16}$d.

At auction on Wednesday 67 bags Singapore bought in at to 6$\frac{1}{2}$d. Of 112 bags Tellicherry only a few bags of damages s at 5$\frac{5}{8}$d to 5$\frac{3}{4}$d. 20 bags good to fine Mangalore sold at 8$\frac{3}{4}$d to 9 103 bags Ceylon sold at 5$\frac{15}{16}$d for good heavy. Of 79 bags Alep only one lot greyish sold at 5$\frac{7}{8}$d per lb.

To-day dull and no sales mentioned.

There are sellers of Tellicherry to arrive at 55s c.i.f d.w. Lond with buyers at 6d per cwt. less.

For *White* the market continues very quiet, but value is uncha ed. Singapore has been sold on the spot at 9$\frac{5}{16}$d for fair, Penang at 8$\frac{3}{4}$d to 8$\frac{13}{16}$d per lb.

At public sale on the 12th instant 322 bags Singapore bought at 9¼d to 10¼d. 14 bags Ceylon partly sold, small mixed with cks, 8⅞d per lb.

GINGER.

COCHIN.—Cut descriptions sold at steady prices, but washed rough clined 1s to 2s per cwt. 41 cases 846 bags offered and 240 ckages sold—bold rather roughly cut and scraped, slightly limed s, medium and small, with a little bold 55s, medium and small to 46s 6d, tips and smalls 40s, medium and small part bold washed igh 37s 6d to 38s, rather smaller 36s to 37s per cwt.

JAMAICA was in very large supply and but poor demand. 1,598 rrels were offered of which 550 barrels sold—good bright bold s, fair to good 58s to 55s, middling to good middling 40s to 47s , common to good common 36s to 39s per cwt.

ST. LUCIA.—23 barrels fair sold at 34s 6d to 35s per cwt.

CINCHONA.

The auctions of Java cinchona-bark held at Amsterdam on ne 13, consisted of 5,356 bales and 264 cases, weighing 485,826 os., and containing 23,787 kilos. sulphate of quinine. The average percentage of quinine in the manufacturing-bark is 5·55 per cent., against 5·10 per cent. for the auction in May last, and an average of 5·26 per cent. for the ten auctions held in 1900. Of the above quantity 5,147 packages sold at an average unit of 10·45c. per half-kilo., against 10c. per half-kilo. paid at the auctions on May 11. The following were the approximate quantities of quinine purchased by the principal buyers:—English and American factories, who purchased the equivalent of 3,941 kilos.; the Brunswick factory, 4,262 kilos.; the Mannheim and Amsterdam factories, 6,323 kilos.; the Frankfort-on-Main and Stuttgart factories, 4,123 kilos.; and various buyers, 2,769 kilos. The prices paid for the manufacturing-bark ranged from 4c. to 113c. per half-kilo., and druggists' bark from 14¼c. to 63c.

QUININE.

Quinine has had a quiet week, and prices in second hand are practically unchanged. A few thousand ounces have been sold at 1s 4½d for October, and 1s 4¾d for December, while for spot there are sellers 1s 4d per oz. The general desire to await the result of the Amsterdam bark sales has curtailed business this week.

(AVERAGE FOR ALL INDIA 5·44d., JUNE 14TH.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.
ilgherry ...	**370**	**6·50**												
danaad ...	139 p	7	74½c	8¾ 1/1	49	5	16½c	7½	...	...	...	...	..	...
unt Gordon ...	36	4½	23	5 5½	9	4	...	...	...	...	...	...	4	3
w Hope ...	100 p	6¼	44 p	7½	30	6	...	...	26	5¼	...	...	...	...
spect ...	77 p	7¼	24½c	8½	43	6¾ 7½	10½c	6½	...	...	...	...	...	...
iashola ...	18½c	6¼	9½c	7	9½c	5½	...	...	...	...	...	...	...	...
avancore ...	**1187**	**5·16**												
lford ...	46½c	3½	...	...	46½c	3½	...	...	...	...	...	...	...	...
rady Goody ...	103	5¾	59	6¼ 6¼	21	4¾	23	5¼	...	...	...	...	...	...
M. R. ...	121½c	3¾	...	...	75½c	3½ 3¾	46½c	3¾	...	...	...	...	...	...
n Dev H Co. A	23 p	4¾	...	...	...	...	...	...	6	4	...	...	17½c	3 5½
nmylies ...	95½c	3½	...	...	88½c	3½ 3¾	...	...	....		4½c	2	3½c	2¾
rchiston ...	26	4¾	...	...	...	...	26	4¾	...	...	...	...	...	...
onmudi T Co B	240 p	5½	...	...	75	5	99	6½	29	4½	14	3¾	23 p	2¾ 4¾
Braemore ...	76 p	5¼	30	5	22	4¼	20	6½	...	...	...	...	4½c	2¾
„ ...	38	4¾	14	5	...	...	10	6¼	10	3¾	4	3½	...	...
Poonmudi ...	80 p	4¾	16	5½	32	5	...	...	13	4¼	7	2¾ 3¾	12 p	3 4½
riera ...	50 p	3½	...	...	33	3¼	12	4¼	...	...	2	1¾	3½c	2¼
I. T. Co Kud Kar	81	6	34	6	...	...	40	6¼	...	...	...	...	7	3¾
T. T. Co Venture	157	5¾	...	...	76	5½ 5¾	51	6¼ 7	30	4¾	...	...	...	..
v T Est Co Pa	51	5¾	17	6	17	5	17	6	...	...	...	...	...	...
ynaad														
hmond ...	7	4	...	...	7	4	...	...	...	...	...	...	...	...

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PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

L. VI.] MADRAS, SATURDAY, JULY 13, 1901. [No. 28.

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.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, anting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 19th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad.

July 8th.—Weather—After a long spell of light rain, the monsoon asserted itself, and gave us an average of above one inch daily throughout last week. *Wind* from the S.-W. very cold and strong. *Works*—Planting, weeding and handling. *Plant diseases*—Borer very virulent. *Interesting item*—The Deputy Commissioner in answering the Balehonnur Planters' Association that the roads were excellent throughout the district, can hardly know what a metalled road should be, or he would not write such nonsense; the road from Hassan to Arsikere is a disgrace and from Hassan to Saklaspur it is worse.

Coorg.

Polli Betta, 10*th July.—Weather*—During the past week the moonoosn was heavy, over six inches of rain having been collected. There is every promise of its continuing heavy this week also. Operations against borer are still being actively prosecuted. Supplying is progressing favourably. Labour is sufficient for present requirements, but places are not so swamped as they were this time last year. There have been no more cases of cholera beyond the imported ones.

INDIAN TEA FOR INDIANS.

One of the most interesting subjects likely to be discussed at the annual meeting of the U. P. A. S. I. this year is that of the development of consumption of Indian tea among Indians. There are various points to be considered. The Indian Tea Association (Calcutta) has a scheme in course of incubation; in all probability, it will be worked by one of the maligned middlemen; the Central Travancore Planters' Association has suggested a scheme, but this appears likely to be merged into another proposed by the Kanan Devan Planters' Association. The first thing to be settled is whether

the working up of demand in Southern India shall be undertaken by the I. T. A. or by a special organization on the South. If the former, details pass beyond the scope of Southern Indian Planters, except in so far as they may succeed in getting one representative or more appointed on any special committee that may be formed to control operations If the latter, there still remains for consideration the questions whether the South Indian organization shall or shall not work in conjunction with the I. T. A. or its agent, and whether financial aid from the I. T. A. shall or shall not be asked for. There are among the first matters to be settled. We cannot but think, that unity of policy is greatly to be desired; but equally necessary to success is independence of action. The object must be the same; the general plan of action should be as uniform as possible, but details must vary according to local conditions, and in the various districts of India, whether North or South, a certain elasticity of system must be admitted, in order that local agents may be free to avail themselves to the uttermost of their experience in regard to methods of working local business.

Assuming that it is decided that the southern portion of the Indian continent shall be worked, whether with or without financial aid from the wealthier northern tea-planters, by a southern organization, it remains to be considered whether this organization shall be distinct from the U. P. A. S. I. This Association cannot work on any lines that would mean a financial profit to itself, for it is incorporated on the lines of an Association not working for profit. It is free nevertheless to do everything in its power for the benefit, financial or otherwise, of District Associations or of planters. At the present time its organization is quite unfitted to cope with special work such as that of pushing demand for tea throughout Southern India; but either this organization can be remodelled to meet the requirements of the day or a separate organization can be established in connection with the body that represents the joint interests of all the District Planting Associations in the South. Yet again it is, of course, possible to form an organization that shall have no direct connection with the U. P. A. S. I. The advantages and disadvantages of the alternative courses will need to be very carefully weighed. The Indian Tea Association, which represents northern planters as the U. P. A. S. I., represents those of the South, is expected to leave the working of its general plan to a firm of merchants. If southern planters decide to work through the U. P. A. that body may take a similar course, or it may decide to proceed differently. It is in no way bound at present, nor is there any reason why it should bind itself, to work out all details on the lines approved by the I. T. A. or those laid down by whomsoever may eventually be appointed as its working agent in regard to the sale of Indian teas in India.

In Indian, as in English, journalism, anonymity is the rule. In the present instance, however, it seems but fair that we should lift the thin veil of anonymity, and declare that these lines are written by the Secretary of the U. P. A. S. I., and that the editorial "we" is identical with the secretarial "I." From this small digression, we return to our sheep, to state our opinion that, in some form or other, however slight, the new scheme should be associated with the U. P. A. Whether the practical working be left to an entirely separate organization that shall merely regard the U. P. A. as its direct principal, to whom reports must be sent and through whom the necessary funds must be obtained; or whether the organization of a working scheme and staff be left to U. P. A.—these are minor points. What we wish to ur that the United Association represents the joint interests District Associations, and that for this reason, also becau the difficulty of arranging for the head of a working sta receive instructions from, and make reports to, diffe District Associations, it is preferable to follow the nort precedent and work through, or in connection with, central body. It seems to us that the elaboration of a w ing scheme must be largely a work of time. Work details as one may at the outset, the apparently simplest may prove to be the most effective if so arranged as to a of expansion and elaboration as necessity arises. The ex to which the agency of the U. P. A. S. I. is to be, or can utilised, is, we venture to say, one of the first points t considered after a general plan of campaign has been deci upon.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S

Production of Coffee in India.

After noting that the figures are imperfect and defect and that, for example, the statistics of the Nilgiri district very imperfect, the Director-General of Statistics reports follows:—

Area.—At the end of 1900 there were 245,405 acres of land u coffee in India, all, with the exception of 387 acres, in South India. The production of coffee is restricted for the most part limited area in the elevated region above the South-Western co the coffee lands of Mysore, Coorg and the Madras districts of M bar and the Nilgiris, comprising 88 per cent of the whole under the plant in India. About 52 per cent. of this area i Mysore, where there were 128,087 acres in 1900, and the plan grown on 99,088 acres, being 40 per cent. of the whole, in British districts of Coorg (68,596 acres), the Nilgiris and Mala (30,492). In Madras there is no extensive cultivation excep these two districts, and in Salem and Madura. Coffee is grown, but on a very restricted scale, in Burma, Assam, Ben and Bombay.

Production.—The fall in prices since 1897 has removed stimulus which had been given for a few years to the furt expansion of the coffee-growing area, while disease has combi with adverse climatic conditions to reduce the yield. The quan produced last year was but little more than half the quan produced ten years ago. Taking 100 to represent the area and duction in 1885, the ratio of yearly increase or decrease is follows:—

	Area.	Product
1885	100	100
1886	97	90
1887	103	109
1888	104	76
1889	110	85
1890	114	63
1891	111	13
1892	110	97
1893	109	109
1894	117	101
1895	119	115
1896	121	75
1897	116	69
1898	118	68
1899	115	50
1900	103	62

Persons employed.—According to the statements there w 22,128 persons permanently, and 91, 685 temporarily, employe the coffee estates in 1900, making a total of 113,813 persons, wh is equal to one person to about 2·16 acres.

Exports and Consumption.—The following figures are the average the ten years ending 1900-01:

	lbs.
dian Coffee—	
Production	30,040,608
Exports	30,163,056
reign Coffee—	
Imports	1,529,819
Exports	737,520

It is of course not the case that exports have exceeded production ring this period; the figures merely illustrate the difficulty of taining an accurate view of an industry when those who are gaged in it think fit to withhold information which is indispens-le in the consideration of any questions affecting the industry. e figures, however, imperfect as they are, indicate that the Indian oducer of coffee has no local market on which he can depend for e consumption of any portion of his production. He is entirely pendent upon the external markets which are contained in the untries mentioned below, these being the principal countries to ich Indian coffee is exported (in lbs):

	1897-98	1898-99
ited Kingdom	12,773,376	17,392,480
ance	8,607,872	9,356,816
ylon	293,888	505,680
atic Turkey and Persia	863,856	131,264
stralia	199,024	265,440
abia	630,896	229,488
rmany	297,584	618,688
stria-Hungary	591,360	1,023,568
	1899-1900	1900-01
ited Kingdom	17,640,000	15,678,768
ance	10,847,536	8,430,016
ylon	1,224,272	1,088,528
atic Turkey and Persia	137,984	610,288
stralia	272,496	447,104
abia	85,232	274,960
rmany	292,544	126,560
stria-Hungary	298,704	123,312

As France takes on an average about a third of the whole quan-y exported, it is obvious that the Indian coffee producer has an timate interest in the outcome of the question at present under scussion of the application to Indian coffee into France of a rate duty higher than that which is imposed upon Brazilian coffee.

Prices.—Coffee is not sold, as tea is sold, before shipment for port, and therefore there is no Indian quotation of price. The erage prices in London for East Indian plantation coffee since 74 are here subjoined with their variations, taking the price of 74 as the datum=100. Prices dropped last year, as a conse-ence of the great expansion in the production of Brazilian coffee, the lowest level known:—

	Per cwt.		Variation.
	s.	*d.*	
1874	92	1	100
1877	110	0½	120
1879	100	10	110
1882	85	4	93
1884	76	4½	83
1887	94	9½	103
1889	99	10	108
	s.	*d.*	
1890	106	2½	115
1893	105	4½	114
1894	101	0	110
1897	94	8	103
1898	78	1	85
1899	65	2½	71
1900	47	0	51

* * *

Production of Tea in India.

The Director-General of Statistics reports as follows:—

AREA.

he area under tea in India at the end of 1900 extended over ,487 acres, nearly two-thirds (64·6 per cent.) being in the eys of the Brahmaputra and Surma, which contain as much as 327 acres, namely 204,985 in Assam (the Brahmaputra Valley) and 132,342 in Cachar and Sylhet (the Surma Valley). In extent of cultivation Bengal comes next, the area under tea being 134,572 acres, or 25·8 per cent. of the whole, and a little more than that in the Surma Valley. The production of tea is, therefore, to the extent of nine-tenths of the whole area, limited to the two Provinces of Assam and Bengal.

The principal localities in each Province where tea is grown are these:—

	Acres.
In Assam.	
Surma Valley:—	
Cachar	60,852
Sylhet	71,490
Brahmaputra Valley:—	
Sibsagar	78,422
Lakhimpur	67,509
Darrang	41,708
Nowgong	12,673
Kamrup	3,973
In Bengal.	
Darjiling	50,769
Jalpaiguri	76,278
Chittagong	4,146
Ranchi and Hazaribagh	3,284
In the North-Western Provinces.	
Kumaun	2,921
Dehra Dun	5,134
In the Punjab.	
Kangra	9,645
In Southern India.	
Nilgiris	2,542
Malabar	3,058
Travancore	25,202

There is a small area of 1,479 acres in Upper Burma, but in this Province the leaf which is produced is not made into tea, but is pickled to be eaten by the Burmans, and the area and production may therefore be left out of account. Tea cultivation in India has been mainly concentrated in tracts where a heavy rainfall and a humid and equable climate permit of repeated flushes and pluckings of the leaf. In the valleys of the Brahmaputra and Surma the yield averages about 468 lbs. to the acre; in Jalpaiguri (the Duars) 484 lbs; in Darjiling about 279 lbs; in the North-Western Provinces it is 309 lbs. In Travancore it is stated at 360 lbs. Elsewhere it is much lower. The area under tea has expanded from year to year without a pause during the sixteen years, 1885 to 1900. In 1885 the area was about 284,000 acres; in 1900 it had increased to 522,487 acres, the increase being in the ratio of 84 per cent.

The number of acres added to the tea-growing area each year has been:—

	Acres.		Acres.
1886	14,294	1894	4,688
1887	14,584	1895	15,190
1888	11,524	1896	17,563
1889	9,374	1897	36,838
1890	11,126	1898	31,561
1891	17,610	1899	13,978
1892	12,432	1900	6,829
1893	20,970		

It appears then that as much as about 107,000 acres have been added to the area under tea during the last five years. This area, in full bearing, will yield at least 40 million pounds of tea a year. The plantations vary greatly in size. In Assam, where the industry is mainly carried on by Europeans with ample capital, where fusions of estates have been in progress for some years in view of economy of management, and where most plantations have large unplanted areas attached to them, the area of a plantation averages as much as 1,318 acres. In Bengal the average area of a plantation is 734 acres; in the North-Western Provinces the average falls to 121 acres, while in the Punjab, where natives grow tea extensively in the Kangra Valley, there are only about four acres to each plantation. In Madras the average is about 172 acres, and in Travancore 445 acres.

PRODUCTION.

The quantity of tea produced has increased in much greater ratio than the area under cultivation, for while the area has increased by 84 per cent., the increase in production has been 176 per cent.

Representing the area and production in 1885 by 100 in each case, the ratio of increase is stated below :—

	Area.	Quantity produced.	Actual increase annually in lbs.
1885	100	100	...
1886	105	115	10,899,835
1887	110	129	9,826,270
1888	114	139	7,540,462
1889	117	149	7,250,331
1890	121	156	4,993,531
1891	127	173	11,831,496
1892	132	170	—1,873,628
1893	139	185	10,253,626
1894	141	188	2,465,144
1895	146	200	8,694,783
1896	152	219	13,018,227
1897	165	215	—2,643,846
1898	177	222	3,693,192
1899	182	254	24,322,055
1900	184	276	15,663,209

PERSONS EMPLOYED.

The number of persons employed in the tea industry in 1900 is returned at 621,287 (permanently) and 98,446 (temporarily) or altogether a little below three-quarters of a million (719,733 persons), which would work out to about 1·38 persons to the acre.

EXPORTS AND CONSUMPTION.

The tea produced in India is exported, mainly to the United Kingdom, to the extent of about 96·6 per cent. of the average production The subjoined figures give approximately the quantity of tea consumed in India, the figures representing the average of the last five years.

INDIAN TEA.

Produced	170,509,067 lbs.
Exported	164,634,913 „
Left in India	5,874,154 „

FOREIGN TEA.

Imported	5,801,241 lbs.
Re-exported	2,563,029 „
Left in India	3,238,212 „

Thus more than nine million pounds were left in India on the average, of which 5·87 millions Indian and 3·24 millions foreign, the bulk of the foreign tea being Chinese, though a substantial quantity consists of Ceylon tea. More than a million pounds are purchased annually for the British Army, and a larger quantity must be consumed by the European and Eurasian civil population, as also by natives who, in some of the larger towns, are adopting the tea drinking habit.

The principal markets for Indian tea are stated hereunder, with the quantity exported (in lbs.) to each country in the last three years :—

BY SEA :	1898-99.	1899-1900.	1900-01.
United Kingdom ...	136,245,995	154,161,492	166,171,556
Australia ...	6,305,135	8,362,797	10,438,984
United States & Canada	2,457,880	4,677,797	3,490,451
Persia	3,456,791	1,953,900	2,429,140
Russia	500,889	467,451	772,495
TRANS-FRONTIER :			
Kabul, Kashmir, and other countries on the N.-W. Frontier ...	1,040,704	2,099,328	1,942,640
Other trans-frontier countries	23,968	25,312	25,760

The production of tea in India and Ceylon has increased so much more rapidly than the consumption in the United Kingdom, which is the principal market for these teas, that there has been a heavy fall in price, and the tea industry is at the moment in a position of great embarrassment. Producers are busily engaged seeking relief from the introduction of economies and from the enlargement of markets other than that in the United Kingdom.

PRICES.

The course of prices of tea in Calcutta is illustrated in the appended figures in which the price in March, 1873, is taken as equal to 100. They represent the course of prices of fine Pekoe in January of each year as given by the Bengal Chamber of Commerce It will be observed that the price in January, 1901, fe the lowest level yet known :

1873	100	1888	84
1874	123	1889	77
1875	123	1890	63
1876	136	1891	81
1877	148	1892	71
1878	135	1893	87
1879	129	1894	52
1880	126	1895 ...	97
1881	135	1896	84
1882	126	1897	64
1883	110	1898	61
1884	116	1899	58
1885	90	1900	64
1886	90	1901	45
1887	77		

In the Statistical Department the average prices of the vari descriptions of tea sold at the public sales held in Calcutta dur the tea season have been computed for some years past. Fr these accounts the figures below are taken, being the prices annas and pies per pound of the three descriptions which form largest proportion of the tea sold and the variations in the pri the average price of 1888 being represented by 100 :

	Broken Pekoe. Price.	Pekoe. Price.	Pekoe Souch Price.
	A. P.	A. P.	A. P.
1888	10 3	8 1	6 3
1889	9 9	7 5	5 7
1890	8 10¾	7 2	5 8¼
1891	8 7½	7 0½	5 3⅓
1892	11 3⅓	8 9	6 5¼
1893	9 2⅘	7 2⅔	5 4⅘
1894	11 8	9 4⅘	7 2⅝
1895	9 0	7 3⅘	5 11
1896	8 7¾	6 9 9/10	5 5½
1897	7 5⅝	6 0¾	4 10⅔
1898	7 0	5 8	4 7
1899	6 9¾	5 8¾	5 0⅔
1900	6 0	5 0	4 1⅔

TEA–SUPPLY AND DEMAND.

At the last general meeting of the Dooars Tea Compa Limited, Mr. W. H. Verner expressed in very clear wo what we believe to be the opinion of "the man on Estate" regarding the Tea Crisis. He had first explai that the Company was making tea at a lower cost than ev Then, as regards the Tea industry generally, he remarked "But things seem to me to have gone really from bad worse. We have had against us, and we have still agai us, a largely-increasing output, due to the heavy extensi of new tea which were made during the last decennial per of the century. We have had that difficulty, and we do yet know whether that has reached its climax in 1900 or Then we have had thrown upon us, to add to our troub the increased duty, and that that increased duty cannot to check consumption I think there can be no doubt, must check consumption. However, the real difficulty fac us is that, mainly owing to these large extensions, and pa owing, also, to the very extensive use of manure in Ceyl the supply greatly exceeds the demand. It exceeds it n and the question is whether it will exceed it more this y than it did last year The future is a great conundrum in things, and I cannot answer that conundrum with certai But we have certain things for us. The cheapness of undoubtedly tends to increase consumption, though, of cou the increase which might thereby have been produced be cancelled by the reduction in consumption effected by new duty. Still, we have that effect, that cheaper pr tend strongly to increase the consumption."- Mr. Ver

s not inclined to rely upon cheaper prices alone for the ıch-needed increase of consumption. He took a pessimis- view of prospects of development of demand in foreign ırkets. He admitted that new markets are enlarging very st, yet said:—"In Russia, in Australia, and in America erything appears hopeful as regards British-grown tea, d we have before us—and all persons interested in either dian or Ceylon tea have before them—questions which ay result in the solution of our main difficulties, and that the manufacture of green tea in India and Ceylon." "He so remarked:—"In the United States there are some ,000,000 lbs. of green tea drunk yearly. We have been ccessful there and in Canada in largely substituting our ack teas for the China black teas, and the great problem fore us now, it seems to me, is this—whether we cannot pture a very large portion of the green tea market. There no reason why we should not, as far as I can see. Most cellent green teas have been sent over from Ceylon to merica, and I think that if we work it properly and can ork together we shall very likely find in this the great lution of the present difficulties; that is to say, a large nount of tea which now comes over here as black tea will, e hope, go over to America as green tea, and therefore our arkets will not be flooded."

PROPOSED TEA TRUST IN AMERICA.

Apparently the Japan Tea Trust has caused some excitement nong our American cousins interested in tea. Mr. Thomas artindale, of Thomas Martindale & Co., tea importers, hiladelphia, has sent out a circular suggesting the formation a great national Tea Trade Association. He asserts that No great branch of business in the United States to-day is a more bewildered and unprofitable condition than the ısiness of the import and sale of teas at wholesale." It is ggested that a convention be held at Buffalo in August or eptember, to decide what the best interests of the trade emand, especially as regards the tea Duty; for when an gitation for its removal arises, the Ways and Means Com- ittee of the States Government shrug their shoulders and s the circular expressively puts it) say: "Consistency, thou t a jewel." The real object appears to be to give Japan as a helping hand, so the proposed movement is not likely please Indian and Ceylon planters.

NOTES.

itish Exhibition in St. Petersburg. Originally fixed for November, 1901 the opening of this Exhibition has how been postponed until Novber, 1902.

dian Tea. The tea exported from Calcutta in the second half of June was 4,106,522. he total export up to June 30th is over four millions short, mpared with the past year.

ushing Brazilian Coffee. Dr. Brandão, President of the Planters' Association of Minas, lately ft Brazil for Europe to represent the Brazilian Coffee ercantile and Agricultural Association, whose principal aim is to advertise and advocate the use of coffee, especially in Italy.

Java Cinchona. The shipments from Java for the first half of June are declared at 500,000 Amsterdam lbs., against 300,000 Amsterdam lbs. last year. The exports from Ceylon from January 1 to May 27 have been:—

	1901.	1900.	1899.	1898.
Lbs.	320,928	220,592	391,903	317,281

The Flora of the South Lushai Hills. Vol. I, No. 13 of the Records of the Botanical Survey of India contains an account by Lieut. A. T. Gage, M.A., M.B., B.Sc., I.M.S., of a Botanical Tour in the South Lushai Hills. An alphabetical table of contents would have added to the utility of this very interesting little publication.

Tea Experiments. The Agri-Horticultural Society of India's annual report dates that the cultivation of the tea plant has this year been commenced; not, however, on the lines laid down in the paper read by Mr. H. St. J. Jackson at the meeting of the 11th July, but with a view to aid in the study of the various *jâts* of the tea plant and the insects, blights, and parasites that attack them.

The Private Sale Room in London. A special telegram, dated London, July 5th, 10-5 A.M., to the *Times of Ceylon* says:—Prices at the private sale yesterday were unchanged. It is believed that friction shown by country grocers prevented buyers from bidding. There are only small catalogues for next week. Many merchants are holding off from the sales, pending the settlement of the matter.

Indian Tea Prospects. In Kurseong, after a good flush in the first half of June, tea leaf is not now plentiful and the pickings show a shortage. In North Darjeeling there has been good rain, but the last leaf has been scarce. The bushes now should go on better. In Cachar there has been plenty of rain and conditions are favourable for growth. In Lower Assam leaf is backward. In Sylhet the leaf has been retarded by excessive rains.

A New Market for Coffee. The *Brazilian Review* remarks:—How extravagant the idea of destroying coffee merely to raise its price really is, is shown by the naive proposal of Snr. Ewbank de Camára to use it in place of earth for the embankments of the Santos Docks! That would overcome all the difficulty connected with burning 300 tons of coffee every day, and provide cheap material to the Dock Company. We have heard of using sugar to make mortar, but coffee "earthworks" take the cake!

Travancore Green Tea. Mr. H. Drummond Deane writes to the *Ceylon Observer:*—I have permission to publish the following extract from a letter addressed to Mr. H. M. Knight by Mr. W. Mackenzie:—"A Travancore Green Tea ('Stagbrook' I think) is pronounced *the best yet sent to America.* I have two letters from America about it this week, and one man has sent me a sample from these. It looks glazed. Granted an agent who would look after it and not knock it down at any price offered, such tea should do well."

The Times of Ceylon. We owe our apology to our contemporary in Colombo for having failed to acknowledge that certain news in our last issue (about Brooke, Bond & Co. and the Dumont Coffee Company) was taken from it. The oversight was due to our having failed to note that the information appeared in *special* telegrams to our contemporary. Legally, of course, we have as much right as "the man in the street" to assimilate information given us in the newspapers, but our general aim is rather to acknowledge than to hide the sources of our information.

Exports of China Tea. Messrs. Siemssen & Co. in their Market Report, dated Hongkong, June 21, give the following figures :—

	1901-02. Lbs.	1900-01. Lbs.
To England	220,865	216,825
„ The Continent	591,912	...
„ Russia	...	...
„ America	...	...
„ Australia	...	...
„ South Africa...	..	...
Total ...	812,686	216,825

Ceylon Tea. During the first six months of the year 59,100,000 lbs. of tea were exported to the United Kingdom, compared with 61,200,000 lbs. in the first half of last year and 53,800,000 for the same period in 1899. The exports to other countries for the firs *five* months of the year were 15,700,000 lbs., against 14,000,000 lbs. and 9,500,000 lbs. It will thus be seen, says the *Times of Ceylon*, that the export in 1901 has been the same as last year. Two millions of the January export, however, really belonged to December, 1900, so that there has been a slight decrease in *production*. Stocks of Ceylon tea in London have been on the increase lately.

Amsterdam Bark Market. Further particulars of the bark auctions, which were held in Amsterdam last week, have come to hand, says the *British Colonial Druggist* of 21st ultimo, and show that the bark was divided as follows :—*Succirubra*, 97,370 kilos.; *Ledgeriana*, 346,946 kilos. ; *Officinalis*, 2,498 kilos. ; *Hybrid* and other kinds, 39,015 kilos. Of the total thus formed, root bark formed 57,747 kilos. The richest parcel of bark was lot 115, consisting of 24 bales of *Ledgeriana*, which contained an equivalent of 11·20 per cent. sulphate of quinine. The shipments from Java for the first half of the month were 500,000 Amsterdam lbs., against 300,000 Amsterdam lbs. last year.

London Tea Market. Cabling to Colombo on the 4th instant Reuter reports that the market for Ceylon tea is generally quiet but steady. Pekoe Souchongs are quoted at 4¼d. (same as last week) but the average for the week is "unquotable." 33,000 packages of Ceylon tea were offered for sale, and 19,000 were disposed of; while of the 8,000 packages of Indian tea offered, 7,000 found purchasers. Messrs. Gow, Wilson & Stanton report that buyers are operating very cautiously and that the market for medium liquoring Pekoes and Broken Pekoes, as well as that for common Pekoes and Broken Pekoes, is weak. The price of fair liquoring Ceylon Pekoe Souchong is 5d. and the average price of Ceylon tea sold on garden account week was 6¼d. (both same as last week) as against 5⅞d. 6¾d. respectively in the corresponding week last year.

Indian Tea at the Glasgow Exhibition. A gentleman writes to *Capital* Glasgow, that, so far as he can Indian tea is anything but quately represented at the Exhibition there. Ceylon is, of course, well in evidence with Cingalese waiters ; Dr. Pilgrim's khitmutghar appears to be the chief representa of the Indian Empire. He sits behind packets of tea mar "Government," cannot make himself understood in Engl and looks cold. This, remarks *Capital*, "may be called object lesson in "How not to do it," and the Indian Association wish the Government to levy a tax to adver the product ! The same thing happened with the Coolgar Exhibition. In that case the Committee excused themsel on the plea of insufficient notice. It would be interestin learn what the excuse is this time. Heaven helps those w help themselves."

The Bandong Quinine-factory. The annual report of the Bando quinine-factory expresses much sat faction with the results of the Ba via quinine-auctions, and states that new contracts have be made with the planters, which ensure a full supply of ba for this year. As the whole of the Company's capital invested in the buildings, plant, and stock, it is proposed issue 6 per cent. debentures for 6,250*l*., redeemable in years, in order to provide the necessary working capital ; t whole of this issue has practically been applied for. Af allowing for depreciation there remains a net profit sufficie to pay a dividend of 4 per cent., which the directors propo The Board refers to the great assistance rendered Mr. P. van Leersum, who superintends the work on beh of the Government, and to whose advice the improvement the manufacturing proces is due.

Tea in "South California." Messrs. P. C. Larkin & Co., Toronto, urge Ceylon to "fear no foe Of tea grown in South Calfor (? South Carolina) they say :—"That the tea has been gro in this same garden for very, very many years ; that the grown has been very, very bad ; and that a very, very, *v* big price has been charged for it. It is, we understa subsidised to some extent by the United States Governme and is regularly exploited, for political effect, every two three years, after which we hear nothing more of it another two or three years, when it becomes "flourishin again, *in the newspapers*. We think that the growing of in America is very much like the artificial diamond indust It has been proved that diamonds can be made artificial but they are very much dearer than the real stone, and ve much inferior."

London Port Charges on Coffee. During a recent sitting of t Royal Commission on the Port London, Lord Revelstoke presidi Mr. George Rouse, of Messrs. R. J. Rouse & Co., said was Chairman of the coffee brokers' section of the Gene Produce-Brokers' Association, and past Chairman of t London Produce-Brokers' Association. In illustration of t high dock and warehouse charges on certain articles of produ

the port of London, he put in a table showing the rates harged at London, Hamburg, Bremen, Havre, and Antwerp n imported coffee and cotton, for the services of landing, orking, weighing, delivery, and for rent. In the case of offee the charge for delivery in London was set down at 5s. er ton land conveyance and 6s. 8d. per ton water conveyance, against 1s. 4d. at Bremen, 9¾d. at Hamburg, 8d. at Havre, nd 5d. at Antwerp. The high charges in London, the itness said, were maintained by the absence of competition etween the dock company and the wharfingers, the consequence of certain agreements between those bodies to maintain he high level of warehouse charges.

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alcutta Tea Sales. The Calcutta Tea Sales on the 5th inst. comprised about 12,400 packges, all districts being represented, although Assams are ill in limited supply. A most satisfactory feature of the le was that for the first time this season every leaf was sold, ompetition being brisker and prices firmer all round, except r poor thin "rubbish" sorts. Buyers were particularly een on anything possessing stand-out quality, and the following satisfactory prices were realized :—Hautley Broken ekoe, Rs.1-3-6 ; Phukenbari Broken Orange Pekoe, s.1-3-6 ; Nagri Farm Orange Pekoe, Rs.1-3-6 ; Singtom roken Orange Pekoe, Rs.1-1-0 ; Nasorjan Broken Pekoe, s.15-6 ; Phukenbari Orange Pekoe, As.15-3 ; and Halmerah range Pekoe, As.15. Good Darjeelings and Assams e particularly wanted in this market, just now, and ny such offered will meet with a good reception. With a ortage in output to date of, it is estimated, something like % to 30%, as compared with last year, the market may be pected to firm up considerably for all *good* teas, but the ospect is as bad as ever for badly made coarse plucked leaf ith thin liquor, the stock of which left over from 1900 ason will take some considerable time yet to work off. ylhet and Cachar planters particularly will do well to bear is in mind, and aim at quality rather than quantity.

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elping Brazilian Coffee. On the introduction of the bill to grant 2,000,000$ per annum for the rpose of advertising and pushing Brazilian coffees in Europe, r. Neiva Junior delivered an able speech, in which he conemned in no measured terms artificial expedients for limiting pplies and, especially, the idea of burning 20 % of the outt. It is, however, curious to observe, remarks the *Brazilian eview*, how an observer so clearminded on most points lows prejudice to blind his judgment on others. To Dr. eiva Junior the bugbear is not over-production but exports, who in combination with the big roasting houses, onopolise the markets and persistently and systematically bear" coffee. No doubt an active propaganda will be used in extending the use of coffee, but until consumption ertake production, it is idle to look for any permanent improvement in prices. Precisely the same phenomena that flict coffee interests here are to-day the object of equal licitude to the planters of tea in India and Ceylon, where ere are no exporters in our sense of the word, to monopolize e trade. That, however, has not prevented "overoduction," nor impeded prices from falling. As here, anters are on the outlook for a panacea, but so far we have t heard that Government interference in any form has been en suggested. God helps those that help themselves. But re our trust is in Government.

Indian Teas in London. The quantity in offer is small, says the *Produce Markets' Review* of 15th ultimo, and, consequently, there has been but a poor selection, the bulk of the tea catalogued for public sale having consisted of final invoices of inferior quality. For the latter the demand has been inactive, and, as Ceylon growths are brisker in cup and more useful for freshening up blends, the inquiry for the lower grades of Indian is likely to remain quiet until considerable arrivals of new season's. The finer descriptions, owing to the continued poor supply, have been readily bought, and firm to improved prices have been paid ; and, until there is a fairly good quantity of the new crop available, which will probably not be before the middle or the latter end of next month, the market is likely to be higher. A few parcels of new tea have been brought forward from the Assam and Darjeeling districts, but as the quality was not very attractive there was only moderate bidding and comparatively easy rates were realised. Exports from this market are largely increasing, those for the past month being 1,103,000 lbs. against 555,000 lbs. in the same period last year, while for the past eleven months there is an increase of 4,290,000 lbs., the total quantity being 12,462,000 lbs. as compared with 12,231,000 lbs. of China tea. Taking the total export of all growths from the 1st July, 1900, to the end of May, which reached 40,491,000 lbs , Indian and Ceylon teas contributed the large proportion of 27,125,000 lbs., which clearly indicates the growing popularity of these growths in other markets. Of the 14,562 packages offered at the public sales 13,055 were disposed of at, on the whole, steady prices.

Coffee in the U. S. and Elsewhere. The *American Grocer* reports :—The market moves within a narrow range. The demand for good roasting grades is fair, and such are firmly held and generally above quotations. Thus, good Cucuta, while selling at 8¼@8½c. in an invoice way, will bring 9c. or more if very desirable in style and color ; in fact, some very fancy sold at 11. Bogota, washed, while quoted on ordinary invoices from 9@14c., will bring, if very desirable, 16@16½c. Yellow Santos brings from 10@13c. in jobbing lots where color is extra fine. The differences between grades of Brazil as established by the Coffee Exchange are about 1@1¼c. above actual values based on recent street transactions. Padang Interior, 15½@18½c., with fancy mats at 25@28c., and very fancy better ; Mocha, 15@18c., and higher for extra lots. Sales between May 17 and 31 include 13,559 bags Maracaibo, 5,530b ags LaGuayra, 4,569 bags Savanilla, 2,254 bags Mexican, 5,056 bags Central American, and 220 bags Jamaica. The market sags for Brazil sorts; in fact, there is little to encourage buying ahead of requirements. Receipts continue heavy. The year will close on a record-breaking crop. In options there is moderate trading. Deliveries are light. Mild sorts are in fair demand. No. 7 Rio closed at 6⅛c and No. 3 Rio at 7⅜c.; No. 5 Santos at 6⅝c., and No. 4 Santos at 6⅞@7c. In Costa Rica rains have been late, and, in consequence, next season's crop is predicted small. Reports from Mexico indicate the current crop at two-thirds an average yield. Samples of new crop Rio coffee have been shown in London and indicate poor quality. It is thought that recent volcanic eruptions in Java have damaged the coffee plantations.

GENERAL ARTICLES.

THE TEA TRADE IN THE UNITED STATES.

The *American Grocer* of 5th ultimo says :—

Last Wednesday's auction disclosed a firm market for greens, especially Moyunes. Blacks were irregular, and Congous decidedly weak. From the report in the regular market column, it will be noted that India and Ceylon sold as low as 7 cents, in bond. A line of Moyune Hyson sold at 6¾@7¼ cents. At the close of the regular sale, there was a special sale of 1,692 packages Formosa Oolong, in bond, at 10½@13½ cents.

A BALLAD OF OOLONG.

Whenever the magistrate, good Li Song
Is short of his favorite tea, Oolong,
He lays his gout and his spectacles down
And hies him away into Chinatown.

Into the region of Mon Lay Won,
When the day of official life is done,
Into the land of slant eyed Lee's
He hies him away to replenish his teas.

All day long, in the places of Tax,
Of rubicund tape and sealingwax,
He toils and moils till the hour of tea,
Blessed old 5 o'clock, sets him free!

Blest liberator, better than rum,
Of the Fa and the Fee and the Fi Fo Fum
Of the Tammany Ogre who used to dwell
In the metropolitan citadel

Blest over all the heroes that be
On the sunny side of the Ceylon Sea,
Nerve him still to be Good and Strong,
Excellent magistrate, great Li Song.

—*John Paul Bocock.*

Thomas Martindale, of Philadelphia, in a letter to the *Journal of Commerce*, proposes that a National Tea Importers' and Tea Dealers, Association be organized, and that the first convention be held in Buffalo in August or September. The idea meets with favour. "There is probably," says Mr. Martindale, "no great branch of business in the United States to-day that is in a more bewildered and unprofitable condition than the business of the import and sale of teas at wholesale. I say bewildered, because the trade in this particular article of merchandise is without a policy for mutual protection; unprofitable, because, for at least two years back, it has been practically impossible to turn importations or jobbing lines over at a fair profit, no matter how favourable the purchase appeared at the time it was made. Old houses in the business confess that they have not made living expenses for two years or more, while the capital of many firms has become dangerously impaired in consequence of the heavy shrinkage in values. A number of cases of suicide of members of the trade likewise mutely testify to the lamentable condition in which the trade finds itself. Nor is it likely to improve in the near future without some radical steps are taken by the trade as a whole."

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

AFRICA AS A MARKET FOR TEA.

Interviewed recently by a correspondent of the *Ceylon Obse* Sir Harry Johnstone, Governor of Uganda, gave his ideas on tea industry, which are described by the interviewer as distin refreshing in these times.

To begin with, we read, he takes a keen interest in planting, has tried growing various products, including tobacco and tea; last with but small success. In his opinion this depression in the trade will not last, it cannot last, and when it passes over, assuredly it must, tea will be in as sound a position as e Moreover, if he had money to invest, he would have

NO HESITATION IN INVESTING IN CEYLON TEA PROPERTY.

Regarding the question of over-production, Sir Harry declares t Africa will be a great tea-drinking country—already the native tri are taking to it; and provided tea is good, cheap, and easy to Africa, now only in its infancy, will do away with the fear of ov production; and there will be no question, he believes, of glutt the market with India, Ceylon or China teas. Africa, for vari reasons, will never compete with recognised tea-producing co tries, like India, Ceylon, and China.

Talking of the "Thirty Committee," why on earth, he said, they not

EXPLOIT PORTUGAL?

There is a good field there for tea shops. Portugal, unl Spain and France, is not a coffee and chocolate drinking count It drinks tea, and drank tea long before we did ourselves, but is dearer there than it ought to be. Then Morocco is anot country where tea is drunk all day long, and the "Thirty C mittee" would do well to turn their attention to it. The other

IN SOMALILAND

he stopped at a café, and asked for some coffee; they told him t had only tea, and he was served with a delicious cup of tea. Th were great possibilities for opening up a trade in packet teas w the Arabs who of late have taken to drinking tea. If India Ceylon turned their attention to these parts of the world, ov production would cease to cause alarm. Asked about the increa duty on tea, Sir Harry said he would have taxed fifty other thi before he touched tea; he would have clapped the duty on, champagne, velvets, silks, and various foreign importations. Harry, himself a good judge of tea, is a confirmed tea-drinker, believes that tea is

DISTINCTLY BENEFICIAL, ESPECIALLY IN MALARIOUS REGIONS.

"Bad for the nerves and digestion, the Doctors say? Well, it not injured mine," said Sir Harry, "and I don't care a rap Doctors' fads Much of the illness in Uganda is caused by scarc of good cooks and good food, with too free and too frequent use alcohol."

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange.—*May 25th*, 1901.—Ninety days' Bank rate opened Monday, 20th instant, at 12 7/16d fell to 11 1/2d on Friday and clo this evening at 12 1/16d.

If any proof were wanting of the necessity of a controlling fluence in the exchange market, the extraordinary and viol oscillations of the last three weeks would be more than sufficie With the balance of trade unquestionably and irresistibly in favour and a huge sterling balance in London disposable, th would be no great difficulty in manipulating the market in a m ner that would have prevented the precipitous and prejudicial r to 13 1/2d, on the one hand, and the almost equally disastr reaction on the other. Such, were it properly understood, sho be the rôle of the Bank of the Republic, whose first duty it is use the resources that have been provided by the Nation, not mere personal profit but to ensure the maximum degree of stabil compatible with so fickle an instrument as paper-money. Unfor nately such has not been the programme of the Bank, and, inst of an element of stability, it has proved hitherto an element disturbance rather than otherwise.

If, after allowing for imports and Government requirements, surplus of £3,000,000 shown by exports in two months is not s ficient to cover all possible requirements and leave some balance o after every demand for bills is satisfied, the situation of the coun must be hopeless indeed! By severely restricting expenditure

very kind and cutting down Government requirements and nports to an almost irreducible minimum, the balance of trade as been turned unquestionably in our favour; nor with the revailing monetary stringency and heavy losses entailed on oreign investors by late frequent failures, can there be much doubt hat the equilibrium of foreign payment is so also.

Last year the rapid rise of exchange to over 14d stimulated rivate remittances to an extraordinary degree, but necessarily ft so much less to remit afterwards. This year, no doubt, uch remittances have been also considerable, but limited as ney are mostly to a single year's savings, they must necessarily e on a much less extensive scale and insufficient to greatly affect ie balance. Moreover, no such movement as was noted last year Sao Paulo, when special trains were run for Italian labourers nxious to remit their savings before rates fell and single families ere known to take £2,000 and more over the counter, is perceptie. Were business brisker the activity of the demand for lls might be attributed to the remittance of overdue accounts, ut at present the difficulty of collecting any money at all the interior is notorious, and far from paying back debts, is all traders can do to keep up current payments. If deposits e any guide, on the 30th April, in spite of the stoppage of 13 fferent native banks, deposits at the 25 branches of the foreign nks positively fell off nearly 8,000 contos, the conclusion being at not only was little are nothing available for taking purses in the native banks, but that in the foreign ones the nount was much smaller than last year. Besides, the quantity paper-money in circulation has diminished since this time last ar by over 12,000 contos and still further added to the stringency eated by almost total stoppage of discounts. So that, whatever y it be looked at, it seems indisputable that, whilst the supply of ls has notably increased, the demand must have undergone dical reduction.

It is argued that all the factors in force now were equally active t year when a similiar precipitous rise was followed by a hopeless d prolonged relapse. But even supposing that the value of other orts was the same last year as this, coffee alone has furnished arly two million sterling more in bills, whilst money is still re stringent and private remittances more restricted. The fact t the rise has taken place this year when coffee prices were ling steadily and long before selling for the new coffee crop could luence the market, whilst last year the violent upward movement not commence until June, is proof enough that factors in one e and the other were not the same. This year the rise that culnated at 13 1/2d on 5th May was the natural effect of the usually favourable balance of foreign payments and large surplus ills due to the simultaneous large coffee and rubber shipments, isted and exaggerated by speculation. Last year great part of rise to 14 1/2d was the result of the anticipation of coffee values. doubt speculation has overshot the mark this year, as it always s, and provoked a reaction, but not only is the oversale on a far aller scale this year than last, but for its liquidation the market count on the whole vast surplus that the sale of the coming re- coffee crop must inevitably afford. Last year when exchange minated at 14 1/2d, the Banks had some 124,784 contos to receive ills, most of which had to come from coffee shipments already roached upon.

his year, to reach 13 1/2d a debt of only 45,780 contos has been urred by the market, for which the whole of the new untouched is available as cover. The drop to 11 1/2d, violent and easonable as it was, is useful and healthy because it not only red away a mass of speculative business that, had it gone on mulating, must have been extremely dangerous, but allowed pers a chance to execute orders and get rid of a good deal of ee before new arrivals commence. It is possible that for a time s may oscillate about 12d but sooner or later the new crop must e itself felt and provoke a reaction that may carry rates her than ever.

uring the first week bills are said to have been scarce and to almost disappeared. If it be so it is not because shipments of er coffee or rubber have diminished, because the value of the arques was particularly large, £325,000 as against only £176,000 ng the previous week and £129,000 last year. As to rubber the ments seem to have taken a new and unexpected spurt, and to added some £160,000 to the week's supply of bills. There s, therefore, every prospect of the favourable balance of trade g maintained, even if there should be little or no surplus for the next month or so after meeting Government and private demand. Declared sales of coffee were also heavier, 146,000 as against 101,000 the previous week, and promise good shipments again this week. Summing up, it seems to us that the rapid fall must have pretty well cleared the slate, and if indeed the immediate supply of bills may not be much more than sufficient to satisfy demand, there is no logical reason for a further fall, but very good foundation to expect another and considerable rise in July. As we said before, this may be interrupted or anticipated by speculation, but, however that may be, unless we are much mistaken, rates will rise undoubtedly before the end of July or August, at the latest.

Coffee.—Entries at Rio and Santos during the week ended May 24th were 19,702 bags over those of the previous week and 69,572 or still nearly 180 % more than for the corresponding week last year. New crop washed coffees continue to arrive at Rio in small quantities and also a little *terreiro* coffee, accounting probably for the spurt in entries that are now almost up to the Santos level. Large entries, however, are not looked for before the end of June. The weather continues all that can be desired. Entries from 1 to 24th May amounted to 340,107 bags against 144,230 last year, and for the current crop to 10,316,889, as against 8,622,786. There can be now little doubt that entries for the current crop will reach, if they do not exceed, 11,000,000 bags.

Shipments, however, received a big fillip from the fall of exchange, *embarques* having reached 205,347 bags at Rio and Santos as against 110,676 the previous week and only 66,406 for the corresponding week last year; whilst declared sales amounted to 146,000 as against 101,000 the previous week and 69,000 last year.

The Rio market during the past week was somewhat firmer in consequence of lower rates of exchange, but only on Thursday was any large business done. We quote 7$300 to 7$400, or 30s 6d c. f. and comm. Demand for Europe was slack, only 100 reis premium being offered for colory coffees. The American demand was confined chiefly to the roasting houses. The few samples of *terreiro* coffees offering are said to be decidedly under crop's average, whilst washed coffees are better.

THE COURSE OF COFFEE.

The New York coffee market has for some time shown a decided inclination towards lower prices, and present quotations are among the lowest on record. The question is being eagerly debated whether current figures indicate an era of low prices as a result of over-production and of the cheaper cost of production, or whether they of themselves constitute the basis for an advance, on the ground that coffee cannot be profitably produced at existing rates, and for that reason the production will be curtailed. Messrs. Lewisohn Brothers (who are understood to represent the Rothschilds) are the leading exponents of the latter view; and, on the other hand, Messrs. W. H. Crossman & Brother believe that coffee can be produced at a profit on the present basis of value.

Mr. Hermann Sielcken, of Messrs. W. H. Crossman & Brother, and manager of the Sugar Trust's coffee interests, who is now on a visit to London, ably states the bear side of the position:—"Brazil has been sending sensational stories into the consuming countries, undoubtedly with the idea of affecting the prices at the commencement of the new crop. In the last four or five years of large crops they have exhausted all schemes which the people would believe for a while, and all of these sensations came forward regularly between May and August—the time when the crop is commencing to be harvested. In 1896-97 was the first large crop, and the world at large simply did not wish to believe that there was a large crop The stocks they had on hand at high prices from the preceding year made them think that it would be better to affiliate with the Brazilians in trying to uphold values than to commence with a bold stroke and say, 'The small crops are behind us and large ones are commencing, and a new basis of values must be found' In 1897-98 (the record crop up to the present) they started with estimates of 6,500,000 bags for their crop, which actually turned out 10,500,000 bags. Consuming countries believed it for a long time, as, strange to say, buyers felt more interested in what they had on hand than what they were to get in the future.

"The next year at the beginning of the crop we had frost stories galore, and in July and August it was stated the trees might be totally destroyed by frost; and last year the heavy rains were supposed to have reduced the outturn of the present crop very greatly,

and this, together with the advance in exchange in Brazil, made the world extremely bullish at the beginning of the crop. This movement was absolutely uniform, and, almost without exception, with all speculators in Europe and the States, and led to the heavy losses during this crop. Strange to say, during all of these years of heavy crops the consuming countries have been in favour of buying high, basing their action as to values on small and inferior ideas instead of on broad lines.

"The high prices in gold paid to Brazil from 1887 to 1896 stimulated the production, and the fall in the value of the paper money of Brazil gave enormous currency prices as well as gold prices, and made this stimulus for values in the eyes of the Brazilian planters still greater. Planting was pursued with a vengeance, especially in the Province of San Paulo, where plenty of virgin ground was still open, and is still open, and where the planters possess a great deal more wisdom than those of Rio by attracting immigration to replace slave labour. These efforts led to production never dreamed of. The outturn of the crop in San Paulo ranged from 1,100,000 bags in 1879-80 to 2,620,000 bags in 1886-87, and down to 1,112,000 bags in 1887-88. Since that time there has been a gradual and steady increase up to 5,700,000 bags in 1899-1900, with a promise of 7,750,000 bags to 8,000,000 bags for 1900-1901.

"So far since the commencement of the big crops in 1896 the Brazilians have been able to obtain good prices, considering the size of the crop, and the heavy losses have fallen almost entirely on Europe and the States. A good share of these losses has been caused by too much credulity in all sorts of statements emanating from Brazil for the purpose of obtaining a higher value for the merchandise. It comes to the childish and silly stage when they talk of burning up coffee by law. It is wasting time to dwell on this. It shows plainly what the object is. It proves that the Brazilians are face to face with a large crop on which they have made no advance sales like in former years. They still have about 1,000,000 bags of the current crop unsold, and they would like to sell the spot stocks as well as the new crops on the better basis.

"There is but one way that will permanently cure the decline in coffee, and that is for the Brazilians to be brought face to face with the fact that consumers have large enough stocks to refuse accumulating further, except at prices which are low enough to presume that they will curtail production. What such prices are the future alone will prove."

The arguments of those who expect higher prices for coffee are put forward in the following statement:—"The general position of the coffee market is somewhat anomalous. Prices in Brazil—the chief producing country of the world—are 25 per cent. lower than at the time when prices in America were fully 1c. to 1½c. lower than to-day. The expenses of labour and of running the coffee plantation, of harvesting and shipping to primary markets, are about the same to-day as they were two years ago, when the premium on gold was about 325 per cent.

"Thus the planter is brought face to face with a condition which actually leaves him less for his coffee than the actual cash outlays amount to. It is to this fact that may be ascribed the tenacity of the market and the futility of the efforts of the bears to depr prices below present values.

"Early in the Spring unheard of figures were mentioned as likely outturn of the new Brazilian crops. There are already in cations that anything like an unusually large crop is out of question, and that a fair proportion of the crops of the plantation likely to be affected by the low ebb to which prices in Brazil money have been forced.

"The world's visible supply is still very large, and it is lik that we will wind up this crop year with 1,000,000 bags more th were in sight July 1, 1900. Against this it may be stated that reserve stocks both in this country and Europe are very sm indeed, and probably more than make up in their deficiency for excess of coffee in sight.

"The mild coffee crop is generally reported to be somew smaller than last year's, which was a very moderate crop indee —*Financial News.*

CEYLON GREEN TEA IN NORTH AMERICA.

The following letter from Mr. P. C. Larkin, of Toronto, the Ceylon Tea Commissioner for America is given with hint that Mr. Larkin is obviously not an entirely disint ested advocate of the charms of Ceylon tea :—

TORONTO, *June 14th*, 1901.

DEAR MACKENZIE,—In looking over your letter again to-da notice a request of yours that perhaps I did not answer thoroug in my letter of yesterday ; and that is, you asked me to think o the future of green teas and give you my opinion. Well, as as Canada is concerned, my opinion is that Ceylon greens h taken hold, and so well that there will never be a "let-up." A this is generally acknowledged by the wholesale trade, and any w do not admit it, at least feel it. They are beyond peradvent successful. We have the thin end of the wedge in, and it m keep on entering in, no matter what takes place. If you give every bit of advertising, in every shape and form in Canada, demand for Ceylon green tea would go on increasing continua although a great deal more slowly than if they were well exploit Getting people like ourselves to take hold of them, as you did years ago, remember, has its disadvantages as well as advantag The disadvantages are that we are naturally not well liked by wholesale Grocery and Tea Trade, (although we are on the bes terms now with the retail trade) and if the wholesaler could de and turn to nought what we have been predicting so vigorou through the press of Canada, we have no doubt that in their own terest they would be glad to do so. They laughed at us and predictions years ago about Ceylon black teas, but now they h practically abandoned all other black teas excepting Ceylon India, and they know that our predictions which came true in gard to Ceylon blacks gave us a position in the trade beneficia us and injurious to them. Naturally they do not want to see same thing take place with the greens. But, on the other hand, if

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l not taken hold of them you would probably have found it very ficult to get anyone to take hold of them. They would have given the same reception as you got from —— and ——. And, after what brings these people to toe the mark is the demand from consumer, which we create by our advertising, sampling, and ens of other methods; and this the wholesale trade, taking them lectively, have neither the knowledge or the means to do, nor experience either, and do well. Now then, the demand is set- g in from the public. There is no question about that. Many usands of Japan tea-drinkers are asking daily for Ceylon green . This news will be carried by the travellers to the wholesale ises, and they will take an interest in Ceylon green tea, and will, hin a few years, practically abandon Japans, as they have China ngous.

Of course, the speed with which Ceylon greens make headway l depend altogether on the amount of advertising that is done; such good work has been done in their introduction, and laying the foundation of their trade, that you need not fear for result, which will be the displacement of Japan teas in Canada. nly wish I could say the same about the United States; but if will study out the figures, small as they are, in Detroit and ffalo, and Boston, particularly the two former, you will soon clude, we feel sure, that Ceylon greens have taken a firm hold *h the people who have tasted them* there. When we were ad- tising there we opened a certain number of accounts. In many ces the advertising told, and the teas were asked for, were liked, the people *continued to use them*. If such is not the case why t we are getting constant "repeat" orders for them. As the ertising was not kept up long enough many people returned the as no demand was created: but I feel as convinced as I can be anything in this world that every Japan-tea drinker, or at least eteen out of every twenty of them, who taste Ceylon green tea, the United States, like it and continue to use it. The great ect is to get the Japan tea-drinker to *just try it* and the only to get at him is through advertising, both newspapers and mpling, etc., etc. Unfortunately we have not been able to keep up in the United States, whereas in Canada we have every er in the Dominion full of it, not once or twice a week but three es, and, in many cases, in every issue of the paper. Much as would like to do so, we cannot possibly afford to exploit the lon green at this rate in both Canada and the United States; we can still less afford to abandon the green tea campaign in ada just now We may be enabled to do so later on, to some ent, and then we would devote the money saved here to ex- ting the Ceylon green tea in the United States.—I am, etc.,

P. C. LARKIN.

THE TEA OVER-PRODUCTION QUESTION.

Mr. A. Cooke, of Chota Nagpore, writes to the *Ceylon server*:—

EAR SIR,—In the pages of "Indian Gardening and Planting" roposed a scheme for the use of the Cess: at that time (April) re had been such strong recommendations for a Cess from the ority of those who spoke at public meetings that it appeared a ainty.

ut as week followed week and nothing was done, I continued exertions to get a Cess, and acting under advice I confined my eavours to rousing the tea public to vote for the Cess. My nds said that we must first catch the Cess before we cook it. It fferent in Ceylon. You have a Cess, and are open to receive posals for the use of it, and so perhaps your planters will ive my idea without scoffing. I strongly hold the doctrine an absolute reduction of yield would be fatal, but that the es of tea at the open sales could be raised by withdrawing the *lus*; that is to say if the buyers want 1,000 pounds or maunds, ons, and 1,100 are offered, prices will be low; but if the surplus 00 *can be* withdrawn the buyers will *have* to pay the price vant.

me time ago your planters offered to reduce the yield by three ion lbs. and my advice is to *make* that three million, but with- it as required by the rates ruling at the sales. If prices are emely low it might be necessary to withdraw 20 % from each for three or four successive sales, and as prices improved the unt to be withdrawn would become less until absolute equilibrium should be established. "Equilibrium" means a price which would pay for production and *also* for selling, the producer and buyer would both get their *legitimate* profits.

I may note here that a *reserve* of tea would enable us to fill up any temporary deficiency which otherwise would force the buyer to pay a price that left him no margin of profit.

Any sensible scheme *must* protect the interests of the buyer.

To return to the promised reduction of offerings, I proposed that the tea should be made, but the cost of making it would have to be *repaid* to those who join the scheme.

The cost of making tea in India, *i.e.*, plucking, manufacture, fuel, boxes, freight to Calcutta and sale charges, comes to about Rs.12½ per maund of 80 lbs., *i.e.*, 2½ annas per pound of tea.

I advised Indian planters to put on a Cess of 2 pies per pound which would give a revenue of from 19 to 20 lakhs of rupees; the cost of 10 million lbs. of tea at 2½ annas comes to about 15⅓ lakhs, and leaves 3½ to 4½ lakhs for expenses of distribution. I recommended that percentage of tea should be drawn from the sales of each class of tea, not only the lowest, but of *all* classes. Thus according to the orders for the amount of tea to be withdrawn, each garden would reserve one out of 20 or one out of 30 or 40 chests of *each* class of tea. This reserve could be forwarded on demand to the Association for disposal, and would be paid for at 2½ annas per pound out of the Cess.

The tea thus reserved would be credited to the garden at the prices actually obtained at the sale for the unreserved tea.

The reserved tea would be sent to new markets and disposed of.

If it is *given* away, there would be no return, but supposing it to be sold at 2½ annas, clear of all expenses, that sum would be refunded to the gardens.

By this means a certain proportion would refund the cost of the Cess itself. The Cess on 1,000 pounds at 2 pies comes to Rs.10/6/0. 66 lbs. of tea at 2½ annas is also Rs.10/6/0, and 66 is about 5½ per cent. of 1,000, so that 5½ per cent. of tea reserved and sold at 2½ annas would recover the cost of the Cess at 2 pies per pound on the whole crop. There is an old saying that you get nothing for nothing and very little for a ha'penny. Apparently I want to propose that the Cess shall pay itself and thus cost nothing. But in this case we gain by *unity* and efficiency. The mere fact of union amongst tea owners with a *sufficient* capital at their backs, will, to begin with, force the buyers to pay the Cess. The *first* two pies increase in prices will pay for the Cess. That sum of money, instead of being distributed amongst the producers, will be collected for the *general* good. It will buy *average* tea which will be sent forward to create a demand. When you *give* your surplus to the dealers they reserve the best tea for their ordinary customers, and they send forward the lowest classes to create a demand.

I have thus shown that, by *pretending* to pay a Cess of two pies per pound, we shall force the buyers to pay it, and we shall be able to extend our markets with *average* tea at cost price instead of with low-class rubbish at double that price.

Our *average* tea will we placed on new markets at 2½ annas at Calcutta, say 3½ annas anywhere in the world, and the present low-class tea bought in Calcutta at 2 annas is placed on those markets at about 4 to 5 annas. Does it not follow that better tea at half price would do more to create a demand than worse tea at double the price?

To put it in a clear light, we could transfer the profit from the buyer in Calcutta or London to the pockets of the actual tea dealer in the new market; and he, having placed the new tea at a big profit, would go to Calcutta or London and get more of it.

In armed conflicts the one who can *show* overwhelming force is not compelled to *use* it; it is only necessary to send a commissioner or two to take possession of the desired territory.

In our case we can show an overwhelming force by paying a Cess of 2 pies per pound *on the first few invoices of tea*, and we compel the buyer to refund that, and to go on paying this heavy Cess, which we use in recovering that territory which the force of circumstances has made over to him. We shall recover the two annas per pound of tea which we do *not* get now, and which is *due* to us, and which the buyer and consumer have taken from us.

I have provided for the greatest difficulty, which is the *storage* of the reserved tea, by proposing that the reserves shall be kept (sealed) on the gardens till required. We can expect so much loyalty from managers that they will *honestly* reserve the tea, and not fill up the chests with bad tea or sand.

Even if all is granted there will be a minority who will refuse to reserve any tea. They will benefit by selling their *whole* crop at the improved rates. The *only* method of preventing this illicit gain would be to impose a Cess at a rate that would cover the gain in prices, and to refund the surplus funds to those who subscribed to any generally approved movement, but this of course is not practicable.

I fear that I exhibit a daring which may be considered folly in lightly mentioning sums of 20 lakhs of rupees per annum, but I have endeavoured to show that we shall *not actually have to pay it* ourselves, and these sums are small compared with the amount of gain to be obtained.

Our Indian crop, when it reaches 190 millions, at one anna per lb. represents 118¾ lakhs of rupees and an actual expenditure of 20 lakhs would be cheap for such a return. And then I have stated that we shall be able to recover *two* annas per pound, which comes to 237⅓ lakhs.

You in Ceylon spend about two to three lakhs of rupees per annum, and you do *not* get the buyers to pay it, because India has no Cess and the prices cannot be *forced* up. Let us suppose that you get a return of 200 per cent. on your expenditure, that is to say, you profit to the extent of 20 or 30 lakhs of rupees; that is real good business, but what is the use of this paltry profit divided amongst all tea owners?

It seems to me to be useless to struggle unless we, the tea makers, get the absolute command of the situation, and I reckon that 20 lakhs in India and 14 to 15 in Ceylon would effect this.

Unlike the simile used above, we send an insufficient force to capture the desired territory, and that force is cut up, and we remain vanquished; we remain the absolute slaves of the buyers. They will allow us only sufficient food to keep us alive.

By using ten times our present force we *shall* conquer and make up for lost time, and the tea world will belong to us; and China and Japan will retire into their own borders.

This scheme of mine surpasses even Mr. Mackenzie's aspirations. You could let him handle millions of pounds of *good* tea. Several years ago I ("1874") advised you to make "Green Tea," and to send big lots of tea to America to sell for what they would fetch; but Mr. Mackenzie would not dare to be years ahead of his time.

I understand that Your Associations are feeling sore with him, but in point of fact you set him to an impossible task; you wanted to get a retun of one anna per pound on your tea for an expenditure of two lakhs of rupees.

DISTRICT ASSOCIATIONS.

SHEVAROY.

Proceedings of a Meeting of the Committee of the Shevaroy Planters' Association, held in the Victoria rooms, at 1 p.m., on Monday, the 8th July, 1901. PRESENT:—Messrs. W. J. Lechler, E. Dickins, C. Rahm, C. G. Lechler, J. C. Large, R. Gompertz, *Honorary Secretary*.

1. Notice calling the meeting was taken as read.
2. Read letter from Secretary, U. P. A. S. I., stating that the Annual Meeting would be held at the Resident's Court House, Cubbon Buildings, at 11 A.M., a Council Meeting being held at the same time and place the day before—and requesting Honorary Secretaries of District Associations to send in notice of any subjects they wish discussed to enter upon the Agenda paper.

Resolved that Honorary Secretary be requested to inform the Secretary, U. P. A. S. I., that this Association wishes to propose the reduction of charges for curing coffee and to ask him to make the necessary entry on the Agenda paper.

The following letters were read and recorded:—

Circulars received from Secretary, U. P. A. S. I., during the month of June, 1901.
No. 47/01. Forwarding scheme for exploitation of tea in India.
No. 48/01. I. T. A. approves of Mr. Acworth's suggestion for exploitation of South India with good tea.
No. 49/01. Notice of meeting and subjects for Agenda paper, also receipt from Secretary, U. P. A. S. I., for Rs.150, subscriptions from Shevaroy Planters' Association.
No. 51/01. Forwarding Chairman's criticism of Mr. Acw suggestions and also a scheme put forward by the C Travancore P. A. for pushing the sale of tea.
No. 52/01. Forwarding copy of letter from Mr. Acwor I. T. A.
No. 37/ R. U. from Secretary, U. P. A. S. I., informing Malabar Chamber of Commerce reports that there is no fr ring and no rebates on West Coast.
No. 40/R. U. from Secretary, U. P. A. S. I., giving list of fre from Calicut. No shipping ring there.
No. 41/R. U. from Secretary, U. P. A. S. I., informing freights from Mangalore and Tellicherry to London ar same.
Letter from Superintendant of Police *re* Mr. Travers-Dra complaint against the Police.
No. 5/G. G. O. Nos. 520, 520A., dated 20th June, 1901. R of the Government Botanic Gardens and Parks, the Nil
Books and papers received during the month of June, 190
Planting Opinion, dated June 8th, 15th.
Brazilian Review, dated April 23rd and 30th, May 7th, and 21st, 1901.
Proceedings of I. T. A, dated June 4th, 7th, 8th, and 18th,
Commercial Circular No. 4 (Burmese Rubber-yielding Pla
Agricultural Ledgers No. 24 (Mica).
Do. edited by the reporter on economic ducts to Government of India.
Proceedings of the Kanan Devan, Coorg, and Nelliamp Planters' Associations.
Agricultural Branch, Vol. II, Bulletin No. 44. Notes on C in Madras Presidency.

ROBT. GOMPERTZ,
Honorary Secretary, S.

WYNAAD.

Proceedings of a General Meeting, held at Meppadi C on Wednesday, 3rd July, 1901. PRESENT:—Messrs. Abl Atzenwiler, de Fonblanque, D. Mackenzie, Nicolls, S. Powell, junr., Taylor, Trollope, Waddington, G. Rom *Honorary Secretary*, and S. Gillat, *Visitor*. Mr. Waddin *in the chair*.

1. Proceedings of last meeting were taken as read.
2. **U. P. A. S. I. Meeting at Bangalore.**—Read letter stating the Annual Meeting would be held at the Resident's Court h at Bangalore at 11 A.M., on the 31st July. A Committee Mee would be held at the same place and hour on the previous day.

The Honorary Secretary having stated that he would be un to attend, Mr. D. Mackenzie was invited to represent the Ass tion and Rs.175 was voted towards his expenses.

3. **Proposed Labour Law.**—Resolved that the papers conne with this subject be printed and circulated to members at once that a special meeting be held for its discussion on Wednesday 24th instant.
4. **The Tea Crisis.**—Read letter from the Chairman, U. P. A. to the Indian Tea Association. Read correspondence on the ject of the distribution of Indian Teas in India. Resolved in view of the latest Telegrams from Northern India, the matte postponed until further information is available

Read letters from the Kanan Devan and Nilgiri Association favour of a compulsory Tea Cess.

5. **Tea import duty in Ceylon.**—Read letter from the Hono Secretary to the Chairman, U. P. A. S. I., suggesting that eff should be made to get the import duty on Indian grown Te Ceylon removed, before asking the Government of India to im a Tax on Ceylon Tea. Approved.
6. **Adulteration of Coffee.**—Read several circulars from U. P. A. S. I. recording the action that is now being taken in matter.
7. **Coffee Cess.**—Read letter from the Secretary, U. P. A. S saying that Coorg and 25 members of the Nilgiri Association agreed to submit to a cess.
8. **French Tariff.**—Read circulars from the U. P. A. S. I. say that the rates on Indian Tea and Coffee would probably not

hanced. Resolved that our delegate at Bangalore be instructed bring forward the question of the higher rates on pepper.

9. **Railway rates on Coffee.**—Read letter from the Shevaroy lanters' Association on the subject. Recorded.

10. **Proposed Act to prevent Pepper thefts.**—Read Honorary ecretary's letter to the Collector of Malabar and his reply stating at he could not recommend legislation on the desired lines. esolved that the Honorary Secretary be instructed to again ddress the Collector pointing out that this Association is unable see the great difference in conditions under which pepper and ffee are raised; that it is very important that checks should be aced on moving the product in a condition unfit for consumption, thout passes; that no honest man would object to keep books; at the local police should be consulted as to their experience in aling with cases of theft, and that the operation of the proposed ct might be confined to the hill districts.

11. **Absence of the Wynaad Deputy Collector.**—Read correspondce with the Collector of Malabar. Recorded.

12. **Poodoopady Hotel.**—The Honorary Secretary stated that he d paid Rs. 50 to the proprietor, as the bungalow had now been -thatched.

13. **Encashment of notes at the Treasury.**—Read letter stating at notes would not in future be cashed at the Treasury, except r travellers. Resolved that the Collector of Malabar be asked to ford facilities for cashing currency notes at the Vayitri Treasury.

14. Harbour on the West Coast. Read correspondence.

15. Madras Harbour and Freights. Read corespondence.

16. The following papers were laid on the table:—

I. T. A. circulars.
Report of coffee-stealing cases, quarter ending 31st March.
Proceedings of Shevaroy Planters' Association.
Do. Central Travancore do.
Do. Coorg Planters' do.
Do. Kanan Devan do. do.
Do. North Mysore do. do.
Commercial circular on Burmese Rubber yielding plants.
Agricultural Department Bulletin, Sugarcane in Godavari and Ganjam districts.
Agricultural ledgers on Oxen, Mica, Sugarcane.

Signed H. WADDINGTON, *Chairman.*
(„) GEORGE ROMILLY, *Honorary Secretary.*

The next General Meeting will be held on Wednesday, h September.

MARKET REPORT.

[*Per Mail advices of 21st June* 1901.]

COFFEE.

The London Commercial Record says:—Auctions have again been merous and the supplies offered shewed a varied assortment, t only a small proportion was of attractive quality, and for this ere was fair competition a firm prices. The demand generally, wever, was slow, and in order to effect sales holders submitted to decline of 1s to 2s per cwt. in most instances. The market for utures" at one time shewed decided weakness, owing to a fall Exchange and continued heavy receipts, but subsequently rallied, d the closing prices exhibit no material change for the week. sterday September delivery of Santos sold at 29s 9d, December 30s 1½d to 30s 3d, March at 30s 6d to 30s 7½d, and May at 30s 10½d 31s 1½d per cwt.

We quote.—

ndon ...	... Santos ...	July delivery	... 29s 6d.
w York	... No. 7 Rio...	„	... 5·10 cents.
mburg...	... Santos ...	„	... 29½ pf.
vre ...	.... Santos ...	„	... 36¼ francs.

The auctions to-day were large and passed off without animation, l part was bought in. Prices shewed some irregularity, and ed in some cases in buyers' favor somewhat. Supplies consist- of 1,103 bags East India, 1,545 bags Costa Rica, 483 bags vador, 312 bags Nicaragua, 507 bags Guatemala, 470 bags New nada, 23 bags Colombian, and 541 bags Mexican.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	23,270	20,409	30,850	24,193
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	10,118	8,596	13,116	9,931

The preceding figures exhibit—

	Tons.
In the Imports an increase this year of	6,657
Home Consumption an increase of	1,522
Export an increase of	3,185
Stock an increase of	2,861

Auctions this week have passed off as follows:—

CEYLON.—*Plantation.* 29 casks 9 tierces 7 barrels 8 bags sold, smalls 35s to 40s, common to fair medium 56s to 60s, bold and extra bold 70s to 90s, peaberry 60s to 62s.

EAST INDIA.—5,517 bags partly sold as follows:—*Mysore*, smalls 33s to 47s 6d, fine ordinary to low middling 37s to 44s 6d, middling to good middling 49s 6d to 60s, bold 64s 6d to 69s, fine hard bold 70s to 77s, very fine 80s to 105s, peaberry 40s 6d to 62s. *Naidoobatum*, smalls 37s to 39s, bold 67s 6d, peaberry 48s to 50s. *Coorg*, smalls 34s 6d to 37s 6d, low middling 39s 6d to 43s 6d, bold 55s 6d to 63s, peaberry 44s to 58s 6d. *Neilgherry*, smalls 34s to 38s. fine ordinary to low middling 38s to 43s, bold 55s 6d to 64s, peaberry 48s to 54s 6d. *Wynaad*, smalls 38s to 37, fine ordinary to low middling 37s 6d to 42s, bold 49s to 51s 6d, peaberry 45s to 49s 6d.

MOCHA.—38 half-frazils with drawn.

COSTA RICA.—4,121 bags offered and 3,150 bags sold, smalls 29s to 41s 6d, good to fine ordinary faded greenish 38s to 40s, low middling to middling 41s to 50s, good middling 50s 6d to 53s 6d, bold 54s to 69s, peaberry 41s to 65s.

GUATEMALA.—1,896 bags catalogued and 850 bags sold—smalls 35s to 37s 6d, good to fine ordinary 39s to 40s, low middling to middling 42s 6d to 47s 6d, good middling 50s to 52s, bold 53s 6d, peaberry 45s to 53s.

VERA PAZ.—100 bags sold, smalls 33s, middling 45s, good bold 70s 6d to 71s, peaberry 55s.

COBAN.—38 bags bought in.

NICARAGUA.—Of 584 bags offered 220 bags sold, smalls 30s 6d to 33s 6d, good ordinary 30s, low middling to middling 40s to 47s, fine middling blue 64s, very fine extra bold blue 88s to 102s, peaberry 46s 6d to 79s 6d.

SALVADOR.—Of 2,356 bags brought forward 1,640 bags sold, smalls 31s to 35s 6d, good ordinary 35s 6d to 37s 6d, low middling 40s to 41s 6d, middling colory 45s to 47s 6d, good middling 49s 6d to 50s, bold 55s to 71s, peaberry 37s to 62s 6d.

MEXICAN.—270 bags about half sold, smalls 36s, middling 47s 6d, good bold 64s, peaberry 45s 6d to 55s.

COLOMBIAN.—Of 769 bags offered 630 bags sold, smalls 30s to 31s 6d, ordinary to fine ordinary 31s 6d to 39s, low middling to middling 40s to 47s 6d, bold 47s to 54s, peaberry 41s 6d to 45s 6d.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	2,828,000	3,211,000	3,138,000	4,263,000
Santos ...	7,872,000	5,581,000	5,505,000	6,112,000
Total...	10,700,000	8,795,000	8,643,000	10,375,000
Crop ...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 11½d, previous day 11 5/16d.

HAVRE, *June* 20.—Good average Santos June opened quiet at 35½f. and closed steady at 35¾f., September opened at 36¼f. and closed at 36½f., December opened at 36¾f. and closed at 37f., March opened at 37¼f. and closed at 37½f.

HAMBURG, *June* 20.—Good average Santos July opened quiet at 29¼pf. and closed steady at 29½pf., September opened at 29¾pf. and closed at 30¼pf., December opened at 30½pf. and closed at 31pf., March opened at 31¼pf. and closed at 31¾pf.

NEW YORK, *June* 20.—Closing prices of No. 7 Rio were as follow:—

	June.	July.	Aug.	Sept.	Oct.
June 20...	5·20	5·20	5·25	5·35	5·40
June 19...	5·05	5·05	5·15	5·20	5·30

TEA.

INDIAN.—A smaller quantity was brought forward at public sale, totalling 9,200 packages, of which 500 packages were new season's, against 13,900 packages (138 new season's) on the 10th instant and 6,300 packages (2,000 new season's) a year ago.

Inferior common was unchanged in value but the better grades met more demand at firm prices. Several invoices of the new crop were offered, quality on the whole being of useful description. The Assams and Dooars attracted most attention, particularly those with coloury liquor, but the Darjeelings were rather disappointing in cup.

Entries for export to the United Kingdom from the 1st April to 15th instant were 4,018,000 lbs. contrasted with 5,760,000 lbs. for the corresponding period of 1900.

CEYLON.—Auctions were lighter, *viz.*:—29,400 packages compared with 32,000 packages in the preceding week, and 34,500 packages twelve months since. Pekoe Souchongs and Pekoes for price elicited good bidding, but over 5½d per lb. both Pekoes ond Orange Pekoes were less wanted, and except in the case of parcels with full flavour, easier rates had usually to be accepted to effect business. Considerable irregularity was noticeable in Broken Pekoes, though the more desirable lines and Broken Orange Pekoes fetched about previous figures.

The average is 6⅜d., per lb. On the 13th instant it was 6½d per lb., and also for the same time in 1900.

JAVA.—Slightly over 1,800 packages of direct Import passed the hammer. Competition was fair and quotations did not shew material alteration.

Deliveries.—The clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 18th June,	1901	7,202,807 lbs.
Do. do.	1900	7,146,559 ,,

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	8,209	1,030	9,239
Ceylon	26,868	2,542	29,410
Java	1,646	165	1,811
Total ...	36,723	3,737	40,460

Also 893 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated June 21st, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1901-1902	33,770	90,370	4,091
1900-1901	10,548	66,954	2,331

9,569 *pkgs.* INDIAN
29,861 ,, CEYLON
2,059 ,, JAVA
} Total 41,489 packages were offered in public auction this week.

The substantial increase in the quantity of Indian and Ceylon Tea sent to foreign markets is doubtless chiefly attributable to current low quotations.

	1901.	1900.	1899.	1898.	1897.	1896.
Indian ...	8,526,139	4,875,982	4,994,148	4,631,650	7,090,639	4,385,921
Ceylon ...	12,924,205	10,685,902	7,788,345	7,641,405	6,060,271	4,833,025
Total lbs.	21,450,344	15,561,884	12,782,493	12,273,055	13,150,920	9,218,946

An advance to 21,450,344 lbs., in the first quarter of 1901, against only 15,561,884 lbs. in the corresponding period of 1900 is remarkable.

INDIAN.—The few Teas brought forward sold with a firm tone for anything with character, other kinds still realising only low prices. New season's Tea was represented by 496 packages.

The official wire gives exports to U.K. for first half of June as 2,630,000 lbs., against 2,660,000 lbs. same period last year, making the total from 1st April to 15th inst. 4,018,000 lbs., against 5,760,000 lbs. last year.

Week's average of New Season's Tea sold on Garden Account 1901, 496 pkgs., av. 8d. 1900, 2,885 pkgs., av. 6·99d.

Week's av. of New Season's Tea sold on Garden Account 1901, 3,347 pkgs., av. 6·10d. 1900, 3,636 pkgs., av. 6·92d.

CEYLON.—The supply, although again heavy, met with good attention from buyers Finest descriptions were in most demand, and sold at occasionally better rates, while medium brokens were somewhat irregular and here and there slightly easier.

Private wire from Ceylon gives exports to U. K. from 1st to 1 June as 6,000,000 lbs., against 5,200,000 lbs. same period 1900, estimates the quantity available for the month as 11,000,000 l against actual shipment of 12,750,000 lbs. in June, 1900.

Average for week 6·33d., against 6·50d. same week, 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 594,840 pk av. 6·61d. 1900, 601,377 pkgs., av. 7·31d.

JAVA.—1,669 packages of direct import and 390 packages second-hand Teas were brought forward, the auction passing v steadily with good competition.

Bank Rate 3 per cent. Exchange on London three months sight Calcutta 1/4⅛. Colombo 1/4$\frac{5}{32}$.

COCOA.

Business continues very slow with a tendency for nearly growths to further decline. At auction on Tuesday 3,556 ba were brought forward of which 1,500 bags sold. Trinidad w represented by 1,586 bags and at a reduction of 6d to 1s per cw 600 bags were placed; very fine red brought 75s, good to fine 7 to 73s. Only 61 bags Grenada were offered and they sold at 6 for fine red, 61s for common. 114 bags Dominica were quitted 60s to 64s for common to good, being about valuations. 73 ba St Lucia realised 62s to 64s 6d for fair to good, and 65s 6d w paid for 2 bags St. Vincent. 12 bags fine Tobago brought 64s 6 and 15 bags good Surinam 72s 6d. 281 bags Samana sold at 5 to 61s for fair to good. Ceylon was irregular, collected bringi some advance, whilst estate grown made a further move in buye favour; 878 bags were catalogued and 300 bags sold, good mediu red 77s 6d, dull to fair ditto 62s to 65s, smalls 47s to 57s, black 4 to 50s, and fair to good collected 59s to 62s per cwt. Private a good deal of business (about 1,000 bags) has been effected collected Ceylon at rather higher prices, but full particulars a withheld. 300 bags Grenada sold at 61s 6d to 66s, 100 ba Trinidad at auction rates, 90 bags Haiti 56s for ordinary greyis and some Guayaquil at 77s to 78s for good red summer Arriba, a 70s to 72s 6d per cwt. for winter.

PEPPER.

BLACK.—The market has been dull in tone, and value is easi On the spot sales of Singapore have been made at 6$\frac{1}{32}$d for fa and 50 tons are reported sold for arrival—at 6$\frac{3}{32}$d for June-Augu and at 6$\frac{1}{16}$d for August-October shipment. At the close holde are firmer, consequent upon the loss of the *As'uria* with upwar of 500 tons on board, and sellers have mostly withdrawn; for fa Singapore on the spot the quotation is 6$\frac{1}{16}$d.

The shipments of Black Pepper for the first half of Ju compare as follows:—

	1901.	190
U. K.—Singapore	50 } 180	*nil* } 1
,, Penang	130 }	110 }
Continent	90	
U. S.	200	
Total tons ...	470	1

At auction on Wednesday 35 bags Aleppy, 253 bags Wynaad, a 10 bags Penang were bought in.

WHITE.—is much neglected, and business has been almost at standstill. Singapore has been sold in small lots at 9$\frac{5}{16}$d for fa and Penang at 8$\frac{3}{16}$d. For arrival no business reported.

The shipments of White Pepper for the first half of Ju compare as follows:—

	1901.	190
U. K.—Singapore	70 } 240	70 }
,, Penang	170 }	*nil* }
Continent	20	
Total tons ...	260	

At public sale on the 19th instant. of 6 bags Singapore offer 2 bags good sold at 9½d. 30 bags Ceylon mostly sold—good 9 fair mixed with blacks 8¾d. black 8½d per lb.

GINGER.

COCHIN.—A further depreciation in the value of washed rou was submitted to, but cut kinds maintained previous rates. 1 cases 445 bags brought forward and 22 cases 201 bags sold—go bold cut and scraped 95s, bold with some medium ditto 90s, dit heavily limed 85s, medium with some small limed 65s limed tips 3 brown tips 36s 6d, and medium and small washed rough 35s 6d, 36s 6d, per cwt.

APAN.—210 bags bought in at 34s, to 35s per cwt.
AFRICAN.—255 bags withdrawn at 36s per cwt.
JAMAICA.—Only 138 barrels were brought forward, and they stly sold at steady prices—good bright washed 53s, low middling good middling washed 42s 6d to 46s, common dark lean to good mmon 34s to 39s per cwt.

QUININE.

Notwithstanding the good result of the Amsterdam bark-sale, e market closed last week at a reduction of ½d. per oz., October ivery selling at 1s. 3¾d., and December at 1s. 4d, the decline ng due to the fairly heavy shipments of bark from Java for the t of half June. Since then, however, the second-hand market has adied itself, though little business has been done, a few thousand nces having sold for October delivery at 1s 3⅞d, and December ls 4⅛d oz. The exports of quinine from Java in January 1901 ounted to 184 cases, of which 180 cases were shipped to New rk in four separate consignments; the remaining four cases went to Genoa. For the corresponding month of 1900 and 1899 352 cases and 71 cases respectively were exported.

At the auctions held at Betavia to-day 2,800 kilos. Ed. II. sold at an average of 22½fl. per kilo. (about equal to 9½c. Amsterdam unit). At the last auction, on May 15, an average of 23⅞fl. was paid. The next auction will be held on July 24.

CARDAMOMS.

Cardamoms were from 2d. to 3d. per lb. lower in auction to-day, fine grades being neglected. The following prices were paid:—Ceylon-Mysores: Good bold pale round, 3s. 5d.; medium to bold ditto, 2s 5d to 2s 10d.; medium ditto, 2s 1d to 2s 4d.; small and medium pale, 1s 7d to 2s.; brown and split, 1s 4d to 1s 5d. Seeds according to quality, sold at from 1s 6d to 2s. Ceylon Malabar, 1s 5d per lb. for good small. Of Mangalore, 14 packages offered, and sold, at 2s 10d to 2s 11d for bold round, 2s to 2s 4d for medium bold, and 1s 6d to 1s 11d for small and medium; splits and pickings, 1s 3d to 1s 5d.

(AVERAGE FOR ALL INDIA 5·19d., JUNE 21ST.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.
avancore ...	812	4·98												
ngy ...	129 p	3¾	...	...	60	3¾	24	4½	30	3¼	...	...	15½c	2¾ 3¼
eld T Co Isfield	47	4¼	...	...	28	4 4¼	16	5	3	3½	...	...	...	...
nmudi T Co B	233 p	5	...		81	5	63	5¾ 6	35	4¼	18	3¼	36 p	3¼ 4½
Braemore ...	71	4¾	15	5¼	28	3 4½	...		10	3¾	4	1¾ 2¾	4½c	2¾
Poonmudi ...	112 p	5	13	6¾	52	5	...	...	24	4¼	3	2¾ 3¼	20½c	2¾ 5½
n Ind T Co K K	85	6	30	5¾	...	...	40	6¾	15	4	...	...	...	...
T. T. Co Venture	135 p	5¾	...	...	60	6 6¼	30	6¾	32	4½	...	...	13½c	3¾
naad ...	216	6·30												
toomula ...	95 p	7	...	...	27	7½	68½c	6½ 9¼	...	...	...	...	...	...
naad T Co Per	121 p	5¾	30	6	.	...	44½c	7¼	47	4¾	...	...	...	...

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Munzerabad.

July 15th, 1901.—*Weather*—Last week was our heaviest so far for this monsoon, a little more than 12 inches being gauged at Saklaspur; the temperature ranges from 62° to 70°; winds cold and fairly strong. *Works*—Planting, weeding, borer and handling; the plants that were put out at the beginning of the monsoon appear very successful so far. *Plant diseases*—Coffee as healthy as can be desired. *Labour*—Abundant. *Health*—Improving. *Interesting item*—The Hemarati was in flood from Monday to Friday, when it subsided.

TEA IN PARLIAMENT.

THERE was an interesting discussion in the House of Commons last month. It was started on behalf of the British tea-planter, but that gentleman might well exclaim, "Save me from my friends" upon learning of the arguments advanced in his favour. During the Committee stage of the discussion on the Finance Bill, Mr. KEARLEY, M.P. for Devenport, moved an amendment in favour of an *ad valorem* duty on tea, on the basis of 50 per cent. with a maximum levy of 6d. per lb. *Ad valorem* duties are, as a rule, in favour with neither producers nor traders. To look at the matter from but one point of view, it is hard, if SMITH succeeds, by improved cultivation or manufacture, in raising the value of his tea 1d. per lb., that he should have to pay the Government of Great Britain ½d. out of this. To the practical imposition of *ad valorem* duties there are innumerable objections. It is one thing to have to submit to paying a fixed tax on each pound of tea; it is quite another to have to prove the value, or disprove erroneous valuations, of each shipment. Taxes of some kind are a necessity. Taxes in the form of import duties are in many ways more convenient than direct taxes on income or professions. Duties may thus be regarded as a comparatively

convenient form of a necessary evil; but then convenience disappears if complications are admitted in the shape of *ad valorem* levies, especially where values are variable and uncertain, as is the case with tea. Mr. KEARLEY made one point that the tea-planter should not everlook. He said that the duty on other articles that appeared on the breakfast table, such as coffee and cocoa, the average cost price of which in bond was about the same as that of tea, was much lower. Here there is just ground of complaint, and public sympathy should be easily won, seeing that no other breakfast commodity is so largely produced in *British* territory as tea is.

In his reply the Chancellor of the Exchequer prudently avoided this part of the attack. At other points he met Mr. KEARLEY boldly and cleverly. He stated that that gentleman had made his proposal on the assumption that the poor man had a special inclination to consume the worst class of tea. Sir MICHAEL HICKS-BEACH did not agree with that assumption. He believed that the poor man knew very well what was good tea, and that he purchased it. There was no one to ask him, "where, then, does the low-priced tea, of which such enormous quantities are consumed, find buyers?" Sir MICHAEL hinted that it was not desirable that the tax upon tea should be lowered in order to induce people to consume the worst class of tea; and he argued that the question was not one of mere percentage, but of "what was the price of tea, including the tax?" He cited statistics in support of his assertion that the increased duty on tea had not caused a decrease in imports into Great Britain, and made a strong point in reference to the difficulties connected with the collection of *ad valorem* duties. Mr. CAINE, M.P., asserted that while it is quite true that the well-to-do working classes used good tea and paid 1s. 8d. a pound, there was a large class who bought tea of the very cheapest quality in very small quantities—tea which probably did not cost the seller more than 4d. or 5d. a pound in bond. Nevertheless, Mr. KEARLEY'S suggestion was thrown out.

Sir HOWARD VINCENT then moved another amendment proposing to add that in respect of tea from British possessions one-fourth part or 25 per cent. of the tax should be remitted. In the course of his remarks he observed that if favours were accepted from Canada without any reciprocal effort being made in Great Britain, a great revulsion of Colonial feeling must follow, and act prejudicially to the mother-country. He wanted to get the thin end of the wedge in with respect to differential duties and thought that there could not be a better beginning than with tea. It was incontestable, he said, that tea was essential to the life of the people of England, but could not be produced in the United Kingdom, and any remission of taxation in favour of tea produced within the British Empire could hardly fail to be advantageous to that industry. It would lead to the development of production of tea in India and Ceylon and other parts of the Empire which were equally suitable for its cultivation, such as Australia, the Mauritius, and the East Indies. Sir MICHAEL HICKS-BEACH met this attack by saying that if Sir HOWARD VINCENT'S policy were adopted of placing Customs duties on a large number of foreign manufactured goods and turning the revenue tariff into a protectionist tariff, to be dealt with as some of the colonies which had adopted a protectionist policy were able to deal with a protectionist tariff, by giving preferential rates under certain circumstances to the mother-country, any such policy would be deeply injurious to Great Britain. Any confirmed Free Trader *must* hold this view, and it is, to it mildly, improbable that England will ever be brougl adopt Protection or "Fair Trade" except on the basi solid argument as to principles. To attempt to intro either "with a pound of tea" is absurd. We cannot but that the whole of the opposition side of the discussion adverse to the Indian tea-planters' interests. While by means accepting the statements of the Chancellor of the chequer as irrefutable, we consider that at a time like present the planter should cheerfully submit to extra taxat merely urging that it should be equitable in regard to own and rival commodities, and that the readiness he sh now to endure an unavoidable hardship should be pla to his credit and remembered at some more favoura opportunity in the future. But the planter has now m friends in England, as well as elsewhere, and some of t are not always discreet or tactful.

FRENCH IMPORT DUTIES.

Simla telegrams to the *Madras Mail* state that the follow has been issued by the Finance Department:—"By a Dec published on the 27th December, 1900, the French Gove ment continued till the 30th June, 1901, their minimum ta for Colonial produce of various countries, including Bri possessions. Intimation has been received from the Secret of State for India that the minimum tariff has been furt prolonged till the 23rd February next." Also that no spe proposals from the French Government have reached Government of India for relaxing the Indian import du in favour of France, or facilitating cooly emigration to Ma gascar, in return for continuing the present French tariff.

This is a very unsatisfactory position of affairs, for it ke the planting community in suspense. It is generally lieved that the French Government desires to seize present opportunity to secure facilities for the recruiting Indian emigrants to Madagascar. We should be glad learn that negotiations had been started for the settlement this matter, which is not one that should be left long in ab ance, more especially when the important question of Fre duties on Indian tea, coffee, pepper, etc., appears to depe at least in a measure, upon such a settlement.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S.

Importation of Teas into the United States.

What is called "the new" American Act (passed in 189 regulating the importation of tea into the United Sta is designed to check the influx of impure or unwho some tea. It enacts that a Board to consist of seven expe in tea shall be appointed to prepare and submit to Secretary of the Treasury standard samples of tea. T Secretary of the Treasury is to fix and establish unifo standards of purity, quality, and fitness for consumption all kinds of teas imported into the United States, and procure and deposit in the customs houses of the ports New York, Chicago, San Francisco, and such other ports he may determine, duplicate samples of such standards; t Secretary will procure a sufficient number of other duplic

nples of such standards to supply the importers and dealers tea at all ports desiring the same at cost. All teas or rchandise described as tea of inferior purity, quality, and ness for consumption to such standards shall be deemed hin the prohibition of the Act. The importer or consignee required to submit for examination samples of each line of ery invoice together with the sworn statement of the im-rter or consignee that such samples represent the true ality of each and every part of the invoice, and accord th the specification therein contained. In cases where collector, importer, or consignee shall protest against the ding of the examiner, the matter in dispute shall be erred for decision to a Board of three United States neral appraisers, to be designated by the Secretary of the easury, and if such Board shall, after due examination, d tea in question to be equal in purity, quality, and fitness consumption to the proper standards, a permit shall be ed by the Collector for its release and delivery to the porter; "but if," says the Act, "upon such final re-amination by such Board the tea shall be found to be erior in purity, quality, and fitness for consumption to the d standards, the importer or consignee shall give a bond, h security satisfactory to the Collector, to export said tea, merchandise described as tea, out of the limit of the ited States within a period of six months after such final examination; and if the same shall not have been exported hin the time specified, the Collector, at the expiration of t time, shall cause the same to be destroyed.

* * *

Copies of the Act have been recently circulated, officially, India. "Better late than never."

COFFEE IN DISTANT LANDS.

XXX.

French Indo-China.—In Cochin-China, according to vernment statistics, the number of coffee-plants existing the beginning of 1900 was some 162,000, which were mated to produce 27 tons of Liberian and 2½ tons of abica. In Cambodia there were some 37,000 plants at the ne period; in C. Annam about 234,000 plants; in Tonkin ut 800,000 plants. Total, 1,233,000 plants for the whole French Indo-China. This is certainly not much, but—it stimated that within five years the production will be five es as large.

Trinidad.—From the Annual Report of the Royal Botanic rdens, Trinidad, it appears that the growth of coffee at Clair is conducted under circumstances far from favour-e but has nevertheless met with considerable success. A ly large section was planted with *Coffea stenophylla*, ed from seed grown in the old establishment on trees ich were near to bearing plants of both *Coffea arabica* and *liberica*. Among these seedlings, have appeared several TINCT VARIETIES, and the first tree to fruit has produced nerries" containing beans *twice the size of the type*. cherries are dark purple when ripe, going black drying, and the bean appears to be of excellent quality, far as can be judged by sight alone, but there was a sufficient crop to make any test of its flavour, as the ries were all required for seed purposes. Other plants e also ripened fruit, but the berries vary in size. There appears to be some little evidence in favour of the view that these varieties are natural hybrids between the type and the Liberian, but the beans appear of much finer quality than those of the latter species. The greater portion of the trees on the section, are now showing their habit of growth, and a considerable variation in the size of the leaves is to be noticed throughout. *Coffea stenophylla*, is evidently a plant which will fall readily into the hands of the plant breeder, as it shows a variability of character, which opens out a possibility of the production of improved strains, which it was almost hopeless to secure from the less variable *Coffea arabica*. All the trees have done best where well shaded with the "Saman," but in places where they where open to the midday sun, the growth is fifty per cent. less. Good supplies of seed are now being harvested from our first planted trees. *Coffea stenophylla*, is evidently a plant which will be widely cultivated in the near future. Some of our trees have yielded six pounds of dry coffee per tree.

Two plants of a new kind received under the name of "Congo Coffee" have grown well, and have just set a fair crop of fruit. Their vegetable characters are somewhat similar to Liberian, but the flowers are more like the Arabian type, set in the axils of the leaves, in large rosettes, of from twenty to thirty flowers.

The strain called "Mexican Coffee" appears to be one of the most prolific croppers of the Arabican class. The trees are not large, but the produce appears to compare favourably with good Arabian brands.

The coffee introduced under the name of "Abbeokuta" has grown well, and probably is the best coffee of all to stand the sun. In habit and appearance it is somewhat similar to Liberian, but there is little to indicate it as being more than a variety of that species but still there are characters which readily distinguish it. There is considerable variety in the foliage of the different trees and the size of the beans.

The trees of "Golden drop" coffee, fruited freely during the year, and some hundreds of young plants are on hand for disposal. It appears to be a very productive kind, and its golden yellow berries give it a very distinct appearance from the ordinary Arabian of which it is a variety.

"Maragogipe" coffee continues to do well, producing beans of large size and excellent quality.

The narrow leaved or "Minerva" coffee, has again fruited freely. It probably fruits more regularly and at a younger stage than any other coffee, and is altogether a very desirable variety.

NOTES.

Cocoa in Nicaragua. The British Consul reports:—"Cocoa and sugar planting is increasing every year, and it would seem is a better paying pursuit than coffee.

Rubber in Parnahyba (Brazil). The *Nortista* calls attention to the excellent results obtained by late shipments of Maniçoba rubber at Liverpool, where very high prices were obtained, and recommends greater attention to this industry.

Amsterdam Cinchona Sales.

A catalogue shows the amount of Government bark to be offered at the Amsterdam bark auction on Thursday, July 18th, to be 78 cases and 335 packages, containing 42,033 kilogrammes.

The "Agricultural Ledger."

No. 1 of 1901 deals with *Paspalum Dilatatum:* A new Fodder Grass for India. No. 2 treats of Australian methods of Testing and Improving wheat: their applicability to India, with special reference to the prevention of rust.

Cocoa in the U. S.

American appetite for cocoa seems to be increasing, says the *American Grocer*. For eleven months of 1900, as compared with same time in 1899, the imports of crude cocoa were 6,532,802 pounds greater—nearly 20 per cent.; while coffee fell off 14 per cent.

Indian Teas.

Messrs. W. S. Cresswell & Co., of Calcutta, write in their weekly report, dated 12th instant:—Assams continue to show good sound quality, Cachars and Sylhets have improved, and in some instances, so have Dooars, although the bulk from this district still show signs of unfavourable weather. The few Darjeeling were good.

From America.

The *American Grocer* writes:—Choice selections of coffee command a large premium over standard grades. Colour and size of bean have a great influence on price, so extra fine lots of Maracaibo, Santos, Central American, Mexican, Arabian, and East India growths command a premium of 1 at 2 cents, or even 3 cents, over coffee that is at grade. Fancy coffee is in demand for blends and to mix with Java, and with people who sell coffee in the green bean.

Inflated Currency in Brazil.

Whatever ideas may be entertained as to the influence of currency upon coffee cultivation in Brazil, the shareholders of the Dumont Coffee Company are likely to hold but one opinion on the subject. It is said that the gross average price obtained by the Company for its coffee, 81,781 cwt., was equivalent to 40s. 2d. per cwt, against 29s. 4½d. the previous year, but that owing to the adverse course of the milreis the cost in London was 6s. 10d. more per cwt. than in 1899.

Venezuelan Coffee.

A report that Venezuela will suspend the export duty on coffee, amounting to about $\frac{5}{8}$c. per pound, on May 1st and will also increase import duties 12 per cent. has received considerable attention in the mild coffee trade in the United States, and there appears to be considerable speculation as to the effect this action will have upon the reciprocity treaties. Advices received from Washington say that no official confirmation has been received of a contemplated change in the tariff duties by Venezuela.

Quinine-Makers to the Italian Government.

The concession for produ quinine salts from the bark for use of the Italian Government M poly has been adjudicated to Messrs. G. Candiani & Co Milan. The Italian Press is elated at the success of national manufacturers. The competing firm is known as "German Syndicate," and this is the second occasion which these two firms have competed. The Milan fi price for production is 43f. per kilo., while the Ger firm wanted 62f.

Rubber Planting in Burmah.

The "Thirty Committee" of Planters' Association of Ceylon resolved:—"(I) That a memorial the Secretary of State for the Colonies be drawn up the subject of the experimental cultivation of Pará Rubber Burmah with a view to prevent a continuance of Governm competition with private enterprise in the matter; (II) t a copy of the memorial be forwarded to the United Plant Association, Kuala Lampor, Selangor, requesting support similar lines."

A Passing Cloud?

At the Assam Company's meet in London on the 24th ultimo, Chairman expressed regret that no profit had been m during the past year, but said he regarded the present p tion as a passing cloud. In the Company's long history sixty years there had been three occasions of trouble, each time they had come out with more vitality and pr perity than ever. Orders had been given for reducing expenditure not absolutely necessary for the proper work of the concern.

Tea in the Caucasus.

United States Consular Ag Harris reports from Eibenstock un date April 26, 1901: "The cultivation of cotton in the C casus has been attended with such success that the Russ Government has decided to introduce the culture of tea i that Province. In 1900, nine trial plantations were laid in the districts of Osurgei and Kutais. The results h been such that new plantations will be laid out in the distri of Mingrelien and Sentum. Plants and seeds have b collected for this purpose from the best tea Provinces of Chin

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New Markets.

Apropos of the cry for new mark Messrs. W. S. Cresswell & Co., Calcutta, make the following pertinent remarks:—"We glutted" is the cry of Mincing Lane, "we are starved" the cry of Calcutta. The Indian Tea Association are wa ing funds to open out new markets, a most laudable obj but what is the good of spending money on this, unless th new markets get a chance of being regularly fed, and reasonable rates. London is glutted, give Calcutta some the surplus, make Mincing Lane feel that there are ot places in the world, other than Mincing Lane, were tea bought and—paid for.

A Tea Stall.

The *Times of Ceylon* reports tha tea stall has been put up at the Ga Face Hotel, to the left of the main staircase and opposite electric lift, by Messrs. Lee, Hedges & Co. The stall, wh is in charge of a Burgher lad, consists of a teak-wood coun running the length of the two pillars opposite the lift. G

lity tea, in attractively labelled packets and boxes, are laid on the counter in a way to catch the eye of those using lift, but the counter itself hardly adds to the artistic surndings of the entrance to the lift. Facilitating the purse by visitors of Ceylon tea of good quality is a most ellent way to advertise our staple product.

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erican-Grown Teas.

When Robert Mitchell Floyd was in Montreal a few weeks ago, says *Canadian Grocer*, he promised to send one of his Canadian ends samples of tea grown in South Carolina. These ne to hand this week and they have rather surprised trade, who did not believe our continent capable of oducing such a fine article. The liquor they draw is od, but their appearance is decidedly against their ready e and folks say that, on account of this defect, they will ver take a prominent place in the tea market. At present y are treated as curiosities. There were two samples, one green and one of black.

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cutta Tea Sales.

The Calcutta Tea Sale on the 12th instant was a heavy one, 18,455 ckages being catalogued, including about a half-a-dozen rks that are usually shipped to London. There was a ner feeling all round, flavoury Assams and Darjeelings ng keenly competed for. The Sungma garden had the est invoice of Darjeelings that has been seen for a long e on this market, and secured the following satisfactory zes :—Broken Orange Pekoe, Rs. 1-6-6 ; Orange Pekoe, 1-5-0 ; Pekoe, Rs. 1-1-0 ; and Pekoe Souchong, As. 11. s with quality from any district are wanted and will be d for, but poor badly made sorts, with nothing either in f or liquor to recommend them, are likely to be even more glected than at present, owing to heavy stocks of this class ried over from last season.

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don Tea Sales.

Reuter reports in Colombo that the London market for Ceylon tea is erally firm at previous rates. Pekoe Souchongs are quoted 4¼d. (same as last week) and the average for the week is . 16,000 packages of Ceylon tea were offered for sale, 15,000 were disposed of; while of the 8,000 packages Indian tea offered, 7,000 found purchasers. The weekly cial telegram of 12th instant from Messrs. Gow, Wilson & nton to Colombo reports that buyers are operating very tiously and that the market for medium liquoring Pekoes Broken Pekoes, is steady, while that for Common Pekoes Broken Pekoes shows a fractional advance. The price air liquoring Ceylon Pekoe Souchong is 5d. (same as last k) and the average price of Ceylon tea sold on garden ount this week was 6½d. (a farthing up).

-Growing in South arolina.

Dr. Charles U. Shepard writes from Sommerville to the editor, of the *Tropicol Agriculturist* :—I note he May No. of your ever-instructive and welcome journal r apparent surprise that the article written by Mrs. Ellis the "Review of Reviews" did not allude "to the part ved by an old Ceylon planter—Mr. Henry Cottam" in local experimentation. Aside from the fact that the work that of another, it is but justice to Mr. Cottam and myself tate that his visit to Pinehurst was most agreeable, inspiriting, and advantageous to me; although the first cold Winter caused me to abandon, as unsuitable to this climate, the Ceylonese methods of cultivation of which, very naturally, Mr. Cottam was the enthusiastic exponent. And I might add that experience has demonstrated that it is better to conform to the taste of the buyer than to attempt to convert him.

The Pan American Exhibition, Buffalo.

The *Brazilian Review* remarks :—The Pan American Exhibition at Buffalo, with Canada left out and Brazil abstaining on account of hard times, is going to be a very creditable affair after all. The food exhibit will be particularly interesting and will include miniature tea and coffee plantations with allspice, cinnamon, nutmegs, ginger, kola, vanilla, and cocoa all alive and growing under the same roof. The coffee "plantation" will not, it is true, be very extensive, only 30 trees from Central America being available, but even so will be sufficient to prove to the receptie minds of Americans that coffee is really a product of the vegetable kingdom and not a mineral, as from appearances is too often concluded. We trust that a large accession of coffee drinkers will accrue in consequence and send coffee prices booming. Properly worked this exhibition ought to be a splendid opportunity for coffee "bulls."

The 'Rest' Question.

Quite a Sabbatarian twist has been given to the "rest" question for Ceylon teas. "T" writes to the *Times of Ceylon* :—There have been many suggestions made for decreasing the output of tea, all of which seem to be difficult to carry out in combination, because of the varied condition of the estates financially, difference of elevation, etc. I heard a suggestion made, the other day, which seems to be more likely to equalize risks in combined effort to arrive at the desired curtailment of produce put upon the market. It was this. "How would it do to stop Sunday plucking." He who instituted the laying aside of one day in every seven, as a day of rest, to ourselves and the fruits of the earth, said also, "In all thy ways acknowledge Him and He shall direct thy paths," and "Him who honoureth me I will honour." This would be one way of acknowledging, and honouring Him—practically—and in doing this we could look to Him, the Giver of all things, for help in our honour of need.

Seed Smuggling in B. C. Africa.

Mr. Henry Brown, an ex-Ceylon planter, was lately charged at the instance of the Postmaster-General, B. C. Africa, with illegal importation of small packets of seeds contained in newspapers. All the seeds were despatched from Matale. Mr. Brown, in his defence, stated he was unaware that Mr. Milne, of Matale, was sending him any seeds, that he was greatly astonished at finding them, and he at once burned them. He urged the fact that he had been in B. C. Africa over ten years, and could have introduced seed before the Coffee Disease Regulations came into force, but he had not done so, and was not likely to do so as he was ruined in Ceylon by the Coffee disease. Nevertheless he was fined £50. At the conclusion of the case Mr. Casson stated that he was instructed by H. M. Commissioner that this being the first case brought under the Coffee Leaf Disease Regulations there was no desire to press for a very heavy penalty. His Honour Judge Nunan in confirming the fines of £50 and £1

suggested the possibility of a reduction being made by H. M. Commissioner.

Coffee in London.

The *Produce Markets' Review* of 22nd ultimo reports:—The terminal market, after being about 9d. lower owing to cheaper offers in Santos, has recovered, and there seems at the close a much stronger feeling, while prices are about 6d. better than last week. This has been reflected in the auctions, where supplies, though abundant, have not contained much of an interesting character, and the demand has in consequence mostly been slow. Prices, however, have fallen so low that it only requires a little firmness on the part of importers to bring about an advance. The lower grades of washed coffees are as cheap if not cheaper than they were at the lowest point two years ago, although Santos is about 4s. dearer, and we hardly think that the present prices can be maintained when the pressure of recent arrivals ceases, as it must do in another months or so. Larger supplies of Colombian have come to hand, and though the quality is inferior, being mostly damaged, it has met with a ready sale for Continental account. The few lots of fine Mysore and East India have fetched full prices, but the common grades are most difficult of sale.

A Pharmacist's Tea-party.

M. Antoine, a young pharmacist's assistant, residing in the rue de Puteaux, Paris, and within easy reach of the artistic cabarets and cafés of Montmartre, met with an adventure the other night that at first seemed to him romantic. He met two bright young women during his evening stroll, and after a little conversation invited them to a cup of tea at his rooms. They were rather coy, but finally consented. During tea the conversation turned on the ailments of human nature. One of the girls, Raymonde Sandini, a pretty maid of twenty-one, complained of indigestion; her companion, Léonie Lebrun, who is some years her junior, said she was a victim to insomnia. The young pharmacist, anxious to show his skill, proceeded to get a soporific from a cupboard for the latter, and then began to seek a cure for indigestion. During the time his attention was distracted Léonie filled up his cup of tea with the soporific, which he drank during an animated conversation without noticing the addition. He awoke some hours later to find the ladies had flown, his cupboards were ransacked, and money to the amount of over 20*l.* missing.

Coffee and Tea in Queensland.

The exhibit sent down by Mr. Howard Newport from the Kamerunga State Nursery to the Townsville Show held last month is referred to in the *Townsville Daily Bulletin* as one of the leading features in the agricultural section. Among the articles included in the exhibit were samples of fibres (including those from the Sisal and Sida Retusa) with fibre plants in growth; a collection of rubbers of several varieties, many of which grow well in North Queensland; a specimen of the coffee bean which won in 1900 a gold medal at the Earl's Court Exhibition in London. There were samples exhibited showing the plants in growth, the berry, and the bean green and roasted. A sample of tea grown and prepared at the Nursery was likewise shown. The difficulties which stand in the way of growing this widely used article of commercial value in North Queensland are chiefly the expensive machinery required to manufacture it and the great labour in picking the crop. If these difficulties could be overcome, Mr. New thinks that tea could be grown largely in that part of world as the climate and soil are favourable.

Brazilian Coffee.

A S. Paulo correspondent wr to the *Brazilian Review*:—Of price received for coffee, 2$500 to 3$000 go for work expenses, including railway freight, all of which goes ou the country in addition to whatever Italian labour made of maize, beans, vegetables, etc., and that is not a little. W then remains? Only a paltry balance at the present mil prices of coffee, and a general crack must come some ti that will draw planters, commissarios and all the rest People in Rio do not seem to have the slightest notion h much commissarios' money is locked up in the interior mortgages and loans based on a coffee price much hig than the present. There is the rub! and that is why e common-sober minded commissarios advocate burning 20 cent. of the coffee crop. I am of your opinion that the sit tion is not so hopeless as it appears. Planters will not be a hurry to send down their produce at present prices, the fore consumers will have to continue to buy here and will get the chance to squeeze the life out of us, and the fall exchange which will be the result of small coffee entries, a smaller supply, will not exercise its corroding influence to full power. Consequently, prices will advance slowly as th are doing now. Have you remarked how the milreis pr of coffee has gone down just as the rate of exchange has go up, about 40 per cent.

Rubber Cultivation for Porto Rico.

Mr. O. F. Cook, of the U. Department of Agriculture, repo that in Porto Rico rubber stands th in importance of the commercial products of vegetable ori now imported into the United States, the receipts duri 1899 being valued at $32,500,000. At the present time largest amounts of rubber are obtained from the tropics Africa and South America The extent of the wild supply unknown, since large portions of these countries have yet been explored either geographically or botanically. T factor, taken in connection with the possibility that n species will be discovered which will yield rubber m profitably, the possibility of the discovery of new syntheti methods for producing rubber from turpentine or of meth for extracting a substitute from certain rapid growing shru the many failures in part or wholly that have attend attempts to build up plantations, outside of the natural rub districts, and the increased cost of using civilized help in management of tropical plantations, suggests caution in inve ing large sums of money in the rubber industry. The f that species may grow luxuriantly in a new district seems be no indication whatever that it will profitably produ rubber. Usually the opposite results follow. From 5 to years is given as the probable time required for the grow of rubber trees before they can be tapped for rubber. M Cook discusses the botanical sources of rubber and mentio experiments, generally unsatisfactory, in cultivating Pa rubber (*Hevea brasiliensis*), Ceara rubber (*Manihot glaziov* and Central American rubber (*Castillob elastica*) in regio outside of the native habitat of the species. Rubber cultu as a feature of mixed farming is thought to be the m rational method to follow in Porto Rico until the possibil of its successful production is more definitely established.

GENERAL ARTICLES.

CEYLON GREEN TEAS IN CANADA.

Messrs. P. C. Larkin & Co., of Toronto, write to the lombo papers :—

In your edition of April 25th, we notice a letter headed "Green a" and signed "Inquirer," in which he states that the returns the Chamber of Commerce show only 15,850 lbs. of Ceylon Green a to have been exported during the present year. Now either e reports of the Exports are not reliable, or else "Inquirer" has t looked closely into them. As a matter of fact in the period ted, the Exports of Ceylon *Green* Tea by Messrs. Whittall & Co. *ourselves* have been as follows :—

1901.		Per ss.		Chests.	Lbs.
January	19	Socotra	...	131	11,950
February	25	Java	...	127	11,365
March	8	Shanghai	...	201 hf.	11,512
March	23	Melacca	...	199 ,,	11,396
April	10	Bunaca	...	201 ,,	11,512
				Total ...	57,735

There was also exported by Messrs. Crosfield, Lampard & Co. to *in the same period*, as follows :—

1900.		Per ss.		Chests.	Lbs.
January	31	Agapanthus	...	154	13,916
March	11	Bucros	...	223	20,108
				Total ...	34,024

SUMMARY.

		Lbs.
ylon Green Tea Shipments by Whittall & Co.	...	57,735
Do. do.	Crosfield, Lampard & Co.	34,024
	Total ...	91,750

According to "Inquirer" there were only 15,850 lbs. of Ceylon *reen* Tea exported from Colombo from the beginning of the year to the time of his writing, whereas there were actually exported om Colombo, *to ourselves alone*, by the two firms mentioned above ,759 lbs.; so that someone is wrong in their figures.

In addition to the above we might mention that in the month of ecember last Messrs. Whittall & Co. shipped us by the ss. *mbay* 375 chests amounting to 33,420 lbs, and also by the *Canton* 212 chests amounting to 18,950 lbs.; and by the time u will have received this they will have shipped us at least fifty ousand pounds of Ceylon Green Tea in addition to the quantities entioned above. Our contract with them for shipments of Ceylon reen Tea runs out during the present month.

As to the Green Tea itself we have yet to hear an adverse re-rt. Mr. Mackenzie brought the tea forcibly to our attention in ril 1899, but no rapid progress was made with them, on account the absence of the writer in Europe for the three or four follow-g months; but in October of that year we took hold of them gorously, and we consider now that we have made very rapid ogress. Practically every wholesaler in Ontario has Ceylon Green a in stock to-day, as a result of Mr. Mackenzie's efforts; and we nk you have every reason to congratulate yourselves upon the ospects for the future of Ceylon Greens.

Possibly many growers of Ceylon Greens complain of the low ices they have secured for some of them, but there have been ny shipped here that we have seen which were no credit to ylon and they would do nothing whatever to improve the demand them; and this will often account for the very low prices they ve been bringing. On the other hand we have been receiving voices right along for the last many months paying the equivalent 8 1/2d. for them on contract. We do not say that we are prepared make another contract at such prices. We were compelled to so, at the time we made the one which expires this month, by cumstances, which were that we were not able to purchase Ceylon reens elsewhere in sufficient quantity to fill our orders.

Of course we are only one of the very many wholesale houses handling Ceylon Green tea to-day, we selling ours entirely in our "Salada" Ceylon Green Tea lead packets; and although we are by far the largest handlers of Greens, still we would think that in addition to the ninety odd thousand pounds that have been exported from Colombo to us, in the time mentioned by "Inquirer," there surely must have been fifty thousand pounds at least shipped to other dealers in Canada, besides what has been shipped to the United States.

"Inquirer" in inserting such a letter in your paper is apt to do more harm to the Planting Community than is done by their worst enemies as we presume it would lead the planters to believe that the Green Tea Industry is a frizzle, whereas it is an evergrowing trade.

THE DUMONT COFFEE COMPANY, LTD.

Directors in London:

P. R. Buchanan (*Chairman*), H. K. Rutherford, Hon'ble H. A. Lawrence, G. A. Talbot, R. Hart, S. Boulnois.

Directors In Brazil:

John Buchanan, Senhor Rodolfo Miranda.

REPORT OF THE DIRECTORS.

The Directors submit the General Balance-Sheet and Profit and Loss Account for the year ending 31st December, 1900. The gross profit for the year, exclusive of £7,097 12s. 8d. brought forward from previous year, amounted to £58,495 0s. 4d.; and the London charges were £3,339 17s. 5d.; leaving a net profit of £55,155 2s. 11d.; amount brought forward from 1899 £7,097 12s. 8d. = £62,252 15s 7d. Interest at 5½ per cent. per annum (less Income-Tax) has been paid on the Debentures, amounting to £20,981 3s. 5d.; Income-Tax on same £1,007 16s. 7d.; a payment of 2½ per cent. (less Income-Tax) was made on 19th April, 1901, on account of arrears of dividend on the Preference Shares £9,500; Income-Tax on same £500; leaving a balance of £30,263 15s. 7d.; it is proposed to place to a Reserve Account £20,000; and to carry forward a balance of £10,263 15s. 7d.

The crop, which was estimated at 75,000 cwts., amounted to 18,781 cwts. Of this quantity, 70,478 cwts. were sold in London, and the remainder in Santos and New York. The gross average price realised for the whole crop was equivalent to 40s. 2d. per cwt. landed in London, as against 29s. 4½d. per cwt. the previous year, but owing to the adverse milreis exchange the cost in London was 6s. 10d. per cwt. more than in 1899. The spot price of "good average Santos coffee" during the period of the year in which the Company's crop was sold, was 35s. 8d. per cwt., while the average price realised for the Company's pulped coffee, of which there were 22,760 cwts., was 47s. 7d., and for the Company's unpulped coffee 37s. 4d. per cwt. Owing to the increased production of coffee from Brazil during the year under review, the price of ordinary Santos coffee has now fallen to 29s. per cwt., and with the exchange at about 11½d per milreis, the margin of profit is considerably diminished, causing the position of growers to be one of anxiety at the present time. Under these circumstances, and in view of the necessity of providing working capital, the Directors, after serious consideration, do not feel justified in recommending the distribution of any further dividend, but consider it prudent to place the sum of £20,000 to Reserve Account, carrying forward £10,263 15s. 7d. With regard to the condition of the estate and of crop prospects, the manager writes, under date the 8th April :—

"*General Appearance of Property.*—This continues most satisfactory, and there is lots of wood to give another good crop in 1902. I suppose that Bourbon coffee at Agua Vermeha and Paty will give less, as it seems only to yield well every second year; but all the old coffee looks as well as ever it did, and the young fields at Guerra, Iguape, and Paty have very much improved and ought to bear well next year."

The coffee crop harvested to 31st ultimo was 38,000 cwts., as against 23,300 cwts. to same date last year, and the manager's latest estimate of the current crop is 120,000 cwts. Mr. R. Hart and Hon'ble H. A. Lawrence are the retiring Directors, and being eligible, offer themselves for re-election. The Auditors, Messrs. Jackson, Pixley, Browning, Husey & Co., also retire, and again offer themselves for re-election.

BASIC SUPERPHOSPHATE AND "HUGHES' PATENT."

Mr. John Hughes, Agricultural Analyst, writes to the *Ceylon Observer* :—

The *Overland Observer* received this week contains a criticism on the above from a planter who you state "has paid a good deal of attention to the subject of the proper manure for tea."

It would be very out of place for me to occupy your space with a view to supporting the merits of a manure introduced by myself. Basic Superphosphate must succeed on its own merits, and it will be sufficient to mention that the material has been devised upon chemical principles in order to supply Phosphate of lime in a readily available form, for application to soils naturally deficient in lime, upon which ordinary Acid Superphosphate, when used alone, cannot exert its full benefit.

The practical value of the invention has been recognised by the formation last January of a syndicate consisting of six of the largest manure firms in the United Kingdom who have taken up the patent rights and the manure is now being prepared and sold in considerable quantities. Ceylon planters, who are shrewd men of business, will properly appreciate the above facts and I now proceed to briefly reply to the points of objection raised by the planter already referred to. He states that unless Basic Superphosphate is cheaper than Basic Slag, he does not think there will be much sale for it in Ceylon. In reply I can assure him that this is no reason whatever, because the new manure is of superior solubility in regard to its composition and therefore should command a higher price per ton.

I quite agree with the planter that tea only requires Phosphoric Acid in comparatively small proportion, but it requires to get it in a form readily available as plant food, and not in the condition of a hard fused mass like slag, however finely the latter may be ground.

"Planter" rather contradicts himself in first stating that tea only requires Phosphoric Acid as an essential ingredient to a moderate extent, and then going on to state that Basic Slag which contains fully 38 to 40 per cent. of Phosphate of lime is more effective as a material for burying with prunings than even burnt and slaked lime which practially contains no Phosphate of lime *at all.*

The cost of Basic Superphosphate in England is about £2 10 per ton for the usual quality which contains 26 per cent. of Phosphate of lime soluble in a weak solution of Citric Acid (1 in 1,000 parts of water). For foreign shipment it has the great advantage over Acid Superphosphate that being Alkaline in character there is no danger of the bags being rotted during the voyage and importers will fully appreciate what immunity from damage in that respect means.

"Planter" evidently recognises the value of the invention when he concludes his letter by remarking that concentrated Superphosphate of lime could be mixed with finely-slaked coral lime, and might be found a cheaper form for restoring the balance to crops which are annuals, but he adds, for tea the problem is more complicated.

My patent consists in the conversion of Acid Superphosphate into alkaline or Basic Superphosphate by the use of lime, and I am not restricted to any particular strength or quality of the respective ingredients; so that the most concentrated Superphosphate can be treated with lime prior to shipment, and thus all the annoyance of damage, through the rotting of the bags during transit, will be avoided and the manure will arrive in a fine dry, powdery condition admirably adapted for mixing with the other ingredients necessary to form a suitable complete compound fertiliser for tea or coffee.

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Coffee "roasting."—Projects for "bolstering up coffee" more crazy day by day. The latest that met with warm sup from a meeting of planters at Limeira is the maddest of all, proposes that the 20% to be burned shall be paid for in S Bonds!

We are glad to observe that public opinion is slowly but su working round to take the right view of the monstrous prop for burning coffee. Lately the papers have been full of prot and now Dr. Vieira Souto, professor of Political Economy at Polytechnical School, has added his testimony also.

Exchange.—*1st June*, 1901.—Ninety days' Bank rate on Lon opened on Monday, 27th ultimo, at 12d. and closed this even shaky at 11 15/16d.

The market, for the moment, is entirely in the hands of spec tors and out of control of the banks. Seeing their opportunit powerful group commenced (hearings) immediately after the m age had been published, or rather a day or two before its delive and a leading bank, that up to then had been pushing rates, obliged to cover heavily in a falling market and brought about debacle that has carried rates back to 11 1/2d. Heavy liquidati have no doubt been effected, and, whatever the immediate cou of exchange may be, it cannot be questioned that the reaction is the whole wholesome and useful if not carried too far, becaus clears the course of a mass of speculative sales that were accu lating to a dangerous degree. At the same time such oscillatio however profitable to speculators, are none the less pernicious real business, and the market has the right to expect that Banco da Republica, at any rate, should discountenance them every way in its power. Unfortunately, it was not so, and to imprudent and, we may say, reckless dealing of that bank options is to be attributed most of the trouble.

The refusal of a large jobber to deliver at the last moment th the liquidation into confusion and, it is said, obliged the Ban the Republic to cover anyhow and anywhere, thus driving de rates to 11 7/8d. Indeed, under the circumstances, it is satisfact to see rates so comparatively firm! The feelng is unquestiona for a renewed rise; and rightly so, because whether bills h been withheld or the whole enormous surplus after payment of ports has been remitted, the effect on exchange must be simi In the former case bills must come out of hiding before long swell the supply and help drive rates up again, or else remittan have been on a scale so gigantic as to leave little left to remit. is certain that even during these, the two dullest months of year, the value of exports exceeds that of imports, whilst spec tive selling on account of the new crop has hardly yet commen However it may be looked at, therefore, the present fall appear a temporary set-back, likely to be more than recuperated when supply of bills will again largely exceed the demand in July August. It must be recollected, too, that not only will the sup of bills be exceptionally large but that in consequence of the he scale of remittances lately, the demand is likely to be very m smaller than usual. In fact, we seem about to enter on the co season with the promise of a record crop that will give in case £9,000,000; with rubber prices steadily improving abr money scarcer and tighter than ever, and a trade and gen demand for bills smaller than it has perhaps ever been before.

What the immediate course of exchange will be must dep greatly, if not wholly, on the caprice of speculation, and, as th are said to yet be very heavy options outstanding for this mo it is possible that after a partial reaction the manœuvres that w so successful this month may be repeated and exchange be knoc down once more. At the same time the chances of success do seem so favourable as in May for several reasons. In the place, the renewal of specie payments for the service of the for debt is almost certain to be utilized by the other side; and, m over, there is every prospect of coffee shippers taking advantag low rates to draw for payment of the coming crop. Altogether think the market has seen the worst of the reaction, and that the will be steady, if it do not improve, during the current month perhaps, even July, but must go irresistibly upwards about Aug

During the past week the value of coffee shipments (embarq was considerably under that of the previous week being £28 as against £325,000, but still much larger than last year va

2,000. Declared sales were also smaller 105,000 as against ,000 the previous week, so that comparatively smaller shipments y be looked for next week also.

Rubber shipments were also much smaller, aggregating about ,000 for both Pará and Manáos. Stocks, however, have in-ased to 254 tons. The nut season is also at an end, but cocoa ooking well and likely to give at least 135 tons.

Coffee.—Stocks are now reduced to only 770,346 bags and there ms a good prospect of commencing the new season, after all, h a crop no larger than last year's.

Declared sales to 31 May were as follows:

	1901.	1900.
From 1 July	8,128,000	7,692,000
„ 1 January	3,442,000	2,288,000
„ 1 May	529,000	304,000

During the past week the market at Rio was dull with very little siness doing and that chiefly for account of roasters. We quote 300 to 6$900 for No. 7 New York type and perhaps 7$000 for good ory tppes, and c. f. & com. 28/6 to 29s; the market closed steady. At Santos, too, the market ruled quiet and weaker owing to gher exchange and larger entries, which affected consuming rkets. Higher milreis prices induced planters to send more of ir old holdings down and caused the reaction We quote 4$500 4$800 for superior, primes 200 to 500 réis above, goods 300 réis ow, regular 600 réis below. No special demand is noticeable, but e qualities are no more in such request as last week, whilst quiries for regular and low-regular for Europe were better. aberry is neglected again and orders from Europe are scarce. e quote:

29/- to 30/- for good,
30/- to 31/- for superior.

The States buy erratically and the two big roasting concerns are ctically the only buyers at reserved prices; we hear of a block average n. 6 sold at 6 5/16 c. and average n. 5 at 6 1/2 c.

Receipts consist with exception of a few hundred bags, exclusively old crop coffees; the little new crop having been all picked too ly and contains 50% or more of unripe beans. Of the old crop fees a good part are lower grades, but mostly of good quality l suitable for roasters. Fine and finest qualities are getting rce.

The picking of the next crop will be pretty general by the middle next month.

Reduction of Cost and Production.—At a meeting of planters in important district of Banharão, (S. Paulo) the following sensible olutions were adopted: (1) to reduce the rates paid to labourers care and treatment of coffee trees to 70$ (at 12d. exchange ut £ 3·7d.) per thousand; (2) to reduce labourers' wages to 00s. (1s. 8d.) *per diem* with keep and to 2$ (2s.) without; (3) to ect the proposal to burn 20 % of the coffee; (4) to suspend for r years plantation of new trees; (5) to store low grade coffees l only sell at 5$ per arroba.

An Agricultural Congress is being held at Juiz de Fóra and all over the country great excitement in planting circles is noted. Plants and projects for aiding planters are innumerable and will doubtless culminate this year in action of some kind. The state of many of the planters is absolutely desperate and so far as they are concerned it would matter little if 50 % of their coffee were burned instead of 20 % as proposed so long as they could save the rest. At present many of them run the risk of losing it all unless price should improve, of which there seems but little likelihood. We have heard of some planters who in despair have chucked the whole business and are refusing to even pick their coffee. When people get desperate they become dangerous and capable of adopting any hairbrained scheme that seems to offer relief. So if the burning scheme or something similar were to go through, it would be scarcely surprising. What is really extraordinary is that there has been no organized movement to curtail production voluntarily by refraining from picking 20 or 30% of the coffee. In that way the waste of labour entailed in burning at the ports and all the cost of transport and handling would be avoided, whilst the trees would benefit. We do not say it would be a good plan, but it would be certainly less pernicious and wasteful than burning.

COCOA FOR B. C. A. (THEOBROMA CACAO).

The following is from the *Central African Times* of 1st ultimo:—

The subject of Cocoa cultivation in British Central Africa has been under consideration by me for some time, and since writing the preceding article (No. 2) on the economic product, I have visited Mlanje to see in what condition the Cocoa tree was. At the time of my visit (March) four and a half months of the wet season had passed, and the tree had been able to make vigorous growth during that time. It is evident, however, that, as surmised by me in my previous article, the dry season is too trying for it. The points of last year's growths were withered, evidently the result of drought.

Eucalyptus trees growing close by exert beneficial influences, but screen it from the morning sun, and a grass wind-break has been erected to protect it from the S.-E. winds. It is otherwise exposed to the strong midday and afternoon sun, at which time during the dry season the absence of moisture in the atmosphere is greatest.

As this tree has been at Mlanje for over eight years, and not yet fruited, it may be considered a failure but as before stated, the conditions under which it has been grown were not conducive to success. The fact that this tree has existed during that period proves that it will grow; and if suitable conditions, shade, etc., are brought about, this product may with safety be taken up by the planting community.

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

CROSSE & BLACKWELL'S, LTD.

By Special Warrant Purveyors to The Queen AND Empress of India.

CELEBRATED OILMAN'S STORES.

11-0-98 –t.f o.]

It has to be considered, however, how to introduce seed satisfactorily, and how to make the conditions better for the successful cultivation of Cocoa. The introduction of Cocoa seeds to B. C. A. in quantity has hitherto been attended with failure.

The crucial point has been fermentation and consequent germination, and when the seed has been left in the pod and sealed up in tins or loosely packed in cases, this has been the cause of failure.

H. M. Commissioner and Consul General has approved of a requisition by this Department for a consignment of 2,000 seeds to be sent out from England under special conditions regarding packing and shipment. These conditions may be improved upon by the Kew authorities, but are as follows: the seed is to be placed in Wardian cases, the bottom of the case to be covered with 3 inches of leaf mould or cocoanut fibre, over which will be placed some damp sphagnum (moss), amongst this the seed will be closely packed together. It is estimated that a Wardian case having inside measurement of 3½ feet long by 2 feet wide will hold 2,000 seeds.

It is anticipated that in this manner the seed will germinate and grow a little before Chinde is reached, and on arrival there every effort will be made to have them brought up the river as expeditiously as possible. I have made these remarks on the importation of seed for the benefit of those who meditate immediately entering on Cocoa cultivation. The cubical measurement of such cases is approximately 15 feet, so that beyond the cost of the seed itself importers may estimate what the cost is likely to be.

From the Meteorological Statistics in this office, I am of opinion that the most suitable Districts for Cocoa are, first, South and South-East Mlanje, second, the Southern and Eastern slopes of Zomba, and third, the lower levels from Chiradzulo along the Cholo hills facing East and North-East to the Inchila plain. These from their temperatures and situations, should be found suitable for this product, and where soil is good and deep, success may be fully expected.

Estates at Mlanje have heavily timbered land and good soil, and by judicious thinning of the forest so as to leave a fair shade, good and successful Cocoa gardens might be opened up.

The South and Eastern slopes of Zomba at an elevation of 2,000 feet, will, it is believed grow good Cocoa, but this District does not possess the natural conditions such as rainfall and forest land that Mlanje does; some 100 acre plots might however be obtained at 2,000 feet elevation with fair forest land. The temperature is satisfactory, and with Bananas between the lines of Cocoa a sufficient shade would be afforded the young plants for some years until Conifers have had time to come on and take their place.

Similarly, this would have to be followed out at Chiradzulo, and on the lower slopes of the Cholo hills. I do not mean to convey, however, that Cocoa should be planted on steep slopes, rather should it be on level patches, where protection from wind can be much better provided against. I cannot recommend Blantyre, Namadzi or the higher elevations of the Cholo hills for Cocoa culture, as from the results of three years mean temperatures at Blantyre, it is found that June has a mean minimum temperature of 49°. This indicates that Blantyre is too cold for Cocoa to do well, as it is evident that at times the temperature may go as low as 43°.

The figures require some explanation and it is desirable that this should be given here, since it applies not only to Blantyre but other similar localities. The statistics referred to were furnished by Mr. Beaton, Acting Manager of the African Lakes Corporation. For the years under consideraton, namely 1898-99-00, the instruments were exposed at the garden house near the Mudi stream.

As Mr. Ferguson observes, these temperatures cannot be accepted as a criterion of the whole of the Blantyre district, but in this discussion are all the more valuable, as they are applicable to similar localities in Blantyre, Cholo, and Namadzi. The air is naturally damp and still, and in such places it is not advisable to risk growing a product which is purely a native of the tropics.

It is unnecessary for me to state that Coffee has suffered from frost in the Namadzi district, and that it would be unwise to attempt to grow Cocoa on a large scale involving considerable expenditure in that District.

To go further a field, Fort Johnston district is worthy of consideration for Cocoa cultivation, and that when the experimental consignment of seed arrives, an effort will be made to establish some plants there as well as at other places throughout the Protectorate.

I have briefly stated that Bananas may be grown as a pr nary shade to the young Cocoa plants, and that Conifers shoul mately take their place. As a shade for young Cocoa, Ba will be found to be excellent so long as they are kept within b and not allowed to produce too dense a shade or absorb too moisture from the ground, and therefore instead of being h to the young Cocoa, take all the nourishment, giving weak gling Cocoa plants as the result. If three or four stems of Ba are allowed to grow, these will be found sufficient. My reas suggesting Conifers being grown as shade is that they evaporation more than do deciduos trees, which invariably most of their foliage during the dry season, at the time most de that they should retain it. Conifers on the other hand r their density, and maintain the necessary humidity at a when it is essential to Cocoa growing.

At low elevations Cocoa is planted at twelve to fourteen but at altitudes of 1,800 to 2,800 feet above sea-level ten to tw feet will be found sufficiently wide apart, while this admits of of Bananas and also whatever variety Conifers are grown.

Cup ressus Decurrens and C. Macrocarpa show by their ro and quick growth that they would furnish all that is necessa maintain moisture in the surrounding atmosphere. They have this recommendation that they would not harbour in that might be injurious to Cocoa.

(Signed) J. MACCLOUNI
Head of Scientific Depart

MANUFACTURING QUININE IN BANDOENG

Mr. F. L. Seely, Secretary and Treasurer of the Paris Med Company, has written an account of a visit to Java, during w he inspected the Bandoeng quinine factory. Mr. Seely was gr surprised at the forward state of civilisation in Java. On tr ling to a plantation 23 miles distant from the railway and miles from the nearest neighbour, he was met by the plan conveyance, a "fine upholstered carriage, manufactured in Chic and the planter's home was a "picture of comfort and beauty, b furnished with the finest tapestry furniture, the table well l with cut-glass, the planter himself a college graduate, etc." A 25,000 acres of Java is under cinchona.

Bandoeng is a town of about 1,000 Dutch and 60,000 nat about eight hours' ride from Batavia. From this place Mr. S made expeditions to the plantations by pony-carts and on p back, or in mountain chairs. He saw the cinchona growing i its stages. The seed is planted in nurseries (not glass-cove and have to be covered with leaf-shelters to keep off the ray the sun. Both ledger-seed and succirubra-seed are planted, the ledger is grafted on the succirubra for the reason that ledger does not grow well in the soil, while the red-bark prospers. The little succirubra-tree is allowed to grow abo feet high and the ledger not quite so high. The tender shoo the ledger are cut up into pieces about 6 inches long, each ha two buds, and after being trimmed to a wedge-shape, are inse in a little slip made in the side of the succirubra. This is cov up with wax and bound with a piece of banana-leaf, whereu after a short time, the wound heals and the little ledger-shoot co out in leaf; then the tall top of the little succirubra-tree is cu and the tree is transplanted. It is allowed to grow until it years old, when it is sawed off at the roots, divested of its b and a new tree planted near by. Native women then beat bark off the tree, which is then partly dried in the sun before b put into the ovens. Pharmaceutical bark is usually dried enti in the sun. After drying, the bark is rough-ground and pa in bags of 100 kilos. each; 90 per cent. of the Java bark is expo and the remaining 10 per cent. is manufactured into quinin Bandoeng; this 10 per cent. means 1,000,000 oz. of quinine year, and will soon be raised to 20 per cent., as they are now doub the capacity of the factory. As a prelude to these experie Mr. Seely tells in a brief and sketchy manner the history of introduction of cinchona into Java. Hasskarl's labours were quite so fruitless as is made to appear. On the other hand, number of trees resulting from the seeds obtained from Mr. Le was as many as 40,000 (Mr. Seely says something over 20,000 1874. A good many of these, says Mr. Seely, are still left stand but they are now simply used for their seed. After descri

w the Ledger shoots are grafted on to the succirubra stem, and plaining that the bark is harvested by sawing down the young ee and beating off the bark, Mr. Seely deals with the quinine ctory.

Mr. Seely visited the factory, and his photographs include some ken in it. Dr. A. R. Von Linge is the manager and head chemist the factory. Mr. Seely saw them producing about 4,000 oz. of inine a day, which he could not distinguish when placed among e best-known European brands When the bark reaches the ctory every parcel is assayed, and natives mix the different lots average them. Tons of bark are ground up every day. It is hausted by the petroleum method. The crystallisation is done a process invented by Dr. Von Linge, which enables them to gulate the conditions of the drying-room. The crystallising-ilding is the most perfect specimen of absolute cleanliness r. Seely has ever seen. "Immense rows of big porcelain pans," ites Mr. Seely "hundreds in number," are to be seen. In these ystallisation goes on. The liquor is afterwards "dumped into cen-fugal extractors, which throw the water out and leave the quinine ystals nearly dry." The last crystallising solution is returned pipes to the factory, acid is added to it, and it becomes the first shing solution for another batch. One of the most delicate erations is to regulate conditions so that the quinine contains e right amount of water. The temperature and moisture of the are controlled for this purpose in the Bandoeng factory. The ystallising building is used only for purifying and crystallising e quinine. It is exceptionally clean. The floors are covered with rcelain-finished tiles, which are kept as clean as dishes, the allest dripping of solution being scarcely deposited before it is ped up by a native. The machinery and apparatus are kept in fect order, and even the porcelain-lined crystallising pans are shed with soap and water. Every time the solutions are changed, th is stretched over each row of pans to keep out the dust and nt. After being dried, and packed in tins, the quinine is sent Batavia, where it is sold at public auction.

Before the quinine goes to Batavia it is analysed by a Govern-nt official, and at Batavia is sold by auction. The factory has interest in the sales, as it does no commercial business except h the planter. A sum of $2 per kilo is paid for manufacturing-ts by the planter. The auctions in Batavia are carried on by house of Messrs. Tiedeman & Van Kerchem.

THE JAPAN TEA TRUST.

The report that emanated from New York about a week ago to effect that a trust was forming to control the Japan tea market this continent caused quite a ripple of excitement, both in ntreal and Toronto, but, generally speaking, the matter seems e treated lightly and as if there were nothing in the story.

On the whole, probably it would be a good thing if such a trust re formed, for, in spite of the quality of Japan teas, it has been ught, even by their fondest admirers, that the bidding that es place for these teas each year at Kobe and Yokohama has entimes led prices beyond a profitable trading point if not ond the legitimate value of the teas. The Japan tea market sents the unusual spectacle for a tea market of being cleaned up he close of each season. Production has not gone beyond con-mption. Consequently, there is a spirited competition between ers to obtain the available supplies. Oftentimes this competi-n is unhealthy.

f a trust were formed to do the buying (and why should a trust be economical for buying as well as for selling purposes?) teas uld be bought at a more legitimate value, compatible with the pply and demand. Prices would not then be regulated by a rited competition or speculation.

Even for such an excellent article as Japan tea the price can be run high to induce consumption. Recognition must be given to other s that sell at lower figures, and perchance the Japanese would well to lower their prices to a competition point in order to hold r trade rather than allow it to drift away on account of the raordinary high values set on their article. As yet they have lost any of their hold on this market, but the most ardent ad-ers of Japan tea in Canada to-day would welcome a buying trust, uch an organisation might lead to lower priced teas. Whether organisation could do the buying for the whole country is an n and much disputed question.—*Canadian Grocer.*

SOUTHERN INDIA TEA ESTATES.

The sixth annual ordinary general meeting of the Southern India Tea Estates Company, Limited, was held at the offices of the Company, 16, Philpot Lane, London, E. C., on June 27th, Mr. W. Forbes Laurie presiding.

The Secretary (Mr. Alexander J. Rouse) having read the notice convening the meeting, together with the report of the auditors, the Chairman said: Gentlemen,—With your permission I think we may consider the report as read. Well, it is no use, I am afraid, trying to hide the fact, for it is apparent to all that the tea industry is undergoing a crisis, and the Southern India Tea Estates Company has not passed through the difficulty unscathed. In the last few years tea growing has had much against it, which commenced with the fixing of the rupee at 1s. 4d. Unfortunately, when the rupee stood at a little more than 1s. 2d. the difference between that and 1s 4d. showed such a profit of itself that tea cultivation was extended in some directions most recklessly and widely, and this land now coming into bearing has produced an over-supply. Yet, after all, the over-supply is something less than 5 per cent. of the total production—a fact, which really seems to point to other influences working, besides that of the constantly-condemned over-production. On the top of this the duty was increased to what it is now, thereby doubling the price of tea to the consumer, and for the first time for many years there have been no signs of increased consumption in Great Britain—a country which is the largest consumer of tea in the world. Thus, all things considered, it is hardly possible for the industry to be highly prosperous under these conditions. There is also another factor thought lightly of by many: industries of all kinds are coming under combinations, presumably to insure a living wage to the workers. Warehousemen, brokers, shipowners, and even buyers have associations for this purpose, so whatever our sufferings may be, they do not participate in them. I highly commend any one who provides that in whatever he undertakes shall return a living wage to his employees, but I fail to see as these methods extend, how we can satisfactorily fight the war of existence without adopting similar weapons. The question that arises amongst most shareholders will be, Why are we in such a position as to be unable to pay a dividend? Last year we paid 6 per cent. and wisely passed £1,000 to reserve, much, I believe, against the wishes of several persons in the room at the last meeting. Well. the price of tea has fallen, and I hold a circular here which shows that Travancore teas have fallen 1·45d. on an average of all teas for the year. Our teas, however, have only fallen 1·17d., showing that we are still better than the average of the district, and that this fall is general. The fall undoubtedly has been large throughout India and Ceylon. The chief cause, however, is that the tea our places naturally produce has not been in demand so much as usual. There has also been a loss on coast advances, which has come most inopportunely, but, as regards this, I am sure that our losses have been very small from this cause compared to other companies similarly situated. I may add, as it does not appear in our sheet, that the cost of our tea has been just a fraction under 24 cents f.o.b., which is considered cheap production. As an instance of the great effect this fall in price had on our finances, I may tell you that had this year's crop sold at the same price as we obtained in 1899-1900, *viz.*, 5·92d. instead of 4·75d., we should have had no less than £1,837 more. With so small an over-supply as under 5 per cent, I consider that this condition of affairs cannot last long. By finer plucking, which is now being tried, there must in a short time be some improvement, and I may say that recent sales have shown an improvement. The Chairman, in conclusion, proposed the adoption of the report and accounts.

There was no reason other than he had already stated for the fall in price of their tea, which brought higher results than other companies owning estates in the Travancore district. Of course, as in other commodities there was an ebb and flow in the prices of certain classes of teas, and at present the Company's produce was not in fashion, notwithstanding that a better quality was being marketed, owing to the finer plucking. He was interested in another estate, and there had been a fall of 2d. per lb. quite lately, as the class of tea was beginning to suffer. Capital expenditure would now practically cease, and current expenditure bear everything. In the estimates for the coming year the crop of 413,500 lbs. was estimated to cost 24·64 cents, including capital

expenditure, and as the manager was very careful with his figures, it was quite probable the cost would not really exceed 24 cents. The condition of the estates he believed to be excellent; whatever economies had been effected had not been at the cost of the estates; they had not suffered in any way. Last year a trading account was rendered with the directors' report and balance-sheet, but it was not usual to do this. He saw no reason, however, why the cost of production should not be given in future. He did not agree that the quality of the tea from Glenmary had fallen off. As to coast advances, the bad advances were chiefly due to the year under review. There was no material sum to the debit of that account at the last meeting

Mr. J. F. Whyte seconded the motion for the adoption of the report and accounts, which was carried unanimously.

The Chairman proposed the re-election of Mr. A. Valentine Holland as a director of the Company.

Mr. W. W. Lord seconded the proposition, which was agreed to.

The re-election of Mr. J. D. Stewart Bogle as auditor was moved by Mr. B. F. White, seconded by Mr. H. H. Austen, and carried.

Mr. J. F. Whyte proposed that a hearty vote of thanks be given to the Chairman for his conduct in the chair.

Mr. Lord seconded the vote, which was carried.

The Chairman, in thanking shareholders for the vote, said he believed there was a brighter outlook than was generally assumed Doubtless prices would readjust themselves in time. The only danger he saw was that probably a cycle of good trading would occur in which great success would be achieved, and that might be made the excuse for more capital being put into tea extension.

The proceedings then terminated.

THE TEA CAMPAIGN IN AMERICA.

Mr. P. C. Larkin wrote on the 12th ultimo from Toronto to the *Home and Colonial Mail* :—

I have been reading with a great deal of interest the many suggestions, made by the friends of the Tea Trade, to bring that industry into a better condition than it has been of late

I read with special interest the letter signed "Ross W. Hayter," and agree with everything Mr. Hayter says. In the first place I believe that the only cure all India and Ceylon can find is in the conversion of the hundred million pounds of Japan and China tea, used in the United States annually, to the consumption of the products of India and Ceylon. That this is feasible is beyond question, and is best evidenced by the progress that has been made in the United States during the past six or seven years, for I consider that wonderful progress has been made for the amount of money that has been expended. Surely the newspaper writers, who occasionally give expression to their unsatisfied expectations, can know little of business, and less of this continent, when they expect such wonderful results (as they apparently do) from the small efforts, in the shape of expenditure, that have been put forth by these two tea-growing countries. No sum less than Mr. Hayter mentioned, *viz*, forty or fifty thousand pounds sterling per year, and continued for at least five years, can have the effect of converting this continent to the use of India and Ceylon tea. And to put this into the hands of an inexperienced man, and allow him to purchase his experience on arrival here, would be a great waste. The money should be given to a man with a wide experience.

To give you an idea of what amounts are expended by single firms, who exploit much more insignificant articles than tea, we might quote what is a well-known fact among advertisers; and it is, that the Royal Baking Powder Company spends in the United States and Canada five hundred thousand dollars, or one hundred thousand pounds sterling, annually in exploiting "Royal Baking Powder"; and they have done it consistently for years, and have found it most profitable.

In our small way, in Canada, we spend, and have for many years past, an average of twenty-five thousand dollars per year on newspaper advertising alone. In addition to this we expend large sums on sampling, show-cards, street-car advertisements, demonstrations, etc., etc. Now, if we, in our small way, find this profitable (and the best evidence of the fact that we have found it so is that we are at it to-day, after nine years) how very much more profitable could the planters of India find it if they took the matter up in a whole-souled manner.

Mr. Hayter suggests the collecting of one-sixteenth of a penny per pound on all exports from India, which would amount, roughly speaking, to about forty thousand pounds sterling per annum. This sum would be excellent, and, if continued for five years, would have a wonderful effect. But I venture to say that if, instead of one-sixteenth, one-eighth of a penny was collected, the much desired state of affairs would be brought around much more quickly; for not only would the London market be relieved of an enormous quantity of tea in a few years, but I believe that the advertising would greatly increase the consumption of tea per head per annum in the United States. The vast majority of teas sold in the United States to-day are poor teas, and to an amateur it seems the easiest thing in the world to convert the consumers of this poor stuff to become consumers of good teas; but Mr. Amateur has only to try it to be convinced that it is by no means an easy thing. Getting at the people of the United States is a most expensive process, and it has to be kept up for a number of years before the desired object can be achieved.

In conclusion, I can only say that I agree thoroughly with Mr. Hayter that India has had wonderful results for the amount expended. This continent consumes now close upon twenty million pounds of India and Ceylon black and green tea per annum, as a result of a few years' work and only a moderate amount of money expended. If it is desired to increase this five-fold, increase the amount five-fold. There is no "royal road" to it. There is only the every-day road travelled by many who, when advertising was first suggested to them, said they could not afford it; but they soon found that they could still less afford to do without it, and that advertising made them rich, always providing they had a good article to offer the public.

I might mention that in Canada the Ceylon green tea is meeting with the most wonderful success, and in a very few years it will have driven out ten million pounds of Japan tea entirely. Now I have seen some of the most beautiful green teas, the product of Travancore; and therefore the India planters can supply both black and green tea to the United States.

The deplorable condition of the India tea market I think calls for fresh, vigorous efforts to be made to exploit the great market of the United States.

The India planters must go whole-souledly into this matter, or else the results will be as they have been before; that is, "small expenditure, and only comparatively good returns."

If you were to ask a man who has successfully exploited any article in the markets of the world, what he would do if he owned the entire tea product of India, I feel sure his answer would be—"I would exploit the United States market by advertising."

PEPPER.

The *London Commercial Record* says :—

There were a good many people who awaited the telegraphic advice of shipments of Pepper from the Straits during the first half of June with exceptional anxiety, as in their opinion the extent of these shipments would determine the future of the Pepper, especially the Black Pepper market. It was believed that a further decline in the supplies would have a most stimulating effect on prices, whereas on the other hand an increase would intensify the depressed state of the market. The figures showed a small supply to London and the Continent, but a large one to America, and consequently at one moment people were hopeful that these figures would act beneficially on our steadily declining prices. But in this they were sadly disappointed, for although small shipments to the United Kingdom and a scanty supply to the Continental port sound well, and insignificant stocks in Europe are a formidable argument in favour of a rise, yet the large quantities thrown into America had a most depressing effect, for they told an unpleasant tale. They unmistakably confirmed that America is drawing her requirements from the Straits direct to the detriment of London dealers who used to supply her. It means the loss of another and a very important buyer, and no wonder, therefore, if these large shipments of black Singapore begin to cause serious anxiety among our dealers. This is one of the reasons why, in spite of an excellent statistical position, prices continue to follow a steady decline.

Another, and also a very formidable factor in the present position of black Singapore, is the keen competition of black Tellicherry Pepper. We took an opportunity two or three years ago of drawing the attention of our readers to the renewed interest evinced in the East Indian description, and ventured to assert that shortly it would become an article of speculation in opposition to black Singapore, and might ultimately even take the place of the latter. We know that our remarks at the time created general dissent, but time has proved how correct our prognostication has been. The shipment of black Tellicherry is no longer practically confined to Havre, but the Italians have purchased largely, and, above all, London speculators have bought to a considerable extent; even Liverpool has taken a bigger quantity than ever, and yet the time is not very distant when operators there would not listen to any proposals of East Indian Pepper. They were too conservative, but *tempora mutantur*, they have taken a few hundred tons during the present season, and in all probability will take even more next year. Liverpool operators, like all others, have been forced to recognise: firstly, the quickly diminishing supplies from the Straits and the increasing consumption of black Tellicherry; secondly, the superior and uniform quality of the latter; and thirdly, the low price of the Indian sort, which has been particularly apparent this season. The difference in price would be even more pronounced if the demand for home consumption of Tellicherry were less important, but as a rule the shipments to Indian ports exceed those to European destinations. We hope to furnish our readers shortly with some interesting figures and facts concerning the home consumption and position in India of black Tellicherry, which in the present state of affairs might be of interest to our readers.

SHADE IN COFFEE CULTURE.

One of the vexed questions of tropical agriculture is that of shading coffee trees. By some persons the practice is condemned, while others claim that it is necessary for the healthy growth and productiveness of the tree.

The U.S. Department of Agriculture has in press and will soon issue Bulletin No. 25, Division of Botany, entitled "Shade in Coffee Culture," which combines the results of personal observation and of a careful study of the literature relating to this much controverted question by Mr. O. F. Cook.

The conclusion reached is that there is no basis in reason or observed fact for the belief that shade is a general necessity for coffee, even when growing at low elevations. On the contrary it is extremely probable that the beneficial effects resulting from shade are quite apart from the shadow cast upon the coffee tree.

As a means of protecting the coffee tree from drought, erosion and winds, shading is beneficial and the planting of shade trees for these purposes is determined by local conditions of climate and soil.

The planting of shade trees in regions not affected by injurious climatic extremes is justified from the cultural standpoint only by the increased fertility imparted to the soil by means of the nitrogen-fixing bacteria of the root tubercles of leguminous species.

A list of coffee shade trees is given in the bulletin, which is also illustrated.—*American Gardening.*

THE MAY COFFEE MOVEMENT IN THE U. S.

The May deliveries of coffee in Europe and the United States, while lighter than during April, are to June 1, above the monthly average for the trade year. The *American Grocer* says:—The speculative movement in May was light, the total sales on the Coffee Exchange being only 264,000 bags, against 646,750 bags in April. The market throughout the month was very steady, and on spot coffee fluctuated within ¼ cent. per pound.

It will be noted from the statement below that the world's visible supply is 1,374,562 bags greater than August 1, 1900, but it has decreased 681,821 bags since December 1, 1900, when it was at the highest point on record. Another item of importance is that receipts in Rio and Santos are ahead of any former record.

The following statement shows the May movement and general position of the article:

Stocks, May 1, 1901—	Bags.	Bags.
United States	1,195,858	
Europe	3,876,254—	5,072,112
Receipts during May—		
United States	651,518	
Europe	757,813—	1,409,331
Total supply, June 1 ...		6,481,443
Less stocks, June 1, 1901—		
United States	1,334,266	
Europe	3,966,055—	5,300,321
Deliveries, May—		
United States	513,110	
Europe	668,012 —	1,181,122
Deliveries, May, 1900 –		
United States	364,459	
Europe	641,605—	1,006,064
Decrease as compared with May, 1900 ...		175,058
Deliveries (United States and Europe), May ...		1,181,122
Do. do. do. April ...		1,298,992
Do. do. do. March ...		1,280,733
Do. do. do. February ...		1,067,607
Do. do. do. January ...		1,328,216
Do. do. do. December ...		1,180,838
Do. do. do. November ...		1,281,638
Do. do. do. October ...		1,340,059
Do. do. do. September ...		981,198
Do. do. do. August ...		917,608
Do. do. do. July ...		1,219,058
Total for eleven months, 1900-1901		13,077,069
Do. do. 1899-1900		13,922,144
Decrease as compared with 1900 1901 ...		845,075

The May deliveries in the United States consisted of 396,327 bags of Brazil; 116,783 bags of all other sorts.

The visible supply of the world on June 1, 1901, was 7,192,321 bags, against 7,359,112 bags on May 1 (a decrease of 166,791 bags), and 6,055,816 bags on June 1, 1900.

The visible supply on August 1, 1900, was 5,817,759 bags, so that in eleven months it has increased 1,374,562 bags.

The total receipts at Rio and Santos for the first eleven months of the trade year 10,361,000 bags against 8,631,000 bags for the same time the previous year; and 8,229,000 bags in 1898-99.

Trading in options on the New York Coffee Exchange in May reached a total of 264,000 bags. The lowest price for options was 5·20 cents for June; the highest, 6·20 cents for April. Spot coffee, No. 7 Rio, fluctuated between 6⅜ and 6¼ cents; Padang Interior, 18@20 cents; fair to good Cucuta, 7¼@8½ cents.

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION (CALCUTTA).

Extracts from Abstract of Proceedings of a Meeting of the General Committee held on the 2nd July, 1901. PRESENT:—Messrs. H. S. Ashton (*Chairman*), A. Tocher (*Vice-Chairman*), H. W. Boyd, W. Brown, D. A. Campbell, A. C. Lawrie, R. Magor, and R. R. Toynbee.

Letters dated 7th and 14th June, from the Secretary, Indian Tea Association, London, came up for final consideration and disposal after previous circulation.

The chief subject dealt with in these letters had reference to the extension of the sale of Indian tea in Russia. It was stated that the American and Foreign Market Fund Committee had had under consideration the best means of increasing the consumption of Indian tea in that country; and had endeavoured to obtain information respecting the quality of the tea required, prices, methods of packing, etc. It appeared that the prices paid in London for tea for Russia ranged from 3½d. to 1s. per lb. or more

for parcels with really good flavour. So far the demand had been entirely confined to leaf teas; the buyers altogether avoiding broken teas and dusty parcels. The packing preferred was the ordinary wooden chest with lead lining; although, if the tea were suitable, a patent chest would go through. As a rule shippers in London sold on commission, as credit for twelve months was often given in Russia, and cash was then sometimes difficult to obtain.

Mr Tye also stated that the British Exhibition, which it had been proposed to hold in St. Petersburg from November to February next, had been postponed.

The General Committee had asked for the foregoing particulars with a view to an attempt being made to introduce Indian tea into Russia by the overland route from India. It had been suggested that such an attempt should be made, on account of the preference which it was understood existed in Russia for "overland" teas. (See *Proceedings of General Committee Meeting held on 16th April*, 1901.) From information which had been received from Mr. Foley and from other sources, it seemed to the Committee that it would be quite feasible to send tea overland to Russia *viâ* the Nushki-Seistan route to Meshed, from there to Askabad, and thence (by the Trans-Caspian Railway) to Moscow, St. Petersburg and elsewhere. And for their guidance in the matter they decided to ask the the London Committee to endeavour to obtain particulars respecting the China teas sent to Russia overland, the manner in which they are packed, their prices, descriptions, etc.

A telegram dated 25th June had been received from the Secretary, Indian Tea Association, London, stating that it had been decided to raise a new levy for the American and Foreign Market Fund during the current year.

Considered a letter No. 464 P. D. of 21st June, from the Officiating Chief Secretary to the Government of Bengal, Political Department, with reference to the question of the introduction of Indian tea into Tibet. It was suggested in the letter that possibly Miss Annie Tayler—a lady missionary who has a tea shop at Yatung—might be able to assist the Association in this connection. It was added that the general question of improving the arrangements for facilitating trade between India and Tibet was still under the consideration of the Government of India.

The Committee, after discussion, decided to invite the opinion of Mr. J. M. Korb of Kalimpong (who had previously endeavoured to assist them) upon this proposal. In the event of his thinking it might be adopted with advantage, Miss Tayler was to be asked if she could dispose of any Indian tea in the manner suggested. The brick tea in the possession of Mr. Korb might, the Committee thought, be sent to her if she were willing to assist.

In the proceedings of the meeting held on the 4th June, it was stated that the Committee proposed to address the Colombo Agents of the Russian Volunteer Fleet with reference to a proposal that the ships of the fleet should call at Calcutta.

This had been done, and the Committee now had before them a letter dated 17th June, from Messrs. Stcherbatchoff, Tchokoff & Co., the Agents in question. In this letter it was stated that so long as the plague prevailed at Calcutta it would be practically out of the question for the steamers of the fleet to touch here. Moreover, it was feared that there would not be sufficient cargo to warrant their calling. At the same time it was believed that Indian teas would, before long, find a ready market in Russia; and that being so, the question of the steamers of the fleet touching Calcutta was merely one for the future. The rate of freight from Colombo to Odessa and other Black Sea ports was 30s. per ton of 900 lbs. nett. The only drawback to shipping teas to the Black Sea with transhipment at Colombo was that a through Bill of Lading could not be obtained.

The Committee had also asked for information as to the rates of of freight for the carriage of tea from Singapore to the Black Sea ports. But as this was not given in the reply, they decided to ask the Singapore Agents of the Russian Volunteer Fleet for it. Enquiries were also to be made locally as to the rates from Calcutta to Singapore.

Considered a letter, dated 1st July, from Mr. O. B. Griffiths, stating that as he was proceeding to England, he would not be able to continue to advise the Committee with reference to green teas. He suggested that Mr. L. C. Baines should be asked to take his place. The Committee agreed with this suggestion, and decided to thank Mr. Griffiths for the assistance he had given them.

The Committee had before them samples of the Ceylon tea ordinarily imported into Bombay. These samples had been obtained by Messrs. Finlay, Muir & Co. at the instance of the Committee, in connection with the proposal that the Indian import duty on tea should be enhanced to a protective rate. The contention advanced by the Central Travancore Planters' Association (by whom the proposal was made) was to the effect that the Ceylon tea sent to Bombay were of a "rubbishy" character; and that consequently a protective duty was necessary to check their importation.

After examining the samples, the Committee came to the conclusion that they were not of sufficiently low quality to justify this contention. They accordingly decided to send the samples to the Central Travancore Planters' Association, together with this expression of opinion.

The Committee discussed a draft report prepared by the Sub-Committee appointed to consider the question of extending the sale of tea in India.

The report was to the effect that about 600,000 lbs. of tea had been promised (a certain quantity of it conditionally) to the scheme for the establishment of a tea distributing agency which had been set forth in the Sub-Committee's previous report dated 26th March 1901. The Sub-Committee considered that this quantity was sufficient to warrant a start being made. They had received an offer from Messrs. Andrew Yule & Co. to organise and to work the agency in consideration of the actual expenses which would be incurred; that is to say, without remuneration. The Sub-Committee strongly recommended that this offer should be accepted for they thought it would be an advantage for the agency to be connected with a firm of reputation, and with such wide-spread interests as Messrs. Andrew Yule & Co. possessed. Messrs. Andrew Yule & Co. proposed that the management of the business should be placed in the hands of Mr. A. E. Henson (one of their principal assistants), who would devote practically his whole time to it. A Committee to supervise the work would also be appointed.

The General Committee approved generally of the proposal that the Agency should be started, and be worked by Messrs. Andrew Yule & Co. But as the quantity of tea promised was considerably less than was originally anticipated, it was, they thought, a question for consideration whether the full grant (Rs.40,000) which the Association had decided to make would be required. In order to settle this point they decided to ask the Sub-Committee for a detailed estimate of what the probable annual expenditure would be. An enquiry was also to be made as to whether the proposal was that the Agency should be worked as a department of Messrs. Andrew Yule & Co.'s business, or whether it would be formed into a limited liability company with Messrs. Andrew Yule & Co. as Managers.

NATURE AT HER BEST.

We love Nature! Our regard for her, with her sweet and varying moods, is undying, and our love such that it is beyond the art of man to quench. The promise of Spring is one great message of Hope. The fragrant breath of Summer whispers "Paradise"; the mellow touch of Autumn's hand ripens recollection; and crisp biting Winter brings merry, ringing laughter, and rosy cheeks.

But of all, Summer is most dear.

It was in Summer that Tennyson found Rose, the gardener's daughter, "standing in a porch of roses." "Who had not heard of Rose, the gardener's daughter?" asks the poet.

Why did he not also find a gardener's wife, of rosy cheeks, whose buxom figure might tread with us down the ages as a picture of what a gardener's wife might be—not a woman "languid and weary," whose plaintive cry is that "every little duty is a trouble and takes all the joy out of life"

Such women there are, even "gardener's wives," like, let us say, Mrs. Martha Herriott, whose very words we have written above. Who continues thus: "Morning, noon, and night, my head was racked with pain; often for days together I scarcely got a moment's freedom from it. Sometimes, when the attacks were very severe, my left eyeball became quite shrunken and small, and my head would swell right across the top. The pain I suffered then was intense; I cannot properly describe it, but shall never forget it so long as I live. I consulted the doctor and tried all kinds of

medicine recommended by my friends, but, until I commenced taking Mother Seigel's Syrup, got no real benefit from anything."

A happy illustration is given us now of Nature quickly changing from decay to health, "for" continues Mrs. Herriott, whose address is, 24, John Street, London Road, Sheffield, "after taking it a short time, I feld much better, and the improvement continued until I was *free* from pain. Mother Seigel's Syrup completely cured me.

When I am tired and worn out, after a hard day's work, nothing so soon revives me as Seigel's Syrup. It seems to strengthen every part of the body, and is, indeed, a splendid tonic."

That was in the Summer of 1900. And *now* Nature is herself again! Life is gladness indeed.

We love Nature as she is portrayed in the fields and flowers, but we ourselves, who are part of Nature, must be in perfect health to be in harmony with the countless beauties around us.

The keynote of contentment is good digestion, and Seigel's Syrup awakens into life, by its nutritive and medicinal properties, those dormant digestive organs of the dyspeptic.

He or she can then say, "Nature is at her best."

MARKET REPORT.

[*Per Mail advices of 28th June* 1901.]

COFFEE.

The London Commercial Record says:—Supplies to a fair extent have been offered, and as a whole the trade have shewn more willingness to buy, and the greater portion of the quantity at auction was disposed of. East India met a fair demand for all desirable qualities at previous rates, but inferior kinds continue dull of sale. Costa Rica and Central American kinds were in better request at firm prices to a slight advance, whilst superior qualities sold at extreme rates. Washed Santos held above buyer's ideas. The market for "futures" has been very variable, prices improving early in the week on crop news, subsequently becoming easier, and closing prices do not shew any material change for the week. We quote—

London ...	... Santos ...	July delivery	...	29s 6d.
New York	... No. 7 Rio...	„	...	5·35 cents.
Hamburg...	... Santos ...	„	...	29½ pf.
Havre ...	... Santos ...	„	...	36½ francs.

Auction supplies to-day comprised 883 bags East India, 11 casks 2 tierces 4 barrels 3 bags East India cured in Ceylon, 98 barrels 5 bags Jamaica, 330 bags Guatemala, 426 bags Colombian, 225 bags Mexican, 580 bags Costa Rica, 1,227 bags Salvador, 227 bags Nicaragua, 837 bags Vera Paz, 468 bags New Grenada, 47 bags Ecuador, and 35 bags Coban. The auctions went off with quiet demand and without alteration in prices.

The Dutch Trading Company announce their next public sale for Tuesday, 2nd proximo, at Amsterdam, when 18,520 bags will be offered. Good ordinary Java is valued at 31½ cents.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	22,961	20,481	31,530	24,967
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	10,532	8,873	13,782	10,330

The preceding figures exhibit— Tons

In the Imports an increase this year of	...	6,563
Home Consumption an increase of	...	1,660
Export an increase of ...	...	3,452
Stock an increase of	...	2,480

Auctions this week have gone off as follows:—

EAST INDIA.—1,438 bags 55 cases partly sold as follows:—*Mysore*, smalls 33s to 38s, low middling to middling 39s to 48s, bold 52s to 63s, peaberry 43s to 54s. *Coorg*, smalls 31s *Neilgherry*, smalls 36s to 39s, fine ordinary 38s, low middling to 35s, fine ordinary 38s, bold 50s to 58s 6d, peaberry 48s to 55s, to middling 41s 6d to 44s 6d, bold 50s 6d to 65s, peaberry 43s 6d to 53s 6d. *Wynaad*, smalls 34s, low middling 38s, peaberry 46s 6d. *Travancore*, smalls 37s 6d to 38s.

JAMAICA.—83 barrels about half sold, good ordinary greenish 33s to 34s, low middling 46s, peaberry 45s.

COSTA RICA.—Of 4,728 bags catalogued about 2,600 bags sold, smalls 29s 6d to 40s 6d, ordinary to fine ordinary 34s to 40s, low middling to middling 41s 6d to 49s 6d, good middling 51s to 54s, bold 55s to 66s, peaberry 42s to 60s.

GUATEMALA.—2,849 bags offered and 1,800 bags sold, smalls 28s 6d to 35s 6d, good ordinary to low middling 38s to 42s, middling 44s to 47s 6d, bold 49s to 54s 6d, peaberry 40s to 48s 6d.

VERA PAZ.—649 bags mostly sold, small 32s 6d to 44s 6d, low middling to middling 40s to 47s 6d, good to fine middling 57s to 73s, bold 80s to 99s, very fine bold 114s, peaberry 45s to 85s.

NICARAGUA.—Of 754 bags catalogued 570 bags sold, smalls 26s, good to fine ordinary 36s 6d to 38s, low middling 40s, middling 50s, fine middling 64s, bold 96s to 102s, peaberry foxy 37s 6d to 38s 6d, good to very fine 64s to 87s 6d.

SALVADOR.—Of 5,418 bags offered 4,300 bags sold, smalls 30s to 38s, fine ordinary 37s to 39s 6d, low middling to middling 40s to 45s 6d, bold 47s to 54s 6d, peaberry 40s to 55s 6d.

COLOMBIAN.—7,380 bags mostly sold, smalls 27s to 35s, low middling to middling 39s 6d to 46s, bold 47s to 52s, peaberry 38s to 46s.

HONDURAS.—157 bags sold, smalls 26s 6d, low middling to middling 40s 6d to 41s peaberry 46s 6d.

MEXICAN.—Of 1,009 bags offered 540 bags sold, smalls 33s 6d, good to fine ordinary 35s to 38s, middling 42s 6d to 44s, good middling 48s, bold 52s to 52s 6d, peaberry 38s to 47s.

BRAZIL.—Of 1,117 bags washed Santos 170 bags sold, bold 34s 6d to 40s, peaberry 41s.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	2,886,000	3,243,000	3,181,000	4,294,000
Santos ...	7,941,000	5,659,000	5,561,000	6,156,000
Total...	10,827,000	8,902,000	8,742,000	10,450,000
Crop...	—	8,971,000	8,772,000	10,461,000

Rio Exchange 11 7/32d, previous day 11⅛d.

HAVRE, *June* 27.—Good average Santos June opened quiet at 36f. and closed steady at 35¾f., September opened at 36¾f. and closed at 36½f., December opened at 37¼f. and closed at 37f., March opened at 37¾f. and closed at 37½f.

HAMBURG, *June* 27.—Good average Santos July opened steady at 29pf. and closed steady at 28¾pf., September opened at 30pf. and closed at 29½pf., December opened at 30½pf. and closed at 30¼pf., March opened at 31½pf. and closed at 31pf.

NEW YORK, *June* 26.—Closing prices of No. 7 Rio were as follow:—

	June.	July.	Aug.	Sept.	Oct.
June 26...	5·15	5·15	5·25	5·35	5·40
June 25...	—	5·15	5·20	5·30	5·35

TEA.

INDIAN.—Auctions were about on a par, *viz.*, 9,400 packages, of which 790 packages were new season's compared with 9,200 packages (500 new season's) in the previous week, and 4,800 packages (1,500 new season's) in 1900.

The above-mentioned small supply of this year's manufacture met with a favourable reception, quality generally being considered above that of first invoices usually. No material alteration occurred in quotations for the old crop, but there was a little more life in the bidding, except for parcels with red and mixed leaf. A fair portion of the offerings was from South India, comprising 2,800 packages, some of which shewed improvement in cup contrasted with prior arrivals from the same Estate.

Printed on importer's account during the month:—

1901.	1900.	1899.
42,000 pkgs. (1,500 New Season's)	13,400 pkgs. (4,100 New Season's) (Including Whitsuntide)	47,700 pkgs. (12,700 New Season's)

making the amount passed through the Mincing Lane Sale Room from 1st July last 1,660,000 packages *versus* 1,618,000 packages, and 1,532,000 packages in 1899-1900 and 1898-1899 respectively.

CEYLON.—The quantity submitted was lighter, being 24,300 packages, while on the Tuesday before 29,400 packages were brought forward, and 26,600 packages a year ago.

Common leafy kinds ruled firm, but broken and dusts were in limited demand and often easier. Medium to fine went off quietly, Pekoes from 5½d to 6½d per lb. affording very good value to buyers. Broken Orange Pekoes with full brisk flavour commanded a spirited competition and occasionally fetched higher prices.

Partly owing to the reduced number of choice lots the average is 6¼d lb. opposed to 6⅜d on the 20th instant, and 6⅝d per lb. twelve months since.

Catalogues already issued include 23,700 packages for Tuesday, 2nd proximo, and also 9,400 packages for Tuesday, 4th proximo. The latter are to be disposed or privately, so that the selling prices should not be divulged.

Total sold in June :—

1901.	1900.	1899.
113,400 pkgs.	92.900 pkgs.	105,600 pkgs.
(Avge. 6⅜d per lb.)	(Avge. 6⅝d per lb.)	(Avge. ⅝d per lb.)

JAVA.—Public sales included 1,700 packages of direct import, which were taken by the trade without much change in rates. A consignment of 216 packages from Perbawattee realised 8d per lb.

The following were declared :—

1901.	1900.	1899.
5,300 pkgs.	3,200 pkgs.	4,600 pkgs.
(Avge. ¾d per lb.)	(Avge. 6d per lb.)	(Avge. 7⅜d per lb.)

Deliveries.—The clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.* :—

From 1st to 25th June, 1901 ... ... 10,272,487 lbs.
Do. do. 1900 ... ... 10,325,561 „

During the week the following have been printed for sale by public auction :—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	7,635	1,769	9,404
Ceylon	22,627	1,656	24,283
Java	1,387	326	1,713
Total ...	31,649	3,751	35,400

Also 343 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated June 28th, 1901, says :—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1901-1902	43,370	115,146	5,804
1900-1901	15,646	94,410	3,186

9,600 *pkgs.* INDIAN
24,776 „ CEYLON
1,713 „ JAVA
} Total 36,089 packages were offered in public auction this week.

The United States took considerably more Indian and Ceylon Tea in the first three months of 1901 than during the corresponding period last year, viz. :—

1901.	1900.	1899.	1898.	1897.	1896.	1895.
Lbs. 5,112,871	4,043,062	2,935,885	3,155,099	4,460,943	2,344,938	1,466,215

As the main increase was received from London there is no doubt that low prices have been the cause, and the expansion has therefore been in Black Tea.

To capture the North American market for Green, Unfermented and Oolong Teas his more important than ever. There seems no reason why this should not be done now that absolute necessity demands it, and it has been proved that suitable Tea can be made.

INDIAN.—The small auction passed with good competition and a tendency towards improved prices. 790 packages new season's Tea were included in the auction and made very fair prices; musters of the new crop seem to show fair average quality.

Week's average of New Season's Tea sold on Garden Account 1901, 3,573 pkgs., av. 6·21d. 1900, 2,831 pkgs., av. 7·06d.

New Season's Tea sold on Garden Account 1st June to date 1901, 6,920 pkgs., av. 6·17d. 1900. 6,467 pkgs., av. 6·99d.

CEYLON.—The auction was rather smaller than last week, comprising 24,776 packages against 29,861 last week. Competition was fairly well distributed, but no change can be recorded in quotations, except for medium Teas about 6d., which were occasionally somewhat neglected. For next week 22,904 packages are printed for public sale, and 9,372 for sale in a private auction room.

Average for week 6·30d., against 6 59d. same week, 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 619,234 pkgs., av. 6·60d. 1900, 627,895 pkgs., av. 7·28d.

JAVA.—All the teas offered were of direct import and on garden account. Nearly everything was sold in the room at prices about equal to those ruling last week.

Bank Rate 3 per cent. Exchange on London three months sight :—Calcutta 1/4 3/32. Colombo 1/4⅛.

COCOA.

No auctions have been held this week and the private transactions are of little moment. Prices of all growths are steady.

PEPPER.

BLACK.—The market is quiet, but former prices have been maintained in the business done. About 150 tons Singapore have been sold, including fair Singapore on the spot at 6 1/16d, near at hand shipments at 6⅛d, and April-June and August-October at 6⅛d to 6 3/16d.

At auction on Wednesday 250 bags Wynaad bought in at 6 1/16d to 6⅛d, also 170 bags Aleppy at 6d. 52 bags Ceylon sold at 6d per lb. for fair heavy.

WHITE—Is quiet and business unimportant. For arrival no sales reported.

At public sale on the 26th instant 35 bags Singapore retired at 10¼d and 34 bags Penang at 8¾d. 31 bags Ceylon sold, fine bold at 10d to 11d, brownish 8¾d to 9d per lb.

GINGER.

Slow of sale but steady in value. 25 cases 407 bags offered and 75 bags sold, medium and small dullish washed rough, part lean 36s to 36s 6d, cuttings 33s per cwt.

AFRICAN.—38 bags bought in at 35s per cwt.

JAMAICA.—154 barrels sold at full rates, low middling 40s, common to common 35s to 37s, fresh water damaged 21s to 24s per cwt.

CINCHONA.

At the monthly auctions held on Tuesday, 2,985 bales were presented for competition, contrasted with 4,072 bales brought to the hammer a month previously. Demand was fairly good, and the bulk of the offerings sold at full rates to 5 per cent advance, the unit average being fully 2d, against 1 15/16d obtained at the May auctions. The following are the details of the sales :—

Of *South American*, 1,050 packages were brought forward and all but 100 packages sold—Bolivian cultivated Calisaya quill 4⅛d to 1s 0¼d (damaged 6⅞d to 9d), ditto flat 9d. Red, quill (damaged) 4½d to 5d. Cuprea 2⅜d to 3¼d per lb.

281 bales *Ceylon Cinchona* mostly sold—Red, chips and shavings 2⅞d to 6d; Ledgeriana chips 9⅜d, branch 5¾d per lb.

1,175 packages *East India Cinchona* were catalogued and about 900 packages sold—Officinalis, chips and shavings 6¼d to 1s 0¼d, (common to fair ditto 2⅞d to 5⅞d), renewed ditto 4½d to 1s 0⅛d, branch 2⅞d to 5⅛d, and root 6¾d to 9¾d per lb.; Succirubra, chips and shavings 3d to 6⅞d, root 3½d to 6¼d; Ledgeriana, chips and shavings 6½d to 9⅜d, root 6⅜d; Hybrid, chips 3¼d to 4⅞d per lb.

399 bales, etc. *Java Cinchona*, about half sold—Succirubra, chips 5¾d to 6¾d; Ledgeriana and Hybrid, chips 10¾d to 1s 3¾d, root 11¾d per lb.

80 bales *African Cinchona* sold—Succirubra quill 6¼d to 7d, broken quill and chips 5¼d per lb.

SULPHATE OF QUININE has passed though a slow and inanimate week, the only business done being 5,000 ozs. for December delivery at 1s 4⅛d. The spot quotation is 1s 3½d, August 1s 3½d, and October 1s 3⅞d per oz.

OFFICIAL QUOTATIONS.

	in tins.	*in 1 oz. vials*
Howards & Sons	1s 6d @ 0s 0d	1s 8d for 1,000 ozs.
Thomas Whiffen	1s 5d „ 0s 0d	1s 7d @ 0s 0d nominal
Brunswick	1s 5d „ 0s 0d	
Mannheim	1s 5d „ 0s 0d	
Auerbach... ...	1s 5d „ 0s 0d	
Zimmer	1s 5d „ 0s 0d	nominal
Milan	0s 0d „ 0s 0d	0s 0d „ 0s 0d
Taillandier	1s 5d „ 0s 0d	nominal
Amsterdam	1s 5d „ 0s 0d	„
Pelletier's	1s 10d „ 1s 11d	0s 0d „ 0s 0d

QUININE.

An extremely dull market in spite of the good result of the London bark-auction on Tuesday. During the week a little German sulphate has been sold at 1s 4⅛d per oz. for December delivery, and there are sellers of October at 1s 4d. Spot is nominal at 1s 3⅛d per oz.

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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DOMESTIC OCCURRENCE.—The fee for inserting a domestic occurrence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 2nd proximo. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Coorg.

Polli Betta, *23rd July.*—*Weather*—Nearly 40 inches to end of last week, 2 or 3 inches under last year, but above average. A nice "break," much appreciated, now on. Coffee looking in prime condition. Splendid promise for 1902. Borer has been very severe in parts. Works well advanced. Supplying nearly completed. Good progress on Paddy fields. *Labour*—Sufficient. Coolies are beginning to come in from Mysore.

THE PROSPECTS OF COFFEE.

We regret that it is not possible for us to write in a very hopeful strain about the future prospects of Coffee. There are but too many indications adverse to the chances of a rise in prices. Brazil continues to produce extensively, and consumption in the United States has fallen off. Whether this latter effect can be traced to the influence of the Tea Campaign we cannot say, but it is an important factor in estimating prospects. There is, some probability of "bull" speculation in Brazil, and if an upward movement can be engineered mild coffees will doubtless benefit to some extent. But unless there is a quite unexpected failure of crops any rise can only be temporary and of brief duration. It is freely asserted that prices in Brazil cannot fall much lower, which means that they are already near starvation-to-planters' point. This is a tale that has been told before, however, and fall after fall has followed, production increasing the while instead of answering to the expectations of "bull" operators. As regards Brazil it is stated to be certain that in many older districts the trees are too exhausted to be able to stand two such crops successively; but whether the new trees coming into bearing in others will make up for such loss, is not easy to determine, although the probabilities would seem to indi-

cate the contrary. It is equally certain that prices cannot fall much lower without stimulating speculation purchases. These, however, are not what is required. The chief need is a good, steady, increasing demand, and an approach to a fair adjustment of the balance between production and consumption. Without this the effects of speculation can only be spasmodic and fleeting.

It must be remembered that there is comparatively little speculation in Coffee in the English market. The chief movements are initiated in the United States, and local operations in Rio and Santos are usually controlled from New York. In the commercial capital of the State operators are rarely left to conduct their operations unopposed. Of late Coffee interests there have been divided into two powerful camps, the "bulls" under the lead of the Lewisohn syndicate, the "bears" under the banner of Messrs. CROSSMAN BROS. The former have been trying to make capital recently out of the fact that remarks passed by Messrs. CROSSMAN during the last few months are not in accordance with what they stated at an earlier date. These criticisms are not really of very much importance, for every man is entitled to change his opinion, and most wise men naturally do as circumstances develop and falsify their predictions or disappoint their anticipations. Messrs. CROSSMAN have aroused antagonism by remarks as to the alleged bearish influence exercised on coffee prices by rising Brazilian exchange. At the first glance it would certainly seem as if a rise in Brazilian exchange should tend to make prices rise, but the other view has taken, on some such grounds, as the following:—High milreis prices have stimulated production and this has become too heavy for consumption. Messrs. CROSSMAN expressed the opinion two or three years ago that with an apparent certainty that exchange would continue to rule high, there was no reason why planters should not increase production by extending their plantations to the utmost degree. Subsequent events have shown that this was an enormous idea, and the firm now expresses a very different opinion.

There can be no doubt that the immediate effect of a rise in the milreis is now favourable to the Brazilian producer, but if gold prices rise proportionately this is soon set right. Apart from speculative movements, gold prices are unquestionably mainly influenced by the relations between supply and demand. It follows therefore, that a standing upward movement in prices, a movement to a permanently higher level, must be brought about by an increase in cost of production, a reduction in quantity produced, or an expansion of demand. For this last coffee-planters have not hitherto worked very energetically. Therein, perhaps, has been their chief blunder. Competition has become keener. It has been said that old trees in Brazil cannot stand the strain of more than, say, a couple of successive heavy crops; that, after this, they need a rest and take it. Hence new ground has been worked in Brazil. In Mexico and other countries fresh and rigorous rivalry has been started. Thus there has been an increase of production. Either this must be checked; perhaps, even a reverse movement must be brought about, or demand must be largely developed. Failing either of these, there can be no lasting rise in the level of prices. These appear to us to be the chief points that coffee-planters all over the world must bear in mind. By adapting their plans to meet the difficulties arising from an increase of production simultaneously with a decrease of consumption they may yet find a way out of the critical position in which they find themselves at the present time.

THE OUTPUT OF TEA.

The attitude of the Empire of India and Ceylon Tea Company exemplifies the position taken up by many of the tea-planters who are loudest in urging a restriction of output. Increased crops are rejoiced over because they have prevented the heavy fall in prices from making the year's accounts disastrous. When challenged about extensions, the Directors reply, in effect: "We do not extend, we merely plant out 5 per cent. or 10 per cent. more land year by year to counterbalance the effects of disease, etc." Over-production is cited as the cause of the fall in prices, yet what applies generally is not taken to apply to this particular case. As it is much the same with companies generally, the merry game goes on and each advocates reduction of output and helps to swell over-production. The arguments of the man who would restrict supplies are always sound, but, somehow or other, their application to "this" company is questioned by almost every Chairman when he addresses the shareholders. Then, too, a very hopeful view is mostly taken by Chairmen with respect to the opening up of new markets, which would provide profitable employment for any increase of output. Mr. Geo. Selon made a suggestive remark the other day as to the prospects of combination for the purpose of developing new markets. He said that when he found that the Tea Industry had been absolutely unable to combine for the purpose of limiting the output, he could not see any prospect of a combination for any other purpose. However, the movement for pushing the sale of tea in India appears to have found much more general favour than that for the "resting" of tea bushes, and it is to be hoped that good results will be achieved.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

The General Committee of the Indian Tea Association (Calcutta) have issued their Monthly Return, dated 17th July, 1901, of Sailings and Daily Customs Entries of Tea from Culcutta, and also a Return of Exports of Ceylon Tea for four years up to 1st July, 1901.

Exports of Indian Tea from Calcutta.

	1901.	1900.	1899.
	Lbs.	Lbs.	Lbs.
Sailings to Great Britain in June ...	4,589,758	6,347,451	9,128,907
Sailings to Great Britain from 1st April to 30th June ...	6,013,451	8,958,110	14,058,776
Sailings to Australia and New Zealand in June	163,926	487,477	173,856
Sailings to Australia and New Zealand from 1st April to 30th June.	204,906	487,557	336,225
Sailings to America in June ..	6,972	19,130	44,336
Sailings to America from 1st April to 30th June	20,160	34,110	44,471
Sailings to other places in June ...	480,163	315,510	451,271
Sailings to other places from 1st April to 30th June	1,235,292	606,581	618,886
Total Sailings from 1st April to 30th June	7,473,809	10,086,358	15,058,358

Daily Customs Entries for Export to Great Britain from 1st April to 30th June	1901 ...	Lbs.	8,127,745
Do. do.	1900 ...		12,553,569

Exports of Tea from Ceylon.

Total Exports from 1st January to 11th July,	1901 ...		75,014,166
Do. do. do.	1900 ...		72,917,366
Do. do. do.	1899 ...		62,382,781
Do. do. do.	1898 ...		60,234,332

Statement showing the Exports of Tea to Sundry Ports during the month of June, 1901.

FOREIGN PORTS.

	lbs.		
Trieste	50		
Copenhagen	1,000		
Havre...	2,900		
Marseilles	50		
Bremerhaven	38,780		
Hamburg	47,835		
Odessa	36,466		
Constantinople	9,249		
Zanzibar	480		
Natal	800		
Suez	1,800		
Aden	6,159		
Hong-Kong	1,930 *		
Shanghai	19,178		
Tientsin	250		
Bankok	240		
Bushire	20		
Penang	600		
Bagdad	3,008		
Bussora	93,763		
Caiffa	2,100		
Samsoun	3,024		
Jaffa	480		
		270,162	lbs.
Bombay	190,546		
Kurrachee	1,460		
Other Indian Ports	17,995		
		210,001	,,
Total		480,160	,,

NOTES.

Tea in the U. S. The *American Grocer*, of 19th ultimo, reports :—At the last tea auction a weak and irregular market was disclosed.

Cocoa in Peru. The cocoa grown in Peru is of superior quality. It is produced in various parts of the country, but only in small quantity, and nearly the whole of it is exported to Bolivia.

Colombo Tea Sales. At the public sale of tea at Colombo on the 17th instant 16,038 packages = 1,250,465 lbs. were offered, of which 13,119 packages = 1,010,957 lbs. were sold.

Java Cinchona. The exports from Java during June amounted to 1,036,000 Amsterdam lbs., against 866,000 Amsterdam lbs. last year, and 1,126,000 in 1899. From January to June the total shipments have been 5,148,000 Amsterdam lbs., against 4,100,000 Amsterdam lbs. last year, and 5,094,000 in 1899.

The Dutch Coffee Auctions. At the Dutch Trading Companys' sale, held on the 2nd July, 18,520 bags Java were sold, good ordinary bringing 32 cents, against 31½ cents at the previous sale. In "Futures" there has been very little doing, and quotations are a shade easier—Santos for July 29s, September 29s 3d, and December 29s 9d per cwt.

Tea in the Persian Gulf. There was a very slight increase of import in tea during 1900. China tea was largely imported and has paid well. According to a consular report, it is chiefly used by persons who are addicted to the use of opium. The import of Calcutta tea has fallen, and dealers in this were hardly able to realise invoice prices. Java tea is going out of favour, and has caused losses to the dealers.

* It is understood that the bulk of this tea consists of transhipments for the United States and Canada.

Coffee in Perak. The Perak Administration Report for the year 1900 states that the prospects of coffee have shown but little signs of improvement during the year. On the estates that have been maintained in good order the crops have been good, but the present price of coffee, it is feared, prevents its being cultivated with success except in connection with other products such as rubber or cocoanuts.

Pepper in Perak. Pará rubber is now extensively planted on many estates in Perak. Where well tended it grows well and the young trees are strong and healthy. In many places, however, white ants, which attack the roots of the trees, are a dangerous enemy, and one against which the planter will have to guard. On no estate have the trees arrived at sufficient maturity to enable them to be tapped.

Cacao in Ceylon. The Cacao Committee of the Planters' Association of Ceylon has resolved that District Associations be asked to arrange that steps be taken to obtain the co-operation of cacao growers in experiments and observations for the information and guidance of the Cacao Committee ; (II) that it be requested that answers to the questions be forwarded to the Secretary as soon as possible.

Indian Tea Exports. The teas shipped from Calcutta to the United Kingdom from April 1st to June 30th, have totalled 7,473,809 lbs., compared with 10,086,358 lbs. in 1900, and 15,058,358 lbs. in 1899. The falling-off is expected to materially assist to remove the glut of the home market. Increased quantities have been shipped to ports in the Mediterranean and to the Persian Gulf in the same period, *viz.*, 628,711 lbs.

Sale of Tea in India. The Indian Tea Association has accepted Messrs. Andrew Yule & Company's offer giving them Rs. 40,000 and trusting them absolutely with the working of the agency. Messrs. Yule are to have the exploitation of Indian Markets without any remuneration for personal services and at the end of three years, having accomplished the work on behalf of the Association and opened up large markets for tea throughout the Empire, the business of the agency will become their own.

Boycotting Tea in Public Sale. A special telegram, dated 16th instant, to the *Times of Ceylon* says :—Notwithstanding the organised boycott of the public sales to-day by a large section of the trade, buyers were numerous and prices firm. Resolved :—"The following Sub-Committe has been appointed by the "Thirty Committee" to consider the draft scheme for the Ceylon Green Teas Producers' Association :—Hon. Mr. W. H. Figg, Hon. Mr. J. N. Campbell, Mr. Bois, and Mr. Rosling."

Coffee in the U. S. Bickford's San Francisco circular of June 7 reports stock of Central

American in first hands at 92,974 bags, against 67,705 bags at same date in 1900. Strictly good Guatemala, 10¼c., against 12c. last year; good Costa Rica, 10½c.; good unwashed Salvador, 7¾c. Bickford says: "Dealers here have been timid investors for some time past. Their stocks are light, and they are moderate, though constant buyers. In this lies the one favorable showing, for coffee keeps moving, though not rapidly enough to suit those having it to sell."

Rambong in Perak. A small sample of Gutta Rambong *(Ficus elastica)* from Perak was reported on in England as "good clean Java character," and sold at the rate of 3s. 10d. per pound. A tree in the Kuala Kangsar garden yielded 25 pounds at a single tapping: this tree is 19 years old, and about 90 feet high, measured round the aerial roots at 3 feet from the ground, it has a girth of 88 feet. Mr. Derry's report on the preparation of the rubber for the market is most interesting, and a copy of it will be supplied to the Managers of the Plantations in the State.

Calcutta Tea Sales. The tea sale on the 19th instant was the heaviest held in Calcutta this season, 19,387 packages being catalogued, including, as was the case last week, several marks that are usually sold in London. There was a good demand, and previous rates were well maintained, lower grade, teas, showing any improvement in quality, being rather firmer. The Lingia Garden of Darjeeling had a fine invoice, which was keenly competed for, and realized the following satisfactory prices:—Broken Pekoe, Re.1-6-0; Orange Pekoe, Re.1-4-0; Pekoe, As.15-6; and Pekoe Souchong, As.11-3.

Sale of Tea in Ceylon. Mr. F. J. Wright, who has already secured an agent for Negombo, calls for any number of agents to open depôts in different parts of the Island, for the sale of pure Ceylon tea grown on Lavant estate, Yatiyantota. The step Mr. Wright has taken is, says the *Times of Ceylon*, along the lines of the proposal which has closely engaged the attention of the Indian Tea Association, considering that the over-production problem is bound to continue to trouble the minds of many. A Ceylon planter, Mr. Wright's new departure is bound to have their good wishes. Doubtless a lot is to be done in supplying our "middle classes" and any reduction of export is welcome to all. The tea will be sold in packets varying from 2 oz. to 1 lb. put up in the estate factory.

Para Rubber in Perak. The result of a sale in the London market of a parcel of Pará rubber *(Hevea braziliensis)* from Perak was received early last year. 327 pounds of the best quality rubber fetched 3s. 10d. per pound, and 23 pounds of scrap, *i.e.*, the fragments of rubber picked off the stems of the trees after tapping, were sold at the rate of 2s. 6d. per pound. 82 trees, of an average age of 14 years, were tapped to give this result; the yield is thus a little over four pounds to the tree, but the Superintendent, Mr. Derry, reports that exceptionally heavy rains frequently interrupted the work and threatened, in conjunction with the tapping, to damage the seed crop, and that therefore the tapping was stopped in many cases long before the supply of latex was exhausted. From the 11 best trees over 97 pounds of dry rubber were obtained, one tree yielding 12 pounds and 1½ ounces.

London Tea Market. A weekly special telegram, date 18th instant, from Messrs. Gow Wilson & Stanton to the Colombo papers reports that com petition is general and well distributed, and that the marke for medium liquoring Pekoes and Broken Pekoes shows fractional advance while tea for price is dearer. The price of fair liquoring Ceylon Pekoe Souchong is 5¼d. (a farthing up) and the average price of Ceylon tea sold on garden account this week was 6¼d. (a farthing down)—as against 6¼d. and 7½d. respectively in the corresponding week last year. Reuter reports that the market for Ceylon tea i generally firm. Pekoe Souchongs are quoted at 4½d. (a farthing up) and the average for the week is 6½d. (same as last week). 32,000 packages of Ceylon tea were offered for sale, and 23,000 were disposed of; while of the 8,000 packages of Indian tea offered, 6,000 found purchasers.

Artificial Manuring. The fifth year's observations upon the effectiveness of nitrate of potash, as compared with like amounts of nitrogen and potash in form of muriate of potash and nitrate of soda are reported on by Messrs. H. J. Wheeler and J. A. Tillinghast of the Rhode Island Experiment Station. The experiments of previous years on this subject were continued during 1899. The results obtained are briefly summarized:—"The data for the 5 years since this experiment was begun show as yet no striking differences between the results with nitrate of potash and those secured with like quantities of nitrogen and potash as nitrate of soda and muriate of potash. It is evident, therefore, that with the amounts of nitrogen and potash employed neither the chlorin nor the soda has as yet proved of positive advantage either as a direct or indirect manure. Incidentally, the experiment has shown the inferiority of gypsum (land plaster) as a source of lime for a sour soil, as compared with air-slaked lime."

Tea Commissions. Writing a month ago, says *Capital*, we ventured to express the opinion that it would be well to pay the managers of Tea gardens liberal fixed salaries, and, if possible, to abolish altogether commissions on profits or outturn. Such a radical change cannot, of course, be looked for until the Tea industry regains its old stability. We are glad, however, to find that so competent an authority as Mr. G. W. Christison agrees with us that commissions can be very injurious to the working of a garden. In his report to the Directors of the Darjeeling Consolidated Tea Company, written after a careful and critical inspection of the Company's gardens, he remarks as follows:—"By existing agreements the payment of commissions to managers is, in my opinion, framed upon a system most prejudicial to the best interests of the Company, 10 per cent., 7½ per cent., 5 per cent., having been paid in proportion to the amount of profit, without any stipulation whatever as to justice being done to the tea bushes or the condition of the gardens." Directors of Tea gardens generally will do well to lay this out-spoken opinion to heart, and to consider if the interests of tea will not be best served by the gradual abolition of such commissions, as the opportunity occurs.

Cinchona. It seems curious, observes the *British North Borneo Herald*, that no attempts have been so far made on a commercial scale to cultivate the cinchona tree for the sake of its quinine—yielding bark, in Borneo. Java supplies about 80 per cent. of the

world's supply of this drug. Of course for its successful cultivation cinchona requires a mean shade temperature of 62° *Fah.* which means a hilly district but that should be no obstacle in the way of the enterprise in this country. The principle of cinchona cultivation is the grafting of the delicate species (the valuable one) on to a robust but commercially valueless one. The yield of bark is obtained after a four years' growth being about lbs. 100 per acre increasing until the eighth year to lbs. 600 per acre when new trees must be called into requisition. The best bark, that of the *Succirubra*, when dried and prepared in a special form for pharmacists fetches in Amsterdam auctions as much as 2 shillings a pound. Suppose an estate in its eighth year and of say 2,000 acres has a good crop, it brings in £60,000 profit, meantime of course other trees are coming into bearing on new and adjoining land and so the rotation is kept up. Perhaps there are objections to its cultivation in this country but capital, no doubt, would overcome them.

The Tea Reserve Scheme. An Upper Dikoya planter does not think Mr. Cooke's scheme at all practicable. He points out that tea, being a perishable article, can only be kept a certain time, and meanwhile it is deteriorating; while at the same time the owner is losing money on interest. The buyers have on hand several months' supply; there is a large stock in London which must be sold, and they would therefore carry on till these reserves of tea had to come into the market. The public at home are now accustomed to 1s. 4d. tea, and if the prices of Ceylon and Indian were by combination forced up to any great extent, the dealers would import China tea again. People in England insist on a certain quality in everything they drink except tea, and they do not seem to care what blend of tea they have. It is all very well for Mr. Cooke to say that the reserve tea would be sent to new markets and disposed of; but where are these new markets and, if they exist, why do not merchants send teas to them now? It seems to me hopeless to expect any great increase in prices; but if the taste for tea is cultivated in India, a vast quantity of poor stuff may be disposed of and the London market thus relieved; and if Ceylon can dispose of 10 million lbs. of green tea in America, prices will rise to a point which will at all events pay Ceylon owners.

Tea in London. Advices, dated 5th instant, say:—Of Indian tea the auctions offered only a moderate supply; all useful liquoring teas were well competed for and realised fully previous rates.—Ceylon tea at Tuesday's auctions showed some irregularity, many buyers not being prepared to operate on that day, and consequently a very large proportion of lots was withdrawn; as the sales progressed, however, more disposition to purchase was shown, and most invoices found buyers at fairly steady rates, considering the circumstances. Subsequently a considerable private business was effected at very substantial advances on the bids made in sale, and no marked change in values can be quoted. Export orders were somewhat scarce. The sales on Thursday, "admission by ticket only," passed off with a better feeling and more general competition, but established no general advance in values. "The shipments to U. K. in June (Messrs Wilson, Smithett & Co. say) are telegraphed as 11,500,000 lbs. against 12,750,000 in June last, and 14,000,000 in June, 1899—the estimate for the current month being 10 to 10½ millions, against actual shipments last year of 11,750,000 lbs. The shipments in the first six months of the year have been 59,250,000 lbs., against 62,250,000 in the first six months of last year. From February 1st, the earliest date which can be taken after the general determination of producers to limit the output, to June 30th, the shipments show a falling off of 5,000,000 lbs. or an average of 1,000,000 lbs. a month. The imports in June were 900,000 lbs. below last year's, but the deliveries show a slight falling off, the stock being increased during the month to 27,266,269 lbs., against almost the same figure last year."

LETTERS TO THE EDITOR.

RUBBER.

Dear Sir,—Can any of your readers favour me with information on the following points:—

1. Which kind of rubber, Castilloa Elastica, Pará or Ceara, is best suited for an elevation of from 3,000 to 4,000 feet?
2. Have any Castilloa trees yet been tapped in S. India? If so, with what result.
3. Where can seed of the above three varieties be obtained?

A. B.

GENERAL ARTICLES.

COFFEE CULTURE IN QUEENSLAND.

Mr. Howard Newport, Instructor in Coffee Culture, writes in the *Queensland Agricultural Journal* on clearing, stumping, distance apart of trees, and lining-clearing.

He says:—Having got the nurseries in full swing and the land and locality for the coffee selected, the felling and clearing must be attended to. The method of clearing for coffee in no way differs from the same work for any other staple, and so need not be detailed here. I may add, however, that, should any logs remain unburnt, the planting of coffee may still be proceeded with, though the logs should, if possible, be rolled so as to lie across the slope and between the lines. If done by contract, this work will cost from 30s. to £4 or £5, according to the timber and undergrowth. From want of experience or carelessness it may, however, be made an exceedingly expensive work. The time of year in which to fell is also much the same in all cases. In coffee, the object is to have the land cleared in time to allow of pitting in January, or earlier if showers are obtained, and admit of planting as soon as the wet season definitely sets in—usually about February. If the nurseries are planted up by June, there should be time between then and February to get the clearing ready to receive the plants.

Stumping.

I have already touched upon this matter in the *Queensland Agricultural Journal* for March, 1900, p. 213—"Grubbing." I am frequently asked whether it is necessary to stump land for coffee. It is not absolutely necessary, but is undoubtedly a good thing, if it can be afforded, not only to remove all stumps, but to plough over the land two or three times before planting.

The advantages and disadvantages of the two systems are as follow:—Of stumping the advantages are—possibility of cheap weeding by means of horse-scuffling for three years or so; better worked soil less possibility of grubs, borers or beetles in the coffee; no damage to the plants from decaying roots; and cheaper pitting. The disadvantages are—the cost, which will run from £3 to £7 or £8, or even more, per acre, according to the number of stumps and nature of the timber; and a loss of nitrogen and humus from the excessive burning involved.

The advantages of not stumping are—cheaper and quicker opening, and retention of a greater percentage of nitrogenous matter and humus. The presence of stumps sometimes makes no difference to the growth of the coffee at all. The disadvantages are—inevitable hand-hoeing from the commencement (just when heaviest); possiblity of grubs, beetles, etc., in the clearing; possible, though

slight, disadvantage to the trees from the presence of roots of the timber trees; and, as a rule, more expensive pitting.

Unless the land is ploughed or dug over, however, all the roots will not be removed by stumping, though they are killed. In heavily timbered country, the cost becomes prohibitive, and the removal of stumps and roots or the digging or ploughing of the land is not essential to the success of coffee. Stumping and ploughing are seldom resorted to in any country in coffee clearings, but, being generally feasible in Queensland, may be taken advantage of where possible.

DISTANCE APART.

Before lining and pitting can be proceeded with, the distance apart that the trees should be, must be decided upon. It is a much debated question, and no hard-and-fast rules can be laid down in the matter. The question of wide or close planting hinges on many contingencies, and must be decided by each grower on his clearing.

The points to be considered are—room for the tree to grow to a good size on the one hand, and economy of space to prevent the useless cultivation of ground on the other, and, besides this, the exposure to wind and cold, and quality of soil of the field, and speedy covering of the ground. It is an old idea that trees on poor soil need to be planted further apart than on rich soil. It has been found by experience that poor soil will not grow any larger trees when planted wide than when close, and ridges and weak patches are therefore planted closer than rich fields, to cover the ground, conserve the moisture, and save weeding. The quality of the soil must be taken into consideration in deciding the question, for it is obvious that what would be close planting in a rich pocket would be wide on a poor patch. As a general rule, therefore, the richer the soil and more protected the spot, the wider the planting may be made with success. Again, not only does too wide planting allow of undue weed growth, and cost more to keep clean, but excessive evaporation takes place in dry weather, and the ground becomes hard. It is a great advantage to have the ground covered as soon as possible. Too close planting, on the other hand, is almost as bad, as it draws up the trees at the expense of lower primaries, but it is better to err on the side of close planting, for it is obviously easier and cheaper to prune back or even cut out trees than to subsequently have to plant between the rows or to weed and cultivate for an indefinite period.

A coffee tree will attain a spread of 6 to 7 feet in from three to five years, but will often take ten years to cover 10 to 12 feet, and on poor soil perhaps never do it. I am, therefore, of opinion that 8 feet x 8 feet is, as a general rule, the widest distance at which C. arabica may be planted in North Queensland, and 6 feet x 6 feet the least distance apart, with success. In exposed, cold, or windy situations coffee trees should be planted at the lesser distances, irrespective of soils, not only to prevent wind getting under or between them and damaging them, but because, other conditions being equal, where it is windy or cold the growth is less. It is better therefore, to line off according to the requirements of each patch or field, at the sacrifice of appearance, than to retain uniformity at the expense of the trees. The following table gives the number of trees to the acre, on the square, at the distances mentioned:—

6 feet x 6 feet=1,210	7 feet x 7 feet=881
6½ ,, x 6½ ,, =1,031	7½ ,, x 7½ ,, =730

8 feet x 8 feet=680.

LINING.

On land that has been ploughed, the lining can be very simply done by counting the furrows, or, if harrowed, by running the plough over it again at the required distances and crossing it. The pits are then made where the furrows intersect each other, and a great deal of the cost and work of pitting can in this way be saved. If the land has not been worked, a supply of stages of scrub wood about 2 feet long and 1½ to 2 inches in diameter will be required. Since it is better not to have split timber for these stakes, or to remove the bark, they will be easily and cheaply obtained. Besides these, a chain or line is necessary—any rope well stretched, or even fencing wire, will do. Ratling is serviceable and lasting, and rope is generally more easily handled than a chain or wire. On this the distances required are marked; a piece of rag or cloth is easily seen and easily attached. In rope it is better to insert than tie on, and so prevent shifting.

There are four methods of lining more or less used in coffee-planting (1) the Square; (2) the Diagonal; (3) the Hexagonal or the Triangular; (4) Quincunx. Surveying instruments, such as a theodolite, are extremely useful; and if a grower can obtain and use one, he will not only have exact lining, but will, need no i structions. Lining is not so important a matter as to need su elaborate apparatus, however; and I therefore propose to expla only the rough and ready methods of laying the guiding lines. all cases, a base line must be marked off, and an effort should made to get this and subsequent leading or guide lines also, if po sible, on level ground.

In Square planting, which is the method commonly adopted, th difficulty usually is to get the guide line at a correct right ang with the base line. If not right to start with, subsequent troub is inevitable.

A right angle may be obtained by tying the line at the fir mark to the first peg of the base line, the tenth mark on the li (nine spaces) to the fourth peg of the base (three spaces), a holding the fifth mark on the line to stretch the slack line out both directions. A peg that spot will then be at right angles the first peg of the base line; this must be carefully done, howeve The method experience has taught to be the surest is to guess square of equal sides and prove or correct it till the diagona measure the same. The feet and inches do not matter, but, if th length from one corner to the diagonally opposite one is not equ to that between the other two corner pegs, the figure cannot right-angled. Once the square is obtained, one side may be lengt ended to form a guide line, on which, with the base, a larger squa is formed. The sides should then be pegged off, when the subs quent filling in will be comparatively easy. In ordinary squa planting the exact distances, such as 6 feet x 6 feet, 7 feet x 7 fe or 8 feet x 8 feet, are usually taken.

In diagonal planting, the object is to have the trees in eve other row opposite the spaces in the base line. This gives th trees individually a little more room, or, rather, leaves less grou unused. but a few trees less will be obtained to the acre. Th lining for this method of planting may be done in the same way the square, and the alternate rows guessed at, but to be correct tw guide lines from the base line are advisable. The second gui line is made by taking the diagonal from two squares as p sketch. A mark on the lining rope is then made to fall on th second guide line wherever it crosses it. The second guide li need not have the distances marked on it, and should be allowed lie until the square is filled in. For this, the equal distances a usually taken as in the square planting.

There is also another method of diagonal lining sometimes use called the "False" diagonal, in which the odd distances, such 6½ feet, or 7½ feet x 8 feet, are taken; the base line always havi the greater distances. This is, however, irregular and somewh difficult, and has few advantages.

The third system is the easiest and best method of lining. It used less often than the square method only because it is imagine to be more difficult to lay out, whereas, in reality, the more or le difficult right angle being eliminated, it is easier. It gets its nam "Hexagonal" from the space alloted to each tree, this figure allo ing of no waste; and "Triangular" from the method of layi the guide lines from the base. Two lines or ropes are require marked as before mentioned, and of equal length. The base li then having been laid and pegged with one of them for its fu lergth, the end of one line is fastened to the first peg of the ba and the end of the other to the last peg, and the two lines a drawn out, forming a triangle. The sides are then pegged accor ing to the marks on the ropes and the triangle filled in, when th pegs will be found to be perfectly regular, having all the adva tages of the diagonal principle, and yet making every tree equ distant from its neighbour on any side.

Any side of the triangle may then be taken to form the base another, and triangles of any size may be made to suit the conto of the field, but must always be equilateral. For this method th equal distances are used, of course, and from 5 to 6 per cent. mo trees will go to the acre than on the square.

The Quincunx.—This is a somewhat irregular method, and only used when a field is designedly planted wide, and the fift tree, planted between every four (as the name implies), is intende to be eventually cut out, or a field is found to be too wide plante In either case it is easier to guess or measure from tree to tr than to line off at first for it. Should it be desired to line off in th first instance for quincunxing, it is best to complete the lining o the square first and make a separate process of putting in the fift pegs. Diagonal lines should be drawn between the four pegs each corner of the filled-in square and the lines stretched fro

these. The same lines may be used, as the distances will be exactly the same as the previous lining on the square will have been.

Finally, a word or two about lining in general. Always endeavour to get the base line not only on level ground, but across the slope. This is more important than making it parallel with the fence or road. In lining at odd distances, such as 6 feet x 7 feet or 7½ feet x 8 feet, the base line should always have the greater distances, so that, when planted up, the coffee will present the wider spaces to the direction of most of the works—*i.e.*, up and down hill.

A well-lined place looks well, but it does not pay to waste time in getting it too exact. A little deviation from the straight is not noticeable when the coffee is old, and the object of lining is to ensure your making the most of the ground and for easier subsequent working, rather than for appearance.

Should a rise or depression of any moment exist in a clearing, exact lining will be impossible, for either the distances must increase or the lines be crooked. In such cases, sacrifice appearance rather than your distances. On large areas, lining off with marked ropes is quick and cheap, but on small gardens it is sometimes done with two sticks of the required length tied together at one end. The end of one stick is placed at a peg in the base line and the end of the other to a peg in the guide line; the spot where the sticks are connected then indicates the place for the next peg, and so on. This is also useful for odd corners.

THE JAPAN TEA MARKET.

The *Canadian Grocer* remarks :—

Japan teas are in a somewhat unique position at present, they being strong in price, while those of other countries are weak.

The chief factor in this in the buying on United States account. Prices are now nearly 2c. per lb. above the opening of the market. So far the market has been following much the same course as it did last year.

According to latest mail advices the shipments to America from the opening of the market to May 18 were 1,370,381 lbs. against 873,658 lbs the same period last year. Of this amount the quantity credited to Canada is 182,192 lbs. against 47,711 lbs. for the same period last year.

The settlements at Yokohama up to May 23 were 59,500 piculs against 49,000 piculs a year ago. For all Japan the settlements were 14,000 piculs more than for the same date last year.

It does not appear likely that much lower prices will be experienced in Japan teas. The cost of producing tea there is increasing largely owing to the increasing cost of labour. It is alleged that, even at the higher prices which have been ruling during the last year, tea-growing is among the least profitable of the agricultural pursuits in Japan.

If the present high price of Japan tea is maintained, benefit will certainly accrue to Ceylon greens, although at present the growers of the latter description are anything but satisfied with the prices they have been receiving.

PLANTING PROGRESS IN THE SURMA VALLEY.

"A. P." writes in *Capital* :—

A Contemporary recently placed this district in the very first rank for the introducing and growing of plants from other regions possessing an Indian climate. Whether it be first in this respect will be a matter of opinion, but it must be admitted that it has taken the lead in growing experimentally other products than those which have hitherto been looked upon as firmly established staples. The mistake is to keep on working as if everything in nature was at an absolute standstill. We are always forgetting that there is nothing in creation absolutely perfect. When tea became a firmly established Assam product it always ought to have been borne in mind that sooner or later it as well as conditions would change to such an extent as to continually require hybridising and raising new species to take the place of the old. First his experiments ought to have been continually carried on with a few other plants in order to be ready with one to take the place of tea when from some cause or other it ceased to be unprofitable investment. If this had been done it may be safely asserted that the bad times, which the industry has, from time to time, gone through would never have been experienced. In some districts of South Sylhet—notably in the Burshijura range of hills—land has been taken up lately at a rate which reminds us of the days when tea was 'booming.' This range is by no means noted for its good quality soil, and no one would ever think of planting tea on it now-a-days. Sisal, however, will grow luxuriantly upon land which will not pay under tea, and the land is going to be utilised for that purpose. But as this range has some spots of low lying bheel lands, there are no use for growing sisal, and it is proposed to settle coolies upon such spots and allow them to cultivate *dhan*. Other products are being grown, such as Black Pepper and Vanilla, and as it has been amply proved that these succeed in the district, there can be no reason why they should not prove as profitable as they undoubtedly do elsewhere. It is difficult to imagine why Black Pepper is not largely grown in Assam, as it used to be formerly, though the little which is grown now cannot be compared with the old for pungency and flavour, chiefly because all our Black Peppercorns are imported from Bengal and are of an inferior quality. The Chief Commissioner from time to time has shown that he takes an interest in the growing of those so called auxiliaries, and has given practical encouragement to those who go in for them earnestly. South Sylhet has had during the last five years the incalculable advantage of possessing a settlement officer, who takes a thorough interest in all things appertaining to the agricultural industry. This officer has been employed since 1896 in the survey and demarcation of the *Elam* and other temporarily settled estates including grants. He has, therefore, had ample opportunity of coming in contact with a large number of the European and native planting community. That he has enjoyed the complete confidence of both must be a source of pleasure and satisfaction to him upon his leaving the district on the completion of his duties. The planting community of the district of South Sylhet is to be congratulated upon having had an officer who has taken such thorough pains in mastering all details during a distinct crisis in the tea industry.

If memory fails not it was the late Dr. Berry White who so continually deprecated the absolute empiricism of the Indian tea planter. Although we can cordially agree with him to a certain extent, it will be a poor look out for the agricultural industry of any district when it becomes denuded of the empirical planter. In saying this, we do mean to detract from the great importance which should be attached to a *a priori* knowledge of the science of agricultural practice. But there is no proprietor or his representative, who would hesitate a moment in his choice between what is known as a practical planter and an expert in agricultural science. It is not possible for a man to have too much practical experience, and it is better to have a large amount of this, even if it is at the expense of theoretical knowledge, than to sacrifice practice at the shrine of science. A great deal has been lately written upon this subject, and for the most part writers are apt to pass ever the fact that good practice in agriculture is the *ne plus ultra* of scientific agricultural perfection. So much is this the case that the splendid results obtained by good practice cannot be always thoroughly explained scientifically for the very simple reason that agricultural scientific knowledge, even at the present day, is far behind the practice.

It is to be feared that the day is still far distant when India will be possessed of planters who have been grounded in the science as well as the practice of agriculture before they enter upon their duties under tropical conditions.

And even if this ever comes to pass there will still be a difficulty to surmount. The planter who comes into this country does so for one, and only one object, and that is to make as much money as he can in a certain number of years and then clear out. In the present states of his education it is hardly to be wondered that a planter takes this view of his sojourn in India. When a youth is intended for any of the profession, or for a commercial career, his education is generally conducted in such a way as to help him afterwards. But the number of youths who are educated with a view to spending their lives as colonial agriculturists must be exceedingly small. When we take into consideration the vast amount of British Colonial possession which require agricultural exploitation it appears incredible that a recent assertion in a home agricultural journal can be correct, that there are not over 2 per cent. of Indian tea planters who have had the slightest grounding in the rudiments of agriculture, either scientific or practical, before they went to India! It has been further asserted that even those who have had such a grounding entirely cast it from them and do not carry on the study under tropical conditions.

This is a fact which is much to be deprecated. If we had a race of planters, who could bring science to aid them in their every day practice and carry on the study of tropical agricultural science hand in hand with their daily experience. they might possibly do something towards furthering the interests of the inhabitants of the country of their temporary adoption. Nepotism no doubt is, to a large extent, responsible for the unsatisfactory state of things as they exist at present, and nepotism is unavoidable in the case of tea concerns. But as this is impossible in the case of Government employés it is perfectly astonishing, when we are continually having evidence, that they are equally as ignorant of their agricultural duties as the employés of private concerns. As Dr. Bonavia remarks, the Government has been trying for twenty years to introduce the date palms into India, and has not succeeded yet. We may very pertinently ask how any one could expect any other result when the experiments have been left in the hands of canal engineers. We are apt to sneer at the Bengalee ryots and his ways, but he knows as much about the judicious breeding of his cattle as the canal engineers can possibly be expected to know regarding the peculiarities of the sexual system of the vegetable kingdom. The day may come, "as come it will for a that," when our European agriculturalists' in India will know something more about their vocation than they learn from their next door neighbour. When that day comes we may confidently expect that Indian famines, as they are understood at present, will almost be things of the past instead of standing disgrace to a civilised Government. If the district of South Sylhet is at all ahead of others in its agricultural enterprise, it is very largely due to the fact that it has had an officer who, besides his land settlement duties, has devoted a considerable amount of time and thought to both European and native agricultural industries, and other districts ought to point to it as an object lesson.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Burning Coffee.—Little by little good sense reasserts itself and the project of destroying 20% of the crop is condemned. At a meeting of the National Agricultural Society now a motion of Dr. Wenceslau Bello to the effect that such a proceeding was "arbitrary and contrary to economic principles as well as inefficient", was unanimously approved.

The Cultivation of Cereals.—One of the lessons that the coffee crisis has effectively taught is the folly of keeping all our eggs in one basket and of depending too exclusively on a single product. Reports of the inspectors of agriculture in São Paulo are uniform in describing the development of cultivation of corn (milho), rice, cane, and beans in that go-ahead State, and within a few years, if such efforts are persisted in, the country may be entirely emancipated from dependence for its subsistence on imports, and produce all it wants for itself. There is plenty of room in Brazil not only to produce most if not all required for mere subsistence, but to supply others as well. A glance at the following list of the (approximate) values of leading commodities imported in February and March, taken from the statistics of the Commercial Bureau, show how important a rôle cereals and other alimentary products, that we could perfectly well raise ourselves, play in the determination of the balance of our foreign payments. Out of a total value of Rs.68,000,000$, Rs.35,500,000$ is accounted for by the following eleven commodities:—

Xarque (jerked beef)	7,200,000$
Wheat-flor	5,800,000$
Wine	5,500,000$
Coal	5,300,000$
Cotton textiles	4,000,000$
Wheat	2,000,000$
Cod fish	2,036,000$
Rice	1,800,000$
Jute yarn	1,100,000$
Cotton yarn	1,000,000$
Beans	600,000$

There is no reason at all why we should not raise all the xarque, rice and beans we require, or even a good deal of the wine and wheat which constitute so formidable an item of foreign expenditure. Anyhow, it is good to see that a real start has been made and that corn (milho), at least, is now being produced in the country instead of being almost exclusively imported as formerly.

Crops.—Rain has fallen abundantly in the Cachoeira and Sant'-Anna districts, where the crops are extremely promising.

Coffee.—Trouble is reported in some districts between planters and "colonists" that originated in difficulties about money matters and threatened at one time to develop into serious rioting, had the disturbance not been stopped by the Police in time.

An outrageous proposal.—The Municipality of Sao Carlos proposes to create a tax of 20,000$ per annum in the form of a license on all houses engaged in the purchase of coffee in that district. On what possible grounds such a tax could be imposed is difficult to understand, except it be jealousy of the invasion of their peculiar hunting grounds on the part of *Commissarios* who are naturally powerful in the interior. Anyhow, it is unconstitutional and certain to be vetoed by the Executive.

Entries at Rio and Santos during the week ended 7th June were, in consequence partly of the holiday at Santos, 23,102 bags under those of the preceding week, but 71,772, or 212%, greater than the corresponding week's last year.

Should entries continue to the end of the month on a similar scale the total for the current crop will amount to 11,614,430 bags as compared with only 9,242,898 for the last crop 1899-1900.

Embarques or shipments were also slightly smaller, 162,472 as against 188,046 for the previous week and 73,031 for the corresponding week last year; but declared sales were larger again aggregating 112,000 as against 105,000 the previous week and 88,000 last year.

Properly speaking there was no coffee but only an exchange market during the past week as Europe put its prices up or down as exchange altered. Currency prices ruled about 7$000 for n. 7, New York type, the lowest quotation for c. f. & c. Hamburg having been 28s. with exchange at under 11½d. which was raised to 29s. on the 8th when rates improved to 11¾d. Very little real business was done, and most of it for European account, American buyers being almost entirely out of the market at present.

New coffees are increasing and reported to represent 10 to 20% of total arrivals. The quality is however decidedly poor even for the season, being between Nos. 7 and 8, whilst last year this time it averaged 5 to 6.

At Santos the market was steady with a regular business doing every day. The drop in exchange facilitated business, although it was impossible for dealers to enforce a rise in currency prices equivalent to the depreciation of the rate; export prices, therefore, receded somewhat.

We quote 4$600 to 4$800 for superior, price differences for the other grades remain the same as last week. There was no special demand but better qualities were preferred. Peaberry continues neglected and new crop washed coffees, although partly of color, show more withered black beans than usual. This seems to confirm late constant reports regarding the inferiority of the next crop, as washed coffees are generally fairly free from such imperfections.

Europe wants to buy good average at 28s. to 29s., superior at 29s. to 30s 6d., and at the latter mentioned price business could be effected with exchange at about 11½d. We have not heard of any business of importance having been done with the States.

The quality of receipts of new crop coffee is still very poor, only now and then a better sample being offered, but only very little new crop goods is coming forward so far. The weather continues favourable for harvesting.

Exchange.—*8th June*, 1901.—Ninety days' Bank rate on London opened on Monday 3rd inst. at 11 13/16, fell to 11 1/4 on Wednesday and closed this evening steady at 11 13/16d.

If, as is generally believed, a large amount of the "bull" account has been already liquidated, speculative selling during the early days of last month must have been on a gigantic scale.

Since 30th April exclusive of the Bahia banks there has been an increase of 18,094 contos in liability to Home Offices and Agents and increase of 3,874 contos in deposits, as against that of only 9,608 contos in cash, a great deal of which, however, probably represents margins for exchange speculation. Still the fact is prominent that the increase of liability at both the Foreign Banks and Banco da Republica is about double that of cash, from which it may be concluded that very little real liquidation has yet been done, and that if it has, it was by the Banks themselves providing the bills. The markets therefore, are now owing to the Banks some £2,800,000 against only £2,000,000 last month, which must be paid by delivery chiefly of coffee bills and the position is very similar to that of 31st. May last year, when the markets owed the Foreign Banks about £2,200,000. This of itself is not a very

formidable amount and with the balance of payments so decidedly in our favour, as they shortly will be again, should be easily paid off, so long as it is not allowed to accumulate by the reckless over-selling that has lately been indulged in. No doubt, just at present it is advisable to help the market a little to prevent any further heavy decline, but if the Banks are well advised, they will stick to their present policy of only selling for liquidation with themselves and set their faces resolutely against a repetition of last year's madness. If the rate can be maintained between 12 and 13d. during this month and perhaps next, the surplus of exports may then be relied upon to afford cover not only to liquidate the outstanding obligations of the market, but to send those rates up again. It is, however, advantageous for everyone that the process, if inevitable, should be as gradual as possible.

During the past week, shipments (embarques) of coffee at the two ports were somewhat smaller again, giving £243,700 as against £282,000 in the previous week and £151,000 last year, whilst rubber furnished only £ 100,000.

Altogether, coffee and rubber gave under £350,000 and were it not that importers had taken advantage of high rates to anticipate remittances, the supply of bills at the present moment would be certainly insufficient to meet demand. As it is, there is little or no market money to be found at these rates, whilst coffee shippers are said to be at length commencing to sell futures. It is, therefore, possible, that the market may be tided over the slack period until bills are plentiful again, but at the best the situation is delicate and liable to panic.

CONSUMPTION OF COFFEE.

(From the New York *Journal of Commerce.*)

Prices may decline very largely with a moderate effect upon consumption, as the coffee statistics prepared by the Bureau of Statistics show. The figures showing per capita consumption appear to have been obtained by dividing the importation by the estimated population, which does well enough over a series of years, but it indicates marked fluctuations of consumption from year to year, which probably do not exist, the fluctuations being in the importation. But it is probably safe to infer from them that the use of coffee is increasing.

How little the price has to do with the increase, however, is shown by the fact that in 1894, when wages had been cut and many persons were out of employment, and economy was generally practiced, particularly in the consumption of spirits and cigars, the average price of coffee was 16·4 cents, and the consumption per capita was 8·3 pounds, and this figure would be scarcely changed if we averaged 1894 and 1893 But in 1900, with wages up and employment general, and unprecedented prosperity, the price of coffee had gone down to 6·5 cents and the consumption had gone up to only 9·81 pounds. These figures warrant the inference that the country used coffee freely at a time when the price was relatively high and the ability to pay it was reduced. If it was drinking all the coffee it desired in 1894, it had little disposition to increase its consumption, because the price had fallen much more than one-half and economy was no longer needed.

There is a distinct flavor of a high tariff propaganda in the observation of the Bureau of Statistics, which no longer confines itself to figures, but obliges the country with arguments based thereon, that "the people of the United States are sending out of the country more than a million dollars a week in payment for coffee consumed in this country, all of which could be readily produced in Porto Rico, Hawaii and the Phillippine Islands, which have already shown their ability to produce coffee of a high grade, commanding high prices in the markets of the world." How often have we been informed how much money the country was parting with for arrowroot and cayenne pepper and Easter lilies, and other things which could be produced at home by making the price high enough. We have been told over and over again how much the country could save by paying double present prices for things which it now imports. Has the Bureau of Statistics only just discovered that the islands we have acquired produce coffee of a high grade? The commercial world has known it for a long time. It is the high grade—and high price—of the coffee of Porto Rico that makes it so little known in this country. Of the coffee imported in the past nine months, 82 per cent. came from Brazil, whence the cheapest coffee is imported. This Brazilian coffee was so large a part of the whole that the average price of all coffee imported was 6·5 cents. Does the Bureau of Statistics imagine that Porto Rico desires to sell coffee to us at that figure? If not, how are we going to divert the money we pay for coffee from a foreign country to a dependency? Perhaps the Bureau of Statistics will recommend a duty of fifteen or twenty cents a pound on coffee in order to "save" the money now shipped abroad to pay for Brazilian coffee. We expect it, in common with other agencies of the same sort, to explain to the country how many million dollars it would save annually by paying three times what it now pays for coffee.

TEA SALES—NEW STYLE.

The *London Commercial Record* remarks :—

In these days of keen competition and small profits men's minds are often sorely tried to devise some effective means of protection or distinct advantage, and manifold and extraordinary are the experiments to which some people have recourse. History is rich in anecdotes and interesting stories and episodes resulting from the cunning which some one or another displayed in his endeavour to steal a march on his opponent or competitor, but in these enlightened times one has to get up very early in the morning to gain a distinct and lasting victory over one's neighbour, all too soon the best laid plans are divulged and effectually counteracted. This has just been experienced by a gang of youthful operators in the Tea trade to whom apparently the exchanging of and dealing in foreign stamps has been too slow and laborious a calling' and who preferred quicker means to secure the much coveted pocket-money. It appears that these young operators had set to work in the most systematic and businesslike manner.

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

CROSSE & BLACKWELL'S, LTD.

By Special Warrant Purveyors to The Queen AND Empress of India.

CELEBRATED OILMAN'S STORES.

[w. 11-0-98 -t.f.o.]

They attended with praiseworthy regularity every public Tea sale, and took down with great pain and accuracy the name of each buyer, and the price he paid for each lot, and forwarded this information and in some cases the entire priced catalogues to his clients in town and country. These clients, are of course dealers and consumers, who are in the habit of drawing their supplies from London dealers, and who through their acquired knowledge of the price paid in auction by their London seller, were able to beat him down to a nominal profit, or in other ways influenced his dealings. For these secret services the young informers received a few shillings weekly until the Tea Association rightly determined to put a stop to this nuisance by endeavouring to exclude this particular class of offenders from the sales. Hence the astonishing announcement that admission to the public Tea auctions can now be only gained by tickets, which are to be obtained by application in writing to the Secretary of Tea Brokers' Association. It is to be hoped that this step will have the desired result, although it is very open to doubt whether the offending class will be absolutely excluded. There is no other trade we know of where such mischief is done by an irresponsible body of boys, and the Tea brokers and dealers are to be congratulated upon the energetic step they have taken in the protection of their business. A more vexing and detrimental proceeding against a fairly competing body of men is difficult to conceive, and no measure should be too severe to protect their interest. The attendance of serious buyers will not be diminished by the enforced rule of admission by tickets, but whether the undesirable element will be effectually exterminated remains to be seen.

A TALK ABOUT TEAS.

The *Montreal Star*, of June 18, remarks :—

Teas, their increased consumption and their remarkable displacement as regards markets, formed the subject of an interesting interview to-day at the Windsor given by Mr. P. C. Larkin, of the 'Salada' Tea Co., a former Montrealer.

"People are drinking more tea than they used to," said Mr. Larkin. "For instance, the consumption of tea has increased in Great Britain from four pounds per head a few years ago to six pounds per head to-day. It would seem to be a highly healthful beverage, for the Anglo-Saxon is the largest tea consumer, and, as a race, he seems to retain his health and vigor fairly well. Australia, Great Britain, and Canada are the great tea-consuming countries and the inhabitants have always been noted for their excellent general health.

"The prominent feature of the trade? Well, one of them is certainly the way China has dropped into the background. For instance, about 12 years ago China shipped into England on an average 160,000,000 lbs. of tea annually. Last year the shipments dropped to 17,000,000 lbs. Now, Japan ships tea to nowhere in the world except the United States and Canada, and, therefore, it is a matter of life and death for her to hang on to her trade in those countries. What is Japan's position to-day? Why, the imports of Japans last year into Canada amounted to only 9,000,000 lbs., while the smallest previous imports for a year amounted to between 11,000,000 and 12,000,000 lbs. This shows gradual displacement.

"The object of the Tea Trust being formed is undoubtedly to endeavour to head off the rapid progress that has been made by Ceylon green tea in pushing out the consumption of Japans. Practically all the Japan tea trade is in the hands of Americans, the Canadians not having firing plants in Japan. Ceylon green teas were introduced into America by the 'Salada' Tea Company two years ago, and have made the most wonderful progress on all hands, and promise, indeed, to displace Japans just as Ceylon black tea has displaced China black.

"All green tea in the dry leaf should be a dark olive or brown color. There is another thing in their favor, however, that counts for something with the Canadian public, and that is that Ceylons are produced by our fellow-colonists, and not by the Oriental. Every pound that comes out of the country has the sanction of the Ceylon Government as to its purity.

"We are able to accurately judge of the effect of Ceylon greens on the American public inasmuch as we have branches in Boston, Detroit, Pittsburg, and Buffalo, as well as do business in the other large American cities through wholesale grocers. Our operations in Canada radiate to every village and hamlet from Sydney, C.B., to Vancouver, B C."

AN OVER-SUPPLY OF TEA.

The *Canadian Grocer* reports the condition of the tea market i Canada is still in an unsatisfactory condition as far as Indian an Ceylon descriptions are concerned. The cause of this is the larg quantity of low-grade teas which have been shipped here on consign ment from Calcutta and Colombo during the last couple of years.

In some of the cities there are low-grade teas which have bee held for two years. At present the demand is light indeed for low grade teas, and the sales that are being made are, as a rule, at a loss A loss of 1c. per lb. is quite common, while we hear of a transactio a few days ago at a price which meant a loss of 4c. per lb. There i one lot of teas held in Toronto on which the holder would lose, if h could find a customer to-day, at least 35 to 50 per cent.

This state of affairs is likely in time to remedy itself; in fact already consignments are falling off. According to the figure published by the Colombo Chambers of Commerce, the exports o Ceylon tea to America from January 1 to May 13 had fallen of nearl one-half compared with the same period last year, the quantitie being 1,093,072 lbs. and 2,053,598 lbs., respectively. The exports t all countries, however, are nearly the same as last year, bein 52,083,925 and 52,140,317 lbs., respectively. These figures do no include green teas, of which 19,290 lbs. were exported, 12,010 lb being for America and 7,280 lbs. for India. The exports of India and Ceylon tea from Great Britain to Canada, have, however, rathe increased during the 10 months of the fiscal year ending April 3 as will be gathered from the following table :

	1900 (10 months). Lbs.	1901 (10 months Lbs.
India	1,358,601	1,508,971
Ceylon	1,511,181	1,498,174
Total ...	2,869,782	3,007,145

Although there is such an abundance of low-grade teas, flavor teas are, on the other hand, scarce and wanted, and have been fo some time.

COFFEE LABOUR IN B. C. A.

A correspondent of the *Morning Post* writes :—

THE COFFEE DISTRICTS.

The coffee districts lie almost entirely round Blantyre, within radius of twenty-five miles, and on the slopes of the Mlanje rang It is said, and I believe with truth, that if all the natives in thes districts could be induced to do a month's work in the year ther would be enough labour and to spare for all the coffee estates The real difficulty is to induce these people to do their four weeks work, for they are constitutionally averse from doing anything Beyond a payment of 3s. a year they have, under the presen system of government, no obligations to anyone, and the sum jus named is easily raised by the sale of a few fowls or a pig. Indeed the disposal of a pig will suffice, at present rates, to pay the taxe of a small village. To remedy matters an increased hut tax ha been suggested; but whatever money the Government exacts fro the native is obtained by the native from the settlers. It woul seem, therefore, that to double the impost would be merely t double the price of necessities already sufficiently high. Th remedy which I would suggest as most fitting to meet the cas would be for the Government to decline to issue a tax receipt to an man who cannot show when he brings his money to the Boma— the Collector's office where taxes are paid—that he has done a least one month's work. Against this remedy it may be argue that it is simply a reversion to the condition of slavery, to do awa with which a Protectorate was theoretically established. But ar the people for whom some thousands of pounds have been expende to do nothing in return? Are the settlers, who have invested thei capital, to lose it all because some people entertain mistaken idea of the real native, and consider that the most heinous of crimes i to make a man do something for himself, or make some return fo benefits received? The tramp who cuts firewood or breaks stones i a workhouse, in return for a night's lodging, is as much a victim o slavery as the Blantyre Ysos would be in doing a month's work year on a coffee estate. But on the subject of the tramp the voic of Exeter Hall is strangely silent, perhaps because the authoritie there know him better than they do the African.

WORD OF WARNING.

That a remedy such as I have suggested could be introduced in British Central Africa without any difficulty or trouble is, I think, certain. Some few would, perhaps, object at first, but if they were dealt with promptly—as are contumelious tramps—any trouble they might cause would end in their own undoing. Should, after fair trial, such a system still leave some planters with an insufficiency of labour I should advise the direct importation into the Blantyre district of whole families, villages even, of Chipeta and the so-called Angoni. These people would be settled on various estates and would have to work for pay three days a week, the other days being given them to tend their gardens and so forth. By this means planters not only ensure a constant supply of labour, but the women and children would form a reserve force which any man worth his salt in dealing with natives would be able te call on for help in the times of his greatest need. The satisfactory working of this scheme depends entirely on the individual white man concerned in each case, but, since I cannot remember, at the present moment, any planter who is not by his own showing thoroughly liked and trusted by every native with whom he comes in contact, its success would be assured from the outset. In conclusion, under this head I would offer a word of warning to planters in British Central Africa. Never in any circumstance let them have a larger acreage under cultivation than they have a permanent labour force, of one man per acre at least, to work the domain. Fifty acres properly cleaned and properly cultivated will give better returns than five hundred acres half scrub and undergrowth, with here and there a coffee bush struggling for existence.

INDUSTRY IMPERILLED.

But there is in British Central Africa a want of unanimity among the settlers which prevents them making any effort in common. Nature and the natives almost appear to have combined to place difficulties in the way of these who are on the spot for the purpose of earning their livelihood Nature has provided a splendid waterway from the Chinde mouth of the Zambesi to the north end of Lake Nyasa, except for some forty miles which it has taken care to render impassable. The natives are there in any numbers, but they have elected to live some two or three hundred miles from the places where their services are most needed. As time goes on they seem less and less inclined to come to work where they are wanted, not only causing great delay in the transport of goods but seriously imperilling the existence of the coffee industry. It must be borne in mind that, owing to the precautionary measures taken to ensure the prevention of coffee disease in British Central Africa, the coffee has become so inbred that it is now entirely lacking in stamina. It is, accordingly, peculiarly susceptible to the attacks of many enemies, and unless it receives constant care and attention it yields no returns whatever. The incessant attention thus rendered necessary demands a continuous supply of labour, which is not now to be obtained.

DISTRICT ASSOCIATIONS.

CENTRAL TRAVANCORE.

The half-yearly General Meeting of the above was held at "Fair field Bungalow" on 13th instant. PRESENT :—Hon'ble Mr. G. L. Acworth (*Chairman*), Messrs. Buxton Laurie, H. D. Deane, Hon'ble V. R. B. Wilbraham, F. Bissett, F. M. Parker, D. McArthur, H. M Knight, E. Latter, and W. H. G. Leahy (*Honorary Secretary*). *Visitor* Mr. W. Graham.

Honorary Secretary having read notice calling the meeting, the minutes of last meeting were taken as read.

Vote of Sympathy.—Before proceeding with the business of the day, the following resolution was unanimously carried: "That this Association wishes to convey to His Highness the Maharajah its deep sense of sympathy with him in the losses he has recently sustained."

The Chairman then addressed the meeting as follows:—

GENTLEMEN,—I have now a much pleasanter duty to perform in welcoming back to our ranks Messrs. Parker and Wilbraham. We all deplore equally with them the causes that have brought them back to this country, indeed we are sufferers equally with them, but it is all ill wind that blows nobody any good, and I am heartily glad to see them amongst us again. In the present critical state of our affairs we want the benefit of the counsel and good sense of all earnest men, and for these we shall not look in vain to Mr. Parker, the father of this Association, whilst Mr. Wilbraham has always been a loyal supporter thereof. It must also be a gratification to this Association to see that our old friend and late British Resident, the Hon'ble Mr. Thomson, has been confirmed in his appointment as one of the Council of H. E. the Governor. I feel sure you will wish to forward to him a formal notification of our satisfaction and hearty congratulation.

Gentlemen, I am not going to weary you with a long speech, but, as you know, there has been no improvement in the position of the Tea Industry since we last met together and, so far as I can see, it is impossible there can be any improvement, until we have found new markets for our wares. I would therefore most earnestly commend to your attention the scheme formulated by the Kanan Devan Association for popularising good cheap teas with the natives of S. India Your Committee willingly withdraw their own scheme in favor of this one, which they consider not merely more feasible, but more businesslike and embracing a wider area. You have seen that Messrs. A. Yule & Co. have offered to relieve the Indian Tea Association and undertake the work of exploiting the North. No doubt their offer will be accepted, but we do not yet know whether they will come so far South as this, and your Committee thinks that we ought to be prepared for all eventualities and have our plan cut and dried, so that, if Messrs. Yule & Co. confine their operations to the North, we may at once set to work in the South. I trust that all Associations will hold these views. But, gentlemen, what we want above and beyond everything is the compulsory cess. If only we could get that and, having got it, utilise it well and wisely, I feel convinced we should once more soon see daylight. As you know the South has gone solid for the cess, and I hope now it will not be long before we learn the result of the plebiscite in the North. I have heard it hinted, that, even should the Northern vote prove satisfactory, it is most unlikely that the powers that be will consent to the imposition of the cess. This I, for one, cannot believe. When we consider the magnitude of the Tea Industry, the vast capital invested therein, how beneficial it is, the amount of labour it employs, the money it circulates in the country, how it populates the waste places of the land, turning the wilderness into fruitful and revenue-producing fields, I cannot but think a favorable ear will be turned to us. And, gentlemen, we must recollect this. The ruin or partial ruin of the Tea Industry does not merely mean the ruin of a number of proprietors and superintendents, who can look about them and find a livelihood elsewhere. It means the ruin, or at any rate the crippling of the resources of a number of retired officers, of many widows and orphans, of those with small means, who, attracted by high dividends in the past, have placed their all or nearly their all in the Tea Industry. The partial ruin of this industry would be a national, not an individual calamity, and for this reason also I believe we shall receive consideration. Finally, we have a precedent in the pecuniary assistance given by the Government to the Indigo Industry, and as we do not ask Government for a single pie, but only appeal to it for aid to help ourselves, I think that also will be in our favour and that we shall meet with a ready assent.

Roads.—Proposed by Mr. H. D. Deane and seconded by Mr. H. M. Knight: "That the Head Officer, P. W. D., Trivandrum, be requested to either visit the district himself before the end of July, or to depute an European engineer to do so, with the object of making himself acquainted with the present system of road upkeep in wet weather; and that a copy of this resolution be sent to the British Resident and to the Dewan, asking them to support it, and pointing out that no European engineer has visited the district for three years." Carried *nem. contra.*

Post Office.—Proposed by Mr. Deane and seconded by Mr. Latter: "That the P. M. G., Madras, be asked to employ an assistant at the Peermaad P. O. capable of working the telegraph in event of need." Carried *nem. contra.*

Cart hires.—Proposed by Mr. Latter and seconded by Mr. McArthur: "That Superintendents of Estates send in to Honorary Secretary rates of cart hire now being paid up and down, and that all estate carts have a plate with Estate's name. This to be circulated and sent to Cottayam agents." Carried *nem. contra.*

Bangalore Delegates.—Hon'ble Mr. G. L. Acworth and Mr. E. Latter were unanimously elected to represent this Association

at the Bangalore Conference, and Rs.150 was voted to Mr. Latter for travelling expenses.

Sale of Tea in India.—Proposed by Mr. Parker and seconded by Hon'ble V. R. Wilbraham: "That this Association approves of the Kanan Devan scheme, and that a minumum cess of Re.1 per cultivated acre be levied, larger subscriptions being optional." Carried *nem. contra.*

Mr. Parker added this Association's delegates should impress upon the U. P. A. S. I. that the minority against the scheme should sacrifice their wishes to the majority, and join in.

Ceylon Import Duty.—Proposed by Mr Deane and seconded by Mr. Knight: "That this Association approves of the proposed support of the Indian Tea Association in the matter of pressing on Government the hardships to South Indian planters in being debarred from using the Colombo market, by the Ceylon import duty of 4 annas per lb., and at the same time would urge the necessity of Inspectors being appointed either in Ceylon or in India, to prevent the export of rubbishy teas to India. That as a proof of the export of such rubbish, we would refer the I. T. A. to the sales, from 13th May to 7th June in Colombo, when 3 ,000 lbs. of "tea" were sold at a fraction over one anna per lb." Carried *nem. contra.*

Forwarding Agent at Cumbum, and Medical Attendance on Writers, etc.—Messrs. Knight and Buxton Laurie withdrew their resolutions, and it was decided by the meeting to leave the preliminaries to be arranged for by the Honorary Secretary who will report at the next General Meeting.

Member of Committee.—Mr. F. M. Parker was unanimously elected a permanent member of the Committee.

With a hearty vote of thanks to the chair, the meeting terminated.

Papers laid on Table.—

Indian Gardening and Planting.
Indian Tea Association Circulars.
Travancore Government Gazette.
Planting Opinion.
Proceedings of Wynaad Association.
Do. Nelliampathy do.
Do. Kanan Devan do.
Do. S. Mysore do.
Do. Shevaroy do.
Do. Nilgiri do.
Do. Coorg do.

W. H. G. LEAHY,
Honorary Secretary.

KANAN DEVAN.

Minutes of Quarterly General Meeting held in the Munaar Reading Room, 20th July, 1901. PRESENT:—Baron Von Rosenberg (*Chairman*), Messrs. P. R. Buchanan, T. W. Schmid, H. S. Holder, F. J. Graham, W. M. Taylor, R. W. Cole, H. R. Quartley, Chas. Brander, R. Harely, K. E. Nicoll, W. Pottie, R. F. Thorp, M. C. Koechlin, H. L. Pinches, W. O. Milne, G. Stuart, J. S. Patterson (*Honorary Secretary*).

1. Proceedings of last meeting were taken as read.

2. **Delegate for Bangalore.**—The following proposal, proposed by Mr. P. R. Buchanan and seconded by Mr. T. W. Schmid, was carried unanimously: "That Baron Von Rosenberg do attend the Annual Meeting of the U. P. A. S. I. as Delegate and that a sum of Rs.200 (Two hundred) be granted for expenses.

3. **Occupation of Bodi Mettu Rest-House by Travancore Government Officials.**—Read letter from Honorary Secretary, of 4th June, to Sub-Division Officer, Kottayam, and to Rest-House Butler, Mettu, informing him that officials on Circuit could make use of the Rest-House meantime. After a lengthy discussion on the inadequate accommodation and discomfort of the Rest-House the following proposal made by Mr. R. W. Cole and seconded by Mr. W. O. Milne was unanimously carried: "That the D. P. W. do be written to and asked to take over the Rest-House and to improve the accommodation."

4. **Bodi Ghat Road.**—A bill from Suriauallee Estate was produced showing a sum of Rs.1,001-4-7 as spent on upkeep of the road. As the Grant is only Rs.750 it was proposed by Mr. Buchanan and seconded by Mr. Schmid that Mr. Knight be written to and asked how the excess was spent and on what authority he overspent the Grant. It was pointed out by the Chairman that although far more money was said to be spent on the road now than in former years, it had never been in worse order, and asked the Secretary to try and get a contractor to keep the road in proper repair and see that the money spent was not wasted.

5. **Munaar Mettu Road.**—Read extract from report of Sub-Division Overseer, D. P. W., granting only Rs.45 in payment for 2½ miles of the three miles repaired from 9th to 6th mile posts although the whole mileage had been carefully repaired and cost the Association some Rs.80. Extract from Dewan's letter, of 31st May, to Chief Engineer, Travancore, was read stating that although only Rs.291-6-0 out of the Grant Rs.378 was paid for the last half of 1075 (Malabar year), the full amount of the Grant should be paid for the year 1076 if work was done, and suggesting that a proper specification should be furnished to the Association. As this has never been done and the proper payment of the Grant is evidently again being evaded, it was proposed by Mr. Buchanan and seconded by Mr. Holder and carried unanimously: "That the Travancore Government be written to and informed that as no specification is furnished and the Grant is not being fully paid although it is largely overspent, this Association regrets that it cannot carry on the work without a more definite and more satisfactory arrangement being come to." Baron Von Rosenberg was asked to bring up this matter at the Bangalore Meeting if he thought it advisable.

6. **Bridge over the Kundale River.**—This work being practically completed Mr. Quartley handed in a memo. of cost showing that a sum of Rs.1,550 had been expended on the work. The Grant from the Travancore Government towards the bridge being only Rs.1,000 the Association has to defray the difference. Rs.1,550 being the estimate it has not been exceeded. The Chairman moved a vote of thanks to Mr. Quartley for the trouble he had taken in supervising and getting the work put through, which was seconded by Mr. Graham and carried.

7. **Exploitation of Tea In India.**—Read letter from Messrs. Finlay Muir & Co., Calcutta, to Mr. Buchanan on Messrs. Yule & Co.'s proposals, also letter from Mr. Ackworth to the Chairman saying that "The Peermaad Association ought to go in for the Kanan Devan Association sale of Tea in India scheme" (as drafted by Mr. P. R. Buchanan) "if Yule & Co. do not come so far South."

Read telegram just to hand stating that Yule & Co. wish their scheme to include South India, in reply to a telegram sent by Mr. P. R. Buchanan to Finlay Muir & Co., Calcutta, asking "Will Yule & Company's scheme include South India." After some discussion it was proposed by Mr. Buchanan and seconded by Mr. Pinches: "That provided the South Indian Tea Association are satisfied that Messrs. Andrew Yule & Co. will work South India concurrently with northern and other parts of India, this Association approves Messrs. Yule & Co.'s proposal." The Delegate would bring this up at the Bangalore Meeting.

8. **Harbour on West Coast and Export Duty on Coffee.**—It was decided to leave these questions for the Delegate to deal with at Bangalore.

9. **Medical Grant.**—Read a letter from Dr. Kerr pointing out that the Sothapara Dispensary had regularly sent in the necessary returns to the Travancore Durbar physician but that the Grant had not yet been received.

Proposed by Mr. Nicoll, seconded by Mr. Harley: "That the Honorary Secretary do write to the Dewan for payment of the Grant promised in his letter of 21st September, 1900, to the Association."

10. **Association Cess and Financial Statement.**—A statement of Income and Expenditure was handed round and it was agreed that the cess of 12 pies per acre be collected at once for the current year.

11. **Volunteer Movement.**—Read Mr. Milne's resignation on the Committee as he was leaving the District and his good wishes for the prosperity of the Corps. Mr. Stuart was elected to fill his place on the Committee. In the course of discussion the Chairman pointed out that little progress was being made with the formation of the Corps and it was commented on that red tape should be so bad still in India after the lessons of the war. Mr. Patterson said that nothing could be done until someone was sent up to enrol the members of the Corps.

J. S. PATTERSON,
Honorary Secretary,

MARKET REPORT.

[*Per Mail advices of 5th July* 1901.]

COFFEE.

The London Commercial Record says:—The market opened with a flat tone, and it was difficult to effect sales at previous rates, but latterly there was some improvement in the demand and all desirable qualities sold at steady rates, and the closing quotations show on material change for the week. A small shipment of Ceylon realised very full prices. The market for "futures" has been quiet, and the slight changes which have occurred have been in favor of buyers; yesterday business was done in July delivery at 29s, december at 29s 9d, and March at 30s.

London ...	Santos ...	Sept. delivery	... 29s 6d.
New York ...	No. 7 Rio...	„	... 5·20 cents.
Hamburg...	Santos ...	„	... 29½ pf.
Havre ...	Santos ...	„	... 36 francs.

Auctions to-day comprised:—5 barrels 17 bags Jamaica, 726 bags Costa Rica, 589 bags Vera Paz, 1,602 bags Salvador, 747 bags Guatemala, 1,032 bags New Granada, 841 bags Colombian, 279 bags Nicaragua, 169 bags Coban, 62 bags Honduras, and 95 bags Mexican. Good qualities sold at full prices, with a brisk demand, but common grades were dull and lower.

At the Dutch Trading Company's public sale, held in Amsterdam, on Tuesday, 18,470 bags 50 cases were offered; good ordinary Java realised 32c against 31½c valuation, and 31c last sales held in Rotterdam. The following are some of the particulars:—

Lying in Amsterdam.

No.	Bags.	Valued at Cents.	Result Cents.
1	1,172	31	33¼ @ 34
2	302	32	34¼ „ —
3	700	31½	34 „ 34½
11	1,282	32	33½ „ 33¾
13	864	36	37 „ 37½
17	329	29	29¼ „ —

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	22,859	20,294	33,312	25,435
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	10,897	9,161	14,301	10,722

The preceding figures exhibit— Tons.

In the Imports an increase this year of ...	7,877
Home Consumption an increase of	1,736
Export an increase of	3,579
Stock an increase of	2,565

Auctions this week have passed off as under:—

CEYLON.—*Plantation.*—6 casks 2 tierces 12 barrels 2 bags sold, smalls 40s to 53s, good middling blue 106s to 110s, good bold 112s to 118s, peaberry 110s to 127s.

EAST INDIA.—1,938 bags partly sold as follows:—*Mysore*, smalls 35s to 43s 6d, low middling to middling 41s to 53s, bold 60s to 67s, peaberry 45s to 57s; *Coorg*, smalls 35s to 39s 6d, middling 45s to 45s 6d, bold 55s to 58s 6d, peaberry 33s to 57s 6d; *Neilgherry*, smalls 35s to 38s. low middling 39s to 41s, good middling 48s to 51s, peaberry 46s to 57s; *Nelliampathy*, smalls 35s 6d to 37s, low middling to middling 39s 6d to 43s, bold 58s, peaberry 45s; *Peermaad*, smalls 36s 6d, low middling 39s 6d, peaberry 43s 6d; *Wynaad*, low middling 40s, bold 50s, peaberry 50s 6d to 52s 6d; *Naidoobatum*, peaberry 49s.

JAVA.—*Liberian.*—136 bags brought in.

NYASSALAND.—55 bags sold—smalls 33s 6d, good ordinary 34s to 37s, peaberry 35s 6d to 37s.

JAMAICA.—208 barrels 11 bags partly sold—smalls 34s to 38s, ordinary to fine ordinary greenish 30s to 39s, low middling to middling greenish 40s to 44s 6d, good middling blue 60s, bold 70s to 80s, peaberry 33s to 40s.

COSTA RICA.—Of 4,981 bags offered 3,220 bags sold, smalls 30s to 40s, ordinary to good ordinary 34s to 39s, low middling to middling 40s to 48s 6d, good to fine middling 51s to 60s 6d, bold 59s to 64s 6d, good to fine blue bold 65s to 81s 6d, peaberry 41s to 70s.

GUATEMALA.—5,118 bags catalogued and 2,300 bags sold, smalls 30s to 38s 6d, good to fine ordinary 36s to 39s, low middling to middling 40s to 48s 6d, good middling 51s, peaberry 39s to 59s.

COBAN.—71 bags sold—smalls 39s 6d, bold 60s 6d.

NICARAGUA.—1,465 bags offered and 1,280 bags sold—smalls 29s to 37s 6d, good to fine ordinary 35s to 39s 6d, middling to good middling 43s 6d to 55s, fine middling 60s, bold 51s, good to fine bold 73s to 96s, peaberry 38s to 91s.

SALVADOR.—1,340 bags half sold—smalls 31s to 32s, good ordinary 36s, fine ordinary 38s 6d to 39s low middling to middling 40s to 44s, bold 51s to 55s, peaberry 40s to 56s 6d.

MEXICAN.—Of 791 bags offered 480 bags sold—smalls 32s to 35s 6d, fine ordinary to low middling 38s to 43s 6d, middling 46s 6d, bold 52s 6d. peaberry 45s to 46s.

COLOMBIAN.—Of 1,429 bags offered 1,050 bags sold—smalls 27s to 34s 6d, ordinary to fine ordinary 30s 6d to 38s, low middling to middling 39s 6d to 47s, bold 46s to 55s 6d, peaberry 35s 6d to 46s.

ECUADOR.—231 bags partly sold—bold 33s.

VERA PAZ.—12 bags sold at 56s 6d for good middling.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags.	1898-99. Bags.	1897-98. Bags.
Rio ...	39,000	21,000	26,000	44,000
Santos ...	62,000	57,000	53,000	84,000
Total...	101,000	78,000	79,000	128,000
Crop...	—	10,900,000	8,971,000	8,772,000

Rio Exchange 11$\frac{17}{32}$d, previous day 11$\frac{9}{16}$d.

HAVRE, *July* 4.—Good average Santos July opened quiet at 35¼f. and closed steady at 35½f., September opened at 35¾f. and closed at 36f., December opened at 36¼f. and closed at 36¾f., March opened at 37f. and closed at 37¼f., May opened at 37¼pf. and closed at 37½pf.

HAMBURG, *July* 4.—Good average Santos July opened quiet at 28¾pf. and closed steady at 29pf., September opened at 29¼pf. and closed at 29½pf., December opened at 30¼pf. and closed at 30¼pf., March opened at 30¾pf., and closed at 31pf., May opened at 31¼pf., and closed at 31¼pf.

NEW YORK, *July* 3.—Closing prices of No. 7 Rio were as follow:—

	July.	Aug.	Sept.	Oct.	Nov.
July 3...	5·10	5·15	5·20	5·25	5·30
July 2...	5·05	5·10	5·20	5·25	5·30

TEA.

INDIAN.—The amount brought forward was smaller, *viz.*, 7,000 packages, of which 2,000 packages were new season's against 9,400 packages (790 new season's) in the week before and 6,100 packages (4,400 new season's), for the corresponding period 12 months since.

There was again brisk bidding for invoices of this year's growth, particularly for parcels with full flavoured liquor, although quotations were somewhat irregular. Shipments of old crop did not shew much change demand running chiefly on medium to fine sorts.

Deliveries are now assuming a normal character, those for the past month being 7,495,000 lbs. compared with 7,002,000 lbs. in June 1890. The bonded stock appears heavy, but with lighter shipments to this country from April to 30th ultimo, namely, 8,118,000 lbs. versus 12,610,000 lbs. for the same time a year ago, statistical position should ere long improve.

CEYLON.—Sales comprised 23,000 packages on Tuesday and 9,000 packages on Thursday, together aggregating 32,000 packages, contrasted with 24,300 packages on the 25th ultimo, and 20,500 packages in 1900.

The market opened quietly, some indisposition to purchase being evinced as buyers were inclined to wait the result of Thursday's offerings, and many lots were withdrawn. Towards the close of the auction, however, orders came in more freely, and there was better competition, and for the portion disposed of former rates were in the majority of instances about maintained.

Yesterday, when admission to the room was by ticket only, there was a stronger enquiry, prices being on the basis of last week.

London clearances during June were 7,276,000 lbs. *versus* 7,633,000 lbs. in 1900, while the bonded stock is similar to what it was then.

JAVA.—Rather over 1,300 packages of direct import passed the hammer, steadily as a rule, Broken Pekoes being occasionally a little dearer.

CHINA.—The *Himalaya* has arrived from Shanghai and Foochow with the first of the new pickings. About 800 packages from the north have found purchasers at from 6d to 1s 5½d per lb., and a few Paklings have been sold at from 6¼d to 7d per lb. Black Leads are considered fairly good, but Paklings so far are below the average quality.

Deliveries.—The clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 30th June, 1901	...	12,299,587 lbs.
Do. do. 1900	...	13,092,700 ,,

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India ...	5,771	1,246	7,017
Ceylon ...	18,517	13,523	32,040
Java ...	1,175	160	1,335
Total ...	25,463	14,929	40,393

Also 964 packages from second hands.

Arrivals of Tea:—

	From Calcutta.	From Colombo.
	Lbs.	Lbs.
Ex *Himalaya*	...	73,000
,, *Antenor*	...	1,204,000
,, *Awa Maru*	...	1,043,000
,, *Shropshire* (reported) ...	...	1,084,000
Totals ...	...	3,404,000

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated July 5th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1901-1902	50,949	148,721	7,139
1900-1901	22,179	115,592	3,956

7,579 *pkgs.* INDIAN
33,575 ,, CEYLON
1,335 ,, JAVA
} Total 42,489 packages were offered in public auction this week.

The prospect for Tea growers is slightly improved by the smaller quantity shipped from India since the first of April, and from Ceylon since the first of January, the aggregate showing a reduction of about 7½ million pounds.

This, when taken in connection with the steady increase in the use of Indian and Ceylon Tea in outside markets is a hopeful feature, but by no means sufficient to relieve the over-pressure occasioned by the recent heavy increase in production.

The surplus must be largely worked off before any substantial relief is afforded.

INDIAN.—Monday's small sale passed with fair spirit especially for better liquoring kinds of new season's Tea. 382 "last of the season" invoices have been sold against 400 during the corresponding period of 1900. The official telegram gives exports to U.K. for the second half of June as 4,100,000 lbs. against 6,850,000 lbs. in the same period 1900, and from 1st April to 30th June as 8,118,000 lbs. against 12,610,000 lbs. in 1900.

Week's average of New Season's Tea sold on Garden Account 1901, 3,127 pkgs., av. 7·64d. 1900, 4,588 pkgs., av. 6·75d.

New Season's Tea sold on Garden Account 1st June to date 1901, 10,047 pkgs., av. 6·64d. 1900, 11,055 pkgs., av. 6·89d.

CEYLON.—Tuesday's Ceylon sale comprised 22,904 packages, while 9,839 were printed for the auction in the private room on Thursday. The former sale was neglected by many dealers, the bulk being in consequence withdrawn; a great deal of the taken out tea was, however, sold privately afterwards. Thursday's sale passed with good spirit at prices fully up to rates current last week.

The official telegram gives the quantity exported to U.K. for June as 11,500,000 lbs., against 12,750,000 lbs. last year, and estimates that for the month as 10 to 10½ millions, against 11,750,000 lbs. shipped in July last year; making the total from 1st January to date as 59,250,000 lbs., against 62,250,000 lbs. in 1900.

Average for week 6·24d., against 6·63d. same week, 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 651,054 pkgs av. 6·58d. 1900, 647,779 pkgs., av. 7·26d.

JAVA.—With good competition the teas were mostly sold in th room at fairly steady rates.

Bank Rate 3 per cent. Exchange on London three months sight: Calcutta 1/4 3/32. Colombo 1/4⅛.

COCOA.

Large supplies were brought to the hammer on Tuesday, th total reaching 10,950 bags, the great bulk West Indian Grenad growth was the only kind for which there was any substanti demand and prices all round declined 6d to 1s per cwt. Of 2,66 bags Trinidad offered, 410 bags sold at 70s to 74s 6d for good t very fine, being 6d to 1s lower. Of the heavy quantity of 4,74 bags Grenada catalogued, fully 4,000 bags were placed at a depreci tion of 6d to 1s—very fine 67s 6d to 68s, good to fine red 63s to 6 and common to fair 60s to 62s 6d. 60 bags Dominica partly sol at 58s 6d to 62s for common to good, and 138 pags St. Luc realised 63s to 63s 6d for fine, and 58s 6d to 62s for common t good, both of these being in buyers' favor. 11 bags good to fi St. Vincent brought 61s to 64s 6d. Of 389 bags Jamaica only 6 bags sold, at 57s to 60s for common to good common, and 62s t 64s 6d for good to fine. 39 bags Surinam partly sold at 72s fo good. 5 bags Maracibo brought 75s 6d. Only 20 bags greyish re Caraquez Guayaquil were catalogued; they sold at 70s. Of 21 bags African, only one lot sold at 61s 6d for fair. Ceylon wa represented by 1,374 bags, but there was practically no demand and only 90 bags sold at 85s for fine bold, 62s to 66s for ordinar to fair dull medium, 56s 6d for smalls, and 45s per cwt. fo black. The following were bought in:—14 bags Demerara, 47 bags Venezuelan, 80 bags Colombian, 646 bags Haitian, and 1 bags Java. Privately little or no business done.

PEPPER.

BLACK.—The sales reported since our last have been of sma importance, iucluding fair Singapore on the spot at 6 1/32d to 6 1/16 and shipments near at hand at 6 1/16d.

At public sale on the 3rd instant 110 bags Tellicherry and 17 bags Aleppy were brought forward, but they retired unsold at 6d t 6⅛d per lb.

The shipments of Black Pepper for the month of June compar as follows:—

	1ST-HALF.		2ND-HALF.	
	1901.	1900.	1901.	1900
	Tons.	Tons.	Tons.	Tons
U.K.—Sing. ...	50 } 180	*nil* } 110	70 } 110	*nil* } *n*
,, Penang ...	130 }	110 }	40 }	*nil* }
Continent ...	90	*nil*	270	28
United States ...	200	*nil*	390	*n*
Total ...	470	110	770	28

In *White* no business reported for arrival. On the spot sales o fair Singapore have been made at 9¼d, and fair Penang at 8¾d.

At auction on Wednesday only 148 bags Singapore were offered they were bought in at 9¼d per lb.

To-day dull. Black Singapore, July-September shipment 6⅛d and September-November 6 3/16d.

25 tons Tellicherry sold at Hamburg at 55s 6d c.i.f. delivered weights, July-September, and 10 tons ditto to Rotterdam at 55s 6d c.i.f. delivered weights, July-September.

White much neglected and sales unimportant.

GINGER.

COCHIN.—A further declension in the value of washed rough wa submitted to, but cut kinds are still well held. Of 5 cases 257 bag presented for competition, 100 bags good bold and medium plum washed rough sold at 35s, one lot 35s 6d; bold limed cut was hel for 95s, Calicut Sorts for 40s, and cuttings for 35s per cwt.

26 bags from Corinto sold—bold rough brown coated hard, poo flavor, 30s 6d to 31s 6d, small ditto 27s, shrivelled picking 22s per cwt.

JAMAICA.—240 barrels offered and about 190 barrels sold i buyers' favor—fair bright washed 48s, low middling to middlin 38s 6d to 42s, and common to good common 35s to 38s per cwt.

ST. LUCIA.—28 bags small dark sold at 32s per cwt.

CINCHONA.

Last week says the *B. & C. Druggist* we gave particulars of the amount of Government bark to be offered at the next Amsterdam bark auctions. The principal catalogue of private bark has now been issued, and we find that the amount of this to be offered is 4,141 packages containing 369,508 kilogrammes. The exports of Java bark for June were 1,036,000 Amsterdam lbs., against 866,000 Amsterdam lbs. last year, and 1,126,000 Amsterdam lbs. in 1899. The total for the six months is 5,148,000 Amsterdam lbs., against 4,100,000 Amsterdam lbs. last year, and 5,094,000 Amsterdam lbs. in 1899.

QUININE.

There is practically no business to report this week, and prices are nominal. The spot price for German sulphate is now 1s 3d per oz.

The stock of quinine in the London warehouses on June 30 was estimated at 3,686,544 oz., against 3,448,976 oz. for the corresponding period of June, 1900, or an increase of 237,568 oz The deliveries last month amounted to 27,584 oz., and the landings to 156,096 oz.

CARDAMOMS.

CARDAMOMS met with a slow sale at from 2d to 3d easier rates for fine and medium grades, but lower qualities were full up. The following prices were paid:—Ceylon-Mysores, fine pale bold to extra bold round, 4s; medium and bold ditto, 3s 2d; medium pale round, 2s 3d to 2s 6d; small and medium pale, 2s 2d to 2s 3d; peas, 1s 5d; bold splits, 1s 9d; medium ditto, 1s 7d; and small, 1s 4d to 1s 5d; small long, 1s 8d; medium brown and specky, 1s 7d; splits and pickings, 1s 4d to 1s 5d per lb.; seed, 1s 11d to 2s.

(AVERAGE FOR ALL INDIA 6·27d., JULY 5TH.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price.
Neilgherry ...	**180**	**8.89**												
Brooklands ...	24½c	9¼	24½c	9¼	...	...	...	...	...	...	...	...	...	...
COA	40 p	5½	...	...	40 p	4½ 5½	...	...	...	...	...	...	...	...
Nonsuch ...	116½c	10	74½c	10 11½	42½c	9¼	...	...	...	...	...	...	...	...
Travancore ...	**910**	**5.82**												
Ellangy ...	80	4½	...	.	40	4¼	20	5½	20	3½	...	...	...	...
Kan Dev H Co. A	65½c	6½	...	.	45½c	6¼	20½c	7¼	...	...	...	...	...	...
,, Munaar ...	292 p	6	33	8	48	7	31	9	127	5 5¼	...	...	53 p	3 4¼
Mount ...	68	5¾	...	...	23	5¼	27	6¾	...	...	...	...	18	5
Penshurt ...	98	6½	21	7¾	57	5½ 5¾	20	7½	...	...	...	...	...	...
Trav T Est Co B A	158 p	5½	38	6½	44	5¼	43	5½	21	4	12½c	4¾	...	...
Vembenard ...	149 p	6	63	6¼ 6¾	50	5¼ 5½	36½c	6	...	...	...	...	...	...

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[w. 15-9-00—t.f.o.]

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Belinda Fitzwarren, by Earl of Iddesleigh.
The Career of a Beauty, by John Strange Winter.
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Indian Polity, a view of the system of administration in India, by General Sir George Chesney, 3rd edition, 1894. Rs. 18/6; *cash* Rs. 15/12.

Collection of Knitting and Crochet Receipts, fully illustrated, by M. Elliot Scrivenor, 1899. As. 14; *cash* As. 12.

Everybody's Scrap Book of Curious Facts, by Don Lemon, a book for odd moments. As. 7; *cash* As. 6.

Do you know It? If not, You should! a Book of Reference for newspaper and other readers, by C. E. Clark. As. 7; *cash* As. 6.

Stable Management and Exercise, a book for horse-owners and students, by M. Horace Hayes, 2nd edition. Rs. 10/8 *net.*

The Jeweller's Assistant in the Art of Working in Gold, a practical treatise for Masters and Workmen, compiled from the experience of thirty years' workshop practice, by G. E. Gee. Rs. 6/9; *cash* Rs. 5/10.

The Birds of India, being a natural history of all the birds known to inhabit continental India: with descriptions of the species, genera, families, tribes, and orders, and a brief notice of such families as are not found in India making it a Manual of Ornithology, specially adapted for India, by T. C. Jerdon, Surgeon-Major, Madras Army, in three volumes, 1862, *scarce.* Rs. 100 *net.*

Half a Century or Changes in Men and Manners, by Alex. Innes Shand, 2nd ed. Rs. 7; *cash* Rs. 6.

Chevasse's Advice to a Mother on the Management of her Children and on the treatment on the moment of some of their more pressing illnesses and accidents, by G. Carpenter, M.D. Rs. 2/3; *cash* Rs. 1/14.

Chevasse's Advice to a Wife on the Management of her own Health and on the treatment of some of the complaints incidental to Pregnancy, Labour and Suckling, revised by F. Barnes, M.D. Rs. 2/3; *cash* Rs. 1/14.

Scoring Book, new and improved Rifle Shots Register, with pages for recording the annual course of the soldier. As. 14 *net.*

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HIGGINBOTHAM & CO.,

MADRAS AND BANGALORE.

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 9th instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad. *July 28th.*—*Weather*—Rain averaging 70 cents daily; cold and rather strong winds; temperature 62° to 70°. *Works*—Planting, weeding, borer and handling. *Plant diseases*—Supplies looking very well, the year has been very favourable for them so far. *Labour*—Abundant. *Health*—Good. *Interesting item*—The views of the non-weeders find little support up here.

Coorg. POLLI BETTA, *30th July*—*Weather*—Heavy rain set in again on Friday last, but it was lighter the next day and still lighter on Sunday and yesterday. Exceedingly good planting weather, and probably there will be a heavy burst later on. *Works*—Planting out of supplies not quite completed. There has been a dearth of plants this season. Borer is still being removed and burnt; and places are being cleared up and some handled. Coffee is looking well and is carrying a lot of leaf and wood. *Labour*—Sufficient. *Health*—Fair. Cholera fortunately failed to establish itself.

THE PERADENIYA GARDENS.

WITH the new century we have a new journal, "Annals of the Royal Botanic Gardens, Peradeniya." The opening number begins appropriately with a paper on "The Royal Botanic Gardens of Ceylon and their History," by Mr. J. C. WILLIS, Director of the Peradeniya Gardens. Visitors to these lovely grounds are numerous, and perhaps the highest praise we can give to the Director and his staff is to say that whether a scientist or an artist or a mere lover of flowers visits the place all are equally enthusiastic as to its charms. The practical, the aesthetic and the scientific are combined. The Peradeniya Gardens are an attraction to the general public. To the botanist they offer attractions that are rare indeed; and while the grass flourishes and the gay flowers

bloom the work of scientific investigation is vigorously conducted so that the utility of the gardens is by no means subordinated to their beauty. The annals of gardens such as these will be interesting and instructive. Peradeniya might almost be said to exemplify the increasing interest that has been taken in Botany during the nineteenth century. As Mr. Willis remarks:—"The economic history of Ceylon during the last few years is chiefly that of tea, which is by far the chief industry of the Colony, though it deserves special remark that tea is not, in proportion to other exports, nearly so great a staple as coffee was. It forms about 52 per cent. of the value of the exports, cocoanuts, cacao, and other products forming no small proportion of the total. Mindful of the fate of coffee, the Department makes every effort to encourage the development of the minor industries, to introduce or discover new ones, and to aid the planters in combating the first appearances of disease among their crops. At present there seems every prospect of india-rubber and camphor becoming valuable new minor industries in Ceylon, through the efforts of the Department, which in the case of rubber date from 1876."

It is stated that there is scarcely any branch of modern botanical or agricultural science which is entirely unrepresented in the present organization of the Botanic Gardens Department. Mr. Willis traces its history, its growth, and shows how products fall out of notice after being thoroughly investigated while new products were taken up. In 1883, for instance, coffee was failing fast, and Dr. Trimen devoted much energy and enthusiasm to the introduction and spread of new industries, especially cinchona, tea, cacao, india-rubber, Siberian coffee, etc. It is curious to note by the way, that Mr. Willis refers to cinchona as "now becoming the staple of the Colony." With the growth of the Tea industry the scientific work at the gardens has also grown; and the threatened falling away of tea from the heights of its prosperity has had an even more stimulating influence on scientific research than had the earlier successes of the plant. In 1899 Mr. E. E. Green was appointed as Entomologist, in 1900 Mr. J. B. Carruthers as Mycologist, and in the latter year also Mr. M. K. Bamber was appointed Agricutural Chemist to the Department. Laboratory accomodation has been extended also, and Mr. Willis has a very high opinion of the Royal Botanic Gardens of Ceylon as a centre for botanical study and research. Zoologists, Entomologists, Geologists and other "ogists" all are welcome at Peradeniya as are botanists, and it will interest many to know that of the eleven working places in the principal laboratory at Peradeniya, about five are used by the staff of the Department, leaving six available for workers from abroad. Intending visitors are invited to communicate with the Director some months in advance when possible, mentioning the line of work they wish to take up, and whether they wish any arrangements made before their arrival, such as the planting of particular plants or seeds, etc.

The annals of Peradeniya are, in some degree, the annals of the planting industry in Ceylon. Study the former and you learn about the latter. Thus it is observed that in the report for 1871 appears the first mention of the Coffee leaf disease *Hemeleia vastatrix;* in the report for 1873 the spread of tea cultivation is noticed, and the cultivation of cacao and cardamoms is pressed upon public attention that Peradeniya says to-day the Ceylon planting Community will say to-morrow, and cacao and cardamoms are now important industries in the island. Mr. Willis rightly observes, however, that in the early years of the past century, when botany consisted only of the study of the external characters of plants, their classification, and the investigation and cataloguing of the floras of the different regions of the world, the Royal Botanic Gardens of Ceylon were occupied principally with the collection and description of the wild plants of the island. Towards the middle of the century began the rise of Economic Botany, and the then Director did splendid service in the introduction and acclimatization of numerous useful and valuable plants from other parts of the world, whilst not neglecting the study of the still very incompletely known vegetation of Ceylon itself. Later still, and with the rise of vegetable Pathology, the fact began to be recognized, partly no doubt as the result of the collapse of the great Coffee industry by the attack of the leaf disease, that science can afford service of as much value in aiding established industries to combat disease as in introducing new industries, and this has gradually led to the appointment of two officers upon the staff of the gardens whose primary duty is the investigation of the insect and fungi of the island, especially those likely to be injurious and the discovery, if possible, of means of combating the attacks.

BOARD OF TRADE RETURNS.

June 1901.

The following tables show the Imports, Consumption, and Exports of the undermentioned articles for the six months ending June 30 in the present and two previous years, compiled from the Board of Trade Returns, with stock in U. K. on June 30 :—

Coffee.—Heavy transactions were recorded, but the statistical position continues unsatisfactory.

—		1899.	1900.	1901.
Import ...	cwts.	752,313	586,361	726,284
Home Consumption	,,	137,845	151,766	180,093
Export	,,	277,192	255,040	332,917
Stock	,,	615,000	465,000	530,000

Cocoa (Raw).—Imports show an increase far in advance of the improved demand.

—		1899.	1900.	1901.
Imported ...	lbs.	29,062,330	29,317,152	30,938,439
Home Consumption	,,	18,982,037	20,887,690	24,255,031
Export	,,	5,682,768	5,775,829	5,787,192
Stock	,,	19,924,000	14,630,000	17,687,000

Cocoa (Prepared).—Home Consumption bulks large, and in the face of a big expansion of imports stock is reduced.

—		1899.	1900.	1901.
Imported ...	lbs.	2,699,834	3,556,278	4,257,012
Home Consumption	,,	2,915,103	3,156,383	4,003,109
Export	,,	420,493	513,366	467,514
Stock	,,	608,000	155,000	118,000

Tea.—A further growth of imports. Export trade shows up well, but stocks are exceedingly heavy.

—	1899.	1900.	1901.
Import ... lbs.	91,667,092	107,689,173	111,985,643
Home Consumption ,,	120,890,528	136,362,276	137,220,418
Export... ... ,,	13,919,782	21,730,267	22,233,487
Stock ... ... ,,	54,985,000	61,811,000	73,687,000

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

Annual Meeting, 1902.

The Annual Meeting opened at the Resident's Court at Bangalore on Wednesday, the 31st ultimo with Mr. H. P. Hodgson in the Chair. On the previous day a meeting of the Council was held, when the Secretary's Report and Accounts for the year were adopted, and the Agenda paper for the Annual Meeting decided upon. The meeting closed yesterday at about 1 P.M.

As it would be impossible to give a complete report of proceedings in this issue, only the list of delegates, the Agenda paper, and the Secretary's report appear, a fuller report being reserved for next week.

DELEGATES.

Central Travancore...	Hon'ble Mr. G. L. Acworth. / Mr. E. Latter.
Coorg	„ C. E. Murray-Aynsley. / „ A. Lambert.
Kanan Devan ..	Baron J. von Rosenberg.
Nelliampathis ...	Mr J. C. Abbott.
Nilgiris	„ H. P. Hodgson. / „ J. Liebenrood.
North Mysore ...	„ O. Scot Skirving. / „ F. J. Parton.
South Mysore ...	„ J. G. H. Crawford. / „ A. M. Elder.
Shevaroys ...	„ R. Gompertz.
Travancore Cardamom Hills ...	„ E. Latter.
Wynaad	„ D. Mackenzie.

AGENDA.

1. Suspension of Rule 2.
2. Annual Report and Statement of Accounts.
3. Chairman's Address.
4. Legislation—
   (*a*) Labour Law.
   (*b*) New Coffee-stealing Prevention Act.
5. Duties—
   (*a*) British Duties on Tea, Coffee, etc.
   (*b*) Ceylon Import Duty on Tea.
   (*c*) Indian Import Duty on Tea
   (*d*) Enhanced Duties on Pepper, etc., imported into France.
   (*e*) Proposed Tea Cess.
   (*f*) Proposed Coffee Cess.
   (*g*) Differential Duties.
   (*h*) Export Duty on Coffee in Travancore.
6. Coffee—
   (*a*) Markets (including sale in India).
   (*b*) Paris Shop.
   (*c*) Adulteration.
   (*d*) Reduction of curing charges.
   (*e*) Cultivation.
   (*f*) Land-tax.
7. Tea—
   (*a*) Markets (including sale in India).
   (*b*) Green Tea.
8. Agricultural Matters—
   (*a*) Products.
   (*b*) Fertilisers.
   (*c*) Ladybirds and Scale Pests.
9. Crop Estimates.
10. Railway and Steamer Freights.
11. Roads and Communications.
12. Proposed Harbour on the West Coast.
13. Improvement of Madras Harbour.
14. Excessive Commission on Money Orders in India.
15. Weights and Measures in India.
16. St. Petersburg Exhibition, 1902.
17. Finance.
18. Election of Office-bearers for 1901-02.

SECRETARY'S REPORT FOR 1900-1901.

No change has occurred in the membership of the Association during the year. Mr. Brooke Mockett has succeeded Mr. Frank Mangles as one of its joint representatives in London, Mr. John C. Sanderson continuing to represent the Association as hitherto. The Hon'ble Mr. G L. Acworth retains his seat as "Planting Member" of the Legislative Council of Fort St. George.

The chief event of the year, one that overshadowed the whole Empire, was the *Death of Queen Victoria*. Planters shared the universal sorrow at the demise of Victoria the Good, and the Chairman voiced the feelings of the whole community in a telegram to the Viceroy, which read as follows:—

"This Association desires to convey, through Your Excellency, its heartfelt sorrow for irreparable loss sustained by the death of our beloved Queen, and respectfully to express deepest sympathy with the Royal Family in its bereavement."

As time passes the aims of the Association become more comprehensive, and the scope of its operations widens. It has to deal with old subjects as well as new, the former predominating, as it is usually found impossible to bring any important matter to the point where "Finis" can be written, except after long deliberation and discussion, and steadfast effort. No better evidence of this could be given than is to be found in the progress made in regard to the subject of local.

Labour Laws.—The year under review has witnessed marked progress, but the new law is still on the legislative anvil. During the year Government has submitted the amended Bill for an expression of opinion, and your Chairman has responded with a memorandum of points in regard to which he feels that the Association will consider the amended draft unsatisfactory. The subject is entered on the Agenda paper of the 1901 Meeting for further discussion.

Another very important matter discussed at last Meeting was the question of *Foreign Markets for Tea*, which is connected with the still wider question—How to stimulate the demand for this product. A definite decision as to a plan of action can certainly be arrived at, but work in accordance with any such plan should be regarded as unending, for while Tea continues to be cultivated and manufactured planters will obviously benefit by efforts to extend sales and command improved prices. Increased interest has been shown in this subject since the last Annual Meeting was held. This Association has not attempted to act independently of the Indian Tea Association, but has endeavoured to stimulate discussion in the hope that benefit may result. On the other hand, the Indian Tea Association has operated independently of the U. P. A. S. I., but it has expressed its readiness to consider representations from the planting community in Southern India, and has manifested no desire to exclude planters in the South from taking an active share in the carrying out of its schemes.

The development of Foreign Markets for Tea and the expansion of *Sales of Indian Teas in India*, cannot but be regarded as cognate subjects. The Indian Tea Association has hitherto maintained a separate fund in regard to the work of advertising, canvassing and distributing samples in America and other Foreign Markets, but it has lately given increased attention to the potentialities of the Indian Market, and has decided to intrust the working out of a scheme for the extension of sales of Tea in India to Messrs. Andrew Yule & Co., a well-known Calcutta Firm. This Firm is, of course, free to operate in Southern India as well as in other parts of the continent; but it should be mentioned that a suggestion has also been put forward with a view to the elaboration of a local

scheme for the development of demand for Tea in the South. It appears probable that the District Associations concerned will consent to the exploitation of Southern India being left to Messrs. Andrew Yule & Co., provided that this firm intends to work in the South with the same energy as in other parts of India. The whole subject, in its widest form, is entered upon the Agenda paper of the present Meeting. It is one of vital interest, and connected with it, in the relation of "means" to "ways," is a suggestion that has been made that Tea planters in India should move for the imposition of a Tea Cess, similar to the Ceylon Cess, for the purpose of raising funds to defray the cost of pushing Indian Teas in Indian and other markets. This also is a point that will come up for discussion at the ensuing meeting.

It may be well to mention here that while the above subjects have received the attention of Tea planters throughout India, Coffee planters in the South have had under consideration the question of ways and means for the development of demand for the commodity that is their staple produce. In many respects the conditions affecting Indian Tea and Indian Coffee differ greatly, yet to Members of this Association the subjects of *Markets for Coffee* and a *Proposed Coffee Cess*, for the purpose of raising funds for the conduct of a campaign in behalf of increased consumption of the fragrant berry, are quite as important as the corresponding questions in respect to Tea.

In both instances a double line of preparation is desirable: the one to relate to consumption in India; the other to have for its object the capture of Foreign Markets, and the conversion of consumers therein into devotees, not merely of Tea and Coffee, but of *Indian* Tea and *Indian* Coffee.

The prevention or regulation of the *Adulteration of Coffee* has been frequently urged by this Association as one means of stimulating consumption of the pure infusion. At the 1900 Meeting a resolution was passed that a number of gentlemen in England be asked to form themselves into a Committee, to act and to communicate with the London Chamber of Commerce, and to take such other steps as they might deem advisable, for getting the subject of Adulteration of Coffee again brought before the Chancellor of the Exchequer and to the notice of the House of Commons. The gentlemen specially named were:—Sir H. Seymour King, and Messrs. J. C. Sanderson, Brooke Mockett, J. Lullin, P. Macfadyen, J. Clifford, and M. A. Ord-Mackenzie, "with power to add to their number." The thanks of the Association are due to these gentlemen, every one of whom complied with its request, and to Mr. J. Innes Rogers (of Messrs. J. Travers & Son, Ld.,) who kindly joined them. They arrived at the conclusion that it was desirable that Indian planters should make representations in regard to this matter to the Indian Chambers of Commerce and Local and Central Governments in India, and by them, or through them, to the India Office, the Board of Trade and the Chamber of Commerce of the United Kingdom. The Madras Chamber of Commerce, it may be remarked, has expressed entire approval of the agitation against Adulteration of Coffee, and its readiness to join this Association in any endeavours it may make to prevent it. The Malabar Chamber of Commerce has expressed itself to the same effect.

Connected, though less directly, with the subject of the development of demand for Indian planting products is that of Imperial Fiscal Federation, with a view to the levy of *Imperial Differential Duties* in favour of British, as distinct from Foreign, products.

A resolution was passed last year "That, considering the critical condition of the Tea and Coffee Industries this Association do communicate with the Indian Tea Association, the Ceylon Planters' Association, the Indian Chambers of Commerce, and with the leading firms of Merchants and Brokers interested in Tea and Coffee, etc., in this country and in England and the Colonies, with a view to ascertaining whether a movement in favour of a commercial combination of Great Britain and Her Colonies and India against the world which would, by a system of Differential Duties, afford some protection to British grown products and manufactures would receive support, and that a Committee of this Association be appointed to carry the above into effect." A special circular was prepared, and was despatched to numerous Chambers of Commerce, etc., in various parts of the Empire.

It would be difficult to summarise in brief space the very heavy correspondence that was received in reply. It may be broadly stated, however, that, though some few of the bodies addressed took an adverse view of the suggestion thrown out, generally speaking, the replies were favourable and encouraging.

The French Import Tariff.—Uncertainty has prevailed during the greater part of the year as to the action to be taken by the French Government in regard to the import Tariff in that country on Tea, Coffee, Pepper, etc. The latest news is to the effect that settlement of this matter has been postponed to early next year. The settlement affects the future of Indian Tea and Coffee in the French Market, which is one to which planters should certainly not give decreased attention

Paris Exhibition.—In Circular No. 48, dated 25th July, 1901, the Indian Tea Association submits its statement of accounts in connection with the Paris Exhibition, showing that no further claim on this account will be made against the Association.

A gold medal was awarded to the Association for its exhibit of Coffee.

Dr. Geo. Watt.—It was resolved last year to request the loan of this gentleman's services from the Government of India, so as to permit him to work in Southern India for six months and investigate plant diseases and insect pests in the planting districts. No reply has been received.

Roads and Communications.—The Governments of Madras and Mysore were addressed during the year regarding the repair of the Bhund Ghaut Road to Mangalore.

Postal Irregularities.—In accordance with a resolution passed last year the postal authorities were addressed on this subject.

Proposed Harbour on the West Coast.—The Association has addressed the Madras Government with respect to the need of a good harbour on the West Coast, and has also been in correspondence with the West Coast Chamber of Commerce at Calicut, the Malabar Chamber of Commerce at Tellicherry, and the Madras and Bombay Chambers.

The Madras Chamber of Commerce is occupied with the question of the improvement of the Madras Harbour, but the Chambers that represent the mercantile community on the Malabar Coast are in full accord as to the need for a harbour. Government desires that a special port be named as the one at which such a harbour should be constructed. When this is done, it will no doubt arrange for the necessary survey and the drawing up of plans and estimates.

Freights.—The Madras Chamber of Commerce requested the support of the Association in an effort to bring about a reduction of the high rates of freight now charged by the B. I. S. N. Co. and the Clan Line; and the subject of a reduction of *Rail Freights on Coffee* was also mooted during the year *Accounts* duly audited, are laid on the table, together with a Balance Sheet showing the financial position of the Association as on the 24th instant.

The Reserve Fund stands at Rs.7,039-12-0, of which Rs.7,000 is invested (fixed deposit bearing 5% interest per annum), the rest standing in current account with the Association's bankers. Of *The Paris Exhibition Fund*, Rs.986-6-2 has been invested in the purchase of 3½% Government Paper of the face value of Rs.1,000; the remainder, *viz.*, Rs.8,072-5-7, lies with bankers, in current account.

The Ladybird Fund stands unaltered at Rs.1,276-3-4, *The Transvaal War Cheroot Fund*—at Rs.20.

The General Fund shows cash in hand Rs.201-6-10, as against an opening balance of Rs.611-15-10. There are, however, sundry subscriptions still unpaid.

The actual financial position of the Association has improved, the Balance Sheet showing a surplus of Assets over Liabilities to the extent of Rs.19,292-11-11, as against Rs.16,604-10-11 on 31st July, 1900.

It should be specially noted that the accounts submitted relate to a broken period—31st July, 1900 to 24th July, 1901—not to a complete year. As far as possible, expenditure for the whole year has been provided for, and *per contra* the subscriptions paid and still unpaid relate to the year.

In conclusion, I have to express my sincere thanks to the Chairman, Planting Member of Council, and the Honorary Secretaries of the various District Associations for their unfailing courtesy during the year.

THE SALE OF TEA IN INDIA.

A Colombo paper makes some unfair and ungenerous remarks regarding the attitude of Travancore in respect to the pushing of sales of Tea in India. It says:—"Travancore will suffer an unkind blow when it is told it is not to exploit its own Tea market in Southern India. But, as *Capital* said in a recent issue, it is easy enough to say, 'We could have done that' after Messrs. Yule's enterprise has been rewarded. And it will be disastrous if Travancore continues unruly, forms a competitive limited Company and attempts to run an opposition agency for exploiting the South Indian market—unless Messrs. Yule are found in time to be neglecting this altogether." Now, in the first place, Travancore is not under the orders of the Indian Tea Association, which cannot inflict any "unkind blow" upon it. The truth is, however, that Travancore Association framed their scheme before knowing that Messrs. Andrew Yule & Co., of Calcutta, were to work on behalf of the I. T. A. As soon as they were informed of this they manifested a very creditable desire to let their own scheme drop. They merely ask for an assurance that South India shall be exploited as vigorously as other parts. This will doubtless be arranged. Particulars of the scheme proposed by Messrs. Yule are given in our "Proceedings" columns.

"PRIVATE" TEA SALES.

The new movement for the establishment of private tea auctions in London has not been favourably received by the trade. On the front page of the catalogue of the first such auction it was notified:—"Admission to this sale by ticket only. Application in writing to be made to the Secretary of the Tea Brokers' Association" Among the notices of motion in the programme of the recent Grocers' Federation Conference at Brighton, was the following, handed in on behalf of the Metropolitan Grocers', Provision Dealers', and Oilmen's Association, and headed: "'Corners' in Tea":—"That in the opinion of this Conference the proposals which have recently been made to hold private auctions for tea sales, and also to establish a private Tea Exchange are undesirable, and appear to be an attempt to bring about 'corners' in tea." The *Grocers' Gazette* remarks:—"The main object of the promoters of this scheme for private auctions is that they may realise higher prices. If this is to be accomplished at the expense of the retailer, as seems likely, we strongly protest against it. Let it be remembered that the retailers, after all, represent the buying power of the trade, and that the remedy lies largely with them; and we trust they will assert themselves by absolutely declining to consider any samples except those which have been dealt with in a fair, open, and public market."

Writing on the 5th ultimo, the London correspondent of the *Times of Ceylon* remarked:—

As I stated in my cable of 31st ultimo, a good many of those connected with the promoters of private sale made no secret of their intention of absenting themselves from last Tuesday's auction, so that what happened caused no great surprise. For the first portion of the sale there was practically no bidding for the teas, no bidding, that is, at anything like the previous week's level of prices. Most of the teas were taken out, but here and there a broker knocked down a tea at considerably below its value. News of this got about. Teas were being given away, and this is a condition of things which appeals very strongly to the mind of the buyer. So, after lunch they started bidding, and the latter part of the sale went much as usual. There is a tendency now in some quarters

TO EXPLAIN AWAY THE BOYCOTT,

to say they did not want any tea, were reserving themselves for Thursday, and so on. But this will not hold water for one moment. All the afternoon there was a procession of buyers to the brokers' offices offering a farthing, a halfpenny, a penny, above the prices bid in the morning. They did therefore want the teas, and the boycott was deliberately thought out. It was a partial failure, but the cloven hoof was shown distinctly enough.

AT THE OPENING PRIVATE SALE

there was a crowded attendance. The door was only half open, and two stalwart chuckers out cried "Tickets, please" Many of the chief buyers who were absent on Tuesday, were there, and spirited bidding was anticipated It did not come, however, and prices were just about on a par with Tuesday afternoon's or the sale of the preceding week. The buyers wanted to support the sale, but each man waited for the other to pay over the market price, and there was the feeling that the teas would be difficult to deal with in the country, where a strong prejudice is arising against them. About

THE ATTITUDE OF THE MERCHANTS

in this matter little need be said. No one now expects them to show any grit or cohesion in any trade matter, and they only lived up to their reputation. A hurriedly convened meeting of members of the Ceylon Association was held on Wednesday. There was an hour or two's talk, and there the matter ended But that the buyers should have been so weak-kneed, I confess, surprises me.

THE STORY OF LITTLE RED RIDING HOOD

appears in one form or another in the folk-lore of many nations, and we, most of us, yield the unconscious homage to the Wolf which human nature pays to the successful trickster.

But if the Wolf had failed to pass itself off as Grandmamma, or had come into untimely contact with Riding Hood's father and his crossbow, we should think him a very poor creature. And this is very much the position of the promoters of this precious private sale. First by a premature and unsuccessful boycott on Tuesday, and second by failing to support the sale on Thursday, and thus taking away the bait which they had been dangling before the eyes of credulous merchants, they have made a mess of the whole thing and it is quite possible that before long it may fizzle out. Meantime

THE MARKET IS GREATLY DISORGANISED,

and a good deal of unpleasantness has arisen A man I know who buys a lot of tea has been refused admittance to the private sales, no reason being assigned. He is naturally very indignant, and says he means to see the matter through if it costs him £100. The representative of the London *Times*, too, has been refused a ticket, and the conductors of "the leading journal" are very angry about it. The system of ticket sales was considered by the grocers met in Congress this week, and the Committee is looking carefully into the matter preparatory to taking further action.

FOR NEXT WEEK

the auctions are pretty equally divided between Tuesday and Thursday. Some merchants are supporting the first day, some the second, and a good many are straddling the fence and like Mr. Micawber "waiting for something to turn up."

NOTES.

Vanilla in Trinidad. The experiment with vanilla in Trinidad is reported to have made good progress.

Ceylon Land and Produce Co., Ld. A special telegram to the *Times of Ceylon* states that this Company pays an interim dividend at the rate of 7½ per cent. per annum.

Amsterdam Bark Market. A supplementary catalogue was issued for the Amsterdam auctions of July 18th. This increased the offerings by 425 packages, comprising 40,523 kilos. of cinchona bark.

Otto of Rose. The *Chemist and Druggist* reports :—Samples of the new Bulgarian crop are advised. The quality is better than that of last year, but the quantity, as already reported, is rather less. The official prices are not yet fixed, but an advance of 1s. to 2s. per oz. would not be a surprise.

Pepper in Trinidad. The plants have grown well but are not sufficiently advanced to produce seeds. The old plants have produced seed yearly. A demand has arisen for this, among European seedsmen for raising plants for the supply of some of the African Colonies. The crop has all been disposed of as growing seeds.

Vanilla. The prospects of a good crop in Seychelles have been realised, and the export of vanilla from the islands this year, says a correspondent of the *Chemist and Druggist*, will probably be at least 50 per cent. greater than in any previous year. There is a large amount of short vanilla, but the quality compares favourably with that of other seasons.

Ceylon Tea and the Adelaide Royal Visit. An Adelaide firm, Messrs. Drummond Brothers, instead of spending money on decorations, handed 500 tickets over to the Citizens' Welcome Committee for free distribution among the charities in and around Adelaide, and each ticket-holder on presenting the same at their establishment received one packet of Ceylon tea. A good "Ad!"

The London Tea Market. Reuter reported on 25th ultimo the market for Ceylon tea is generally firm. Pekoe Souchongs are quoted at 4½d and the average for the week is 6½d (both same as last week). 32,000 packages of Ceylon tea were offered for sale, and 24,000 were disposed of; while of the 12,000 packages of Indian tea offered, 10,000 found purchasers, at an average 7$\frac{7}{8}$d per lb.

Ceylon and Indian Tea Duties. The Indian Tea Association, discussing the Central Travancore Planters' Association's proposal, has decided that a reduction of duty on tea entering Ceylon to 5 per cent. *ad valorem* is insufficient, and has recommended that no duty be levied in Ceylon on Indian teas; likewise in India on Ceylon teas; the duty to be retained against non-British teas.

Guttapercha in French Indo-China. The Government in French Indo-China is patronising the cultivation of the guttapercha tree, and planting is now being tried in various parts, chiefly in Laos, also in Annam and Tonkin. Exports for 1900 amounted to 339,000 kilos. against 52,813 kilos. in 1899. A picul of good quality is worth about 130 dol. (£13).

Ceylon Tea in Egypt. Under the heading of "The Cup that Cheers" the *Egyptian Gazette* has the following :—"Not very many years ago almost all the tea consumed in England, and, in fact, the whole world, came from China. Now-a-days, all this is changed, and the best teas come from Ceylon, whose rich virgin soil, in conjunction with years of patient study and scientific cultivation, has yielded teas whose quality is unrivalled to-day."

Amoy Tea. The British Consul at Amoy says in his report for 1900 :—No Amoy tea was offered for sale for the foreign market during t year under review, and for the first time this commodity, which most of the foreign merchants of this port were i terested, disappears from the figures of export abroad. 20 years a trade of over 7,000,000 lbs. has completely di out. The small amount of 1,400,000 lbs. was sent to nati ports, probably solely for native consumption.

Colombo Tea Sales. It has been decided not to hold tea sale in the August Race wee and therefore the sale of the 14th August is cancelled. T following sale will take place on the 21st August an ho earlier than the usual time. The *Times of Ceylon*, dated 25 ultimo, reports :—Market firm for all sorts. Common te dearer. At the tea sales a box containing 5 lbs. of golden ti from Orion estate, was put up for sale by Messrs. W. Some ville & Co. The highest bid was Rs.3·50 per lb., but was n accepted as the price required was Rs.5.

Rubber Preparation. A Trinidad note remarks :— pursuing experiments with the vie of ascertaining the most economical method of coagulati rubber fluids, some of these were allowed to stand forgott in a large receptacle where they had been creamed Wh again handled the whole mass was putrid, but the rubber w still on the surface and easily coagulated or "coalesced" being handled, and the quality produced is stronger a therefore of a higher quality, than rubber prepared in oth ways. The specimen was shown to a noted American man facturer of rubber goods who readily recognised its quali from among numerous other specimens. There were howev evident signs of loss of weight in rubber material by t decomposition set up by the fermentation of the proteids.

"Common, but not Rubbishy, Teas." Mr. H. M. Knight explains th the samples of teas sent by t Indian Tea Association to the Centr Travancore Planters' Association are not samples of the te that complaints have been made against of being shipp from Ceylon to Bombay. He deprecates most strong trying to get a prohibitive tax imposed upon Ceylon te in India, as he has always hoped that the tax imposed Ceylon would be abolished as far as India is concerned. T teas Travancore has protested against coming into India a those that sell at or under 7 cents per lb. in Colombo, whi are nearly all brought for the Bombay market, and of whi no less than 32,000 lbs. have been sold during the last mont He remarks :—"That teas of the value mentioned should exported at all from Ceylon is quite as harmful to the intere of that country as the importation into India is to the latter

Testing Coffee. A correspondent of the Isis *Record* writing to the *R. R. Herald*, says : Several samples of coffee have been received and tested duri the last few weeks from Mauritius, Norfolk Island, Queen land, and other places, and strange but true, the Claren coffee divides honors with Norfolk Island, with Queensla next. Coffee beans parchment dried are worth 6d. a pou dressed 8d., roasted 10d., and tinned up to 1s. 2d. per lb. large lots. If retailed, one-third more in each form. It known to the writer that one firm is selling Mauritius coff as Clarence River grown. Planters will go in for the cr when they see how cheaply and simply it can be turned in money. Each grower should roast and tin his own crop,

the extra appliances would not involve an expenditure of more than £7. A man can wheel £15 worth on a barrow.

Calcutta Tea Sales. For the auction on 26th ult. 20,700 packages were offered at to-day's sale making, a total out of the market of 100,600 packages against 111,700 packages to same date (27th July) last year. There was a good selection from all districts, last week's quality being well maintained. Bidding was not quite so good as last week, and prices were very irregular, being inclined to weaken towards the close. Fine and finest kinds sold well, but mediums were easier. Assam Pekoe Souchongs sold well at former rates. Common grades remain much as last week, here and there, showing a point or two better price for better quality. Buyers for Bombay and the Gulfs were fairly large operators, but prices for suitable kinds were mostly downwards; other outside markets took a fair quantity. Quality of advance musters from Cachar and Sylhet continues good and above average. From the Dooars great improvement is noticeable, and Assams, although still above the average, are not so fine, as they have been, and Darjeelings have fallen away somewhat.

Coffee in London. The *Produce Markets' Review* of 6th ultimo says :—The Brazil crop, which closed on 30th ultimo, has proved, as was anticipated some two months since, to be the largest on record, and now that we are entering upon one the estimates for which are still larger, it is somewhat surprising that values remain so steady. During the week the terminal market has only slightly fluctuated, closing within 3d. of last week's quotations. Considering the extreme heat of the weather, which is, of course, detrimental to Coffee drinking, and the fact that on the Continent the holiday season is checking business, there has been a fairly good demand at the auctions, and, with the exception of the lowest grades, full prices have been paid. Colombian is at last coming to hand more freely, but is mostly damaged and very mixed in quality. Those parcels which were shipped in husk to be cleaned here, though lacking in colour, have maintained their flavour, and at the prices they are fetching are very useful Coffees. There has again been more demand for fine Costa Rica, and values are decidedly dearer, with a good inquiry at the advance.

Indian Teas in London. As is usual at this season of the year, says the *Produce Markets' Review* of 6th ultimo, the public sales are very small and uninteresting. Last Monday's auction comprised only about 7,580 packages, the majority of which were sold at previous rates. The scarcity of good liquoring Teas from 6d. to 9d. has somewhat hardened quotations, especially as there is an increasing demand for these grades. New season's Darjeelings were offered, the prices realised being well up to valuations. The first arrivals of this growth, however, are generally deficient in flavour and strength, and do not meet the requirements of the general trade. A few invoices of new season's Assams were also printed, and prices were rather irregular. The following are the figures for June compared with the same period last season :—Imports, 1,165,759 lbs. and 2,038,200 lbs. ; the deliveries show a slight improvement, being 7,494,691 lbs. as compared with 7,002,107 lbs., while the stock stands at 32,560,643 lbs. as against 22,079,688 lbs. Judging from the catalogues already issued, the sales next week are expected to be very limited. From Calcutta advices we learn that a sale took place yesterday, when about 12,000 packages were offered.

Formosa Tea. Amoy continues to be the port for ocean shipment for the tea trade of Formosa, in spite of the efforts of the Japanese to deflect the channel of this trade from the course it has run since its birth. They have imposed a differential tax on this tea when exported to Amoy for transhipment and when exported to a Japanese port. A consular report states that the British merchants of Amoy, whose principal business is the export of the Formosan leaf, bitterly resent this differential duty as being contrary to treaty rights, and as being aimed at depriving them of a trade which has been built up entirely by their own labour and enterprise. Out of a total of 395,159 half-chests (about 17,000,000 lbs.) shipped to the United States and Europe 358,704 half-chests (about 15,500,000 lbs.) passed through Amoy, the balance 36,455 half-chests (about 1,500,000 lbs.), presumably all for the United States, going *viâ* Japan. The great bulk of the Formosan leaf is taken by the United States, the remainder some 13,200 half-chests, being exported to the United Kingdom. The war in North China had no direct effect on this market, except that it must have imbued some operators with a speculative feeling, otherwise the smart rise which took place in July, 1900, cannot be accounted for.

Ceylon Coffee. An old planter, who lately paid a flying visit to Ouvah, says that winding in and out, and before reaching and after passing Haputale station, there is still a little coffee. He writes to the *Ceylon Observer* :—I was quite cheered to see some really fine trees, and loaded with green berries ; but like on our side of the country King Coffee is doomed—tea is coming to the front everywhere. Let me tell those wise—save the mark ! —people in London, who make long speeches and are doing more to try and reduce the output, which is unnatural, than they are trying to get new markets—let me tell them that there are a good many thousands of acres of tea not yet in bearing in this little Island of Ceylon. To return to coffee, Ouvah will see the last of it ! When an old planter sees long suckers allowed to shoot up from the old trunk, and the branches very "whippy" and many dry sticks, he knows its days are numbered ! Do you remember old "Billy Rudd" Well, he was asked to visit and report on an estate in the Hantane district—he went but it was a long time before he sent in his report ; the fact is he never intended sending one—he had nothing to report ; but urged to do so, it came, and was as follows :—"Report on ——— Estate, Hantane : all veeds, vips, and valking sticks."

LETTERS TO THE EDITOR.

BUG ON COFFEE.

Dear Sir,—I enclose a cutting of a letter which appeared in the *Madras Mail* written by a friend and neighbour of mine, but although it appeared a month or more ago, has not met with a single response. Two Estates of mine are affected in the same way, and since the enclosed letter appeared I have been watching this bug with great care and have found that it is attacking the stalk of the green coffee berry and the berry itself, the former with disastrous results, as the half size berry turns a curious brown or yellow colour and will probably drop off, at least it does on

being bent. It is impossible to say to what extent the crop will be affected. We have had a very light June and the bug was very active, then came a mesh and it appeared to diminish or to spin its web, now there is a break and it seems to be on the move again, but in lesser numbers and I can only hope that the next mesh will finish it. I have been in this part of Mysore for 22 years and beyond seeing it on isolated fig trees about two or three years ago, we have been entirely free from scab insects. Some years ago I saw it or what I presume to be the same bug on an Estate at Kil Kotagiri, but was assured by a well-known planter that it did the coffee no harm. I am told it is still prevalent on the same Estate and does no harm. I am certain, however, that the black stuff (which I believe is fungus caused by the bug's excreta) does harm, at all events to young coffee, as it becomes so hidebound that practically all growth is stopped. The same bug attack guavas badly, but they seem to get rid of the black stuff by shedding their bark. I have omitted to say that such has been the virulence of this bug that it has attacked a great many indigenous jungle trees, parasites, and weeds, especially Spanish needle. This looks as if having finished one lot of leaves off all the figs, it had to eat anything it could find, and we can only hope it won't acquire an excessive liking for coffee. I have written this somewhat lengthy letter in the hope that some kind person will write, and I hope re-assure us with regard to this bug, scab insect, applies or whatever its correct term is. At one time one heard a great deal of scab pest on the Pulneys; can you say what has happened to that bug in that District. The Hawaiian coffee, according to *Chambers's Journal*, seems to have been quite cured by the Ladybird imported from Australia. In conclusion, I may remark that so far the bug is confined to where the shade is mostly or entirely fig, and in hot situations. There are still some fig trees free from it.

SANTAVERI, 28*th July*. "ENQUIRER."

INQUIRIES.

DEAR SIR,—Will you kindly inform me where I can procure the "Agricultural Ledger" and price. Under the heading "Coffee in Distant Lands" in a recent issue of your journal, you mention several kinds of coffee grown at Trinidad Botanic Gardens. Can you inform me if seed is procurable there and to whom communications should be addressed?

PERCY G. TIPPING.

Note.—The *Agricultural Ledger* can be obtained from the Superintendent of Government Printing (India), at Calcutta; price—2 annas per copy. The application for Trinidad Coffee Seeds should be made to the Superintendent of the Royal Botanic Gardens, Trinidad. Whether he can execute orders or not, we cannot say.

ED.—*P. O.*

GENERAL ARTICLES.

PLANTING IN JOHORE.

The following information respecting the State of Johore has recently been received from the corresponding Agent of the Imperial Institute, the Hon'ble Dato James Meldrum, F. R. G. S.:—

The cultivation of gambier is beginning to languish, owing to the distance planter require to go from the water before they can find virgin forest and fresh land for new plantations. This industry is entirely in the hands of Chinese. The destruction of valuable forest trees is to be regretted thousands of acres have been cut down by gambier planters, who, when the soil is exhausted, seek for "fresh fields and pastures new." Some have gone to Raja Brooke's te tory Sarawak, some have gone to British North Borneo.

The cultivation of tea has practically ceased owing to want cheap labour otherwise the frequent rains and heat are favoura for leaf crops.

A new steam saw-mill has been erected by Chinese assisted Johore officials. The Johore Steam Saw-mills, erected in 1866, in full work; supplies are now brought from greater distanc Ballow, sometimes called Johore teak, has become scarce; t wood was admitted by Lloyd's for "all parts in ships of the high grade"; it is harder and heavier than *Tectona grandis*, and nea double the strength.

No planting of guttapercha trees has been attempted; the s ply cannot be kept up much longer. As regards forest trees, th are no private individuals in Johore to undertake such planti indeed it is only Government who can perform this import duty.—*London and China Express.*

CINCHONA PLANTATIONS IN BURMAH.

It would be interesting to learn what has become of the cincho plantations spoken of in 1880 as existing in the Toungoo distr by Major Spearman in his Gazetteer. In December, 1868, a sm plantation was commenced on Ploo-ma-do hill, south-east of To goo, at an elevation of 2,100 feet. One hundred and eighty pla of the "Succirubra," or red bark variety, were planted, of wh 128 were living twelve years afterwards. Two plants of the sa species planted on Bogale hill at an altitude of 2,800 feet, but rather an exposed situation, had attained a height of nine and feet in thirteen years. A plantation was formed in 1871-2 at Tha daung, eighteen miles east of Toungoo, at an elevation of 3,700 fe The red bark variety is the only one of the different species tri which has succeeded at all. Plants of this species, though vigoro enough, have a bushy and gnarled appearance, and were cover with seed though only about ten to fifteen feet high. The ot variety, planted over two-thirds of the whole area of 100 acr failed. The plants grow well for two or three years but then beg to sicken and die. Plants were gratuitously distributed to heads Christian Missions. We have not noticed in any Forest Depa ment report any account of these cinchona plantations, the old of which were planted from thirty to thirty-five years ago. would be interesting to learn what has become of them.—*Rango Gazette.*

THE UNITED STATES TO RAISE THEIR OWN COFFEE.

The United States is a wonderful country and Americans wonderful peoples worthy of their origin; but, says the *Brazili Review*, there are some things that cannot be done, not even electricity, and one of them is to grow coffee on the sea. We not know to a nicety what the area of the American "possession suitable for coffee growing may be, but are willing to risk a gu that, even with Cuba thrown in, it would not reach a quarter what is already under cultivation here. There is, of cou the resource . . . . of building plantations out on trestles i the sea, but short of that, however anxious Americans may be raise everything they consume within their own borders. it impossible just at present. Besides, why be in a hurry? Is it written that in the fullness of time, when American markets surfeited with their own products and the power of the Trusts waning, Americans will enter on the fullness of the vast inherita reserved by Monroe and annex South America in a lump with Bra and her Coffee plantations, all ready made, without any complica engineering at all? Meanwhile why alienate the sympathies possible possession by so cruelly usurping functions so alien? Brazil grow her coffee and sell it to the beneficent protector South Americans—at a price—and be thankful it is no lower.

No doubt the programme of raising everything you consume attractive enough to some minds, but unless it can be complet by consuming all you raise, it has its weak points. It is all v well to assert that, come what may, decrepit Europe must take States' produce at any price; but if Europe is to go on buying wi out selling, she must soon have nothing left to buy with and be b

krupt, when we suppose the U. States would supply everything gratis out of pure philanthropy. All the same, Brazil has a few advantages in the coffee line that defy competition and will enable her, in the expressive American vernacular, to lick not only the States, but the whole creation. Every time more revenue is required, or a commercial treaty with this country is involved, pressure is brought to bear and Brazil warned of the awful consequences that obduracy may entail. Its undisguised official origin is sufficient this time to show that, like its predecessors, the present is but another attempt to bluff reluctant Brazil into reciprocity. We can see no use or advantage in so tying our hands. No commercial treaty would prevent Americans from cultivating coffee in their "colonies", if it pays; and, if it don't, we require no treaty to give currency to our products in the States; because, if as they are so fond of saying, Europe cannot do without their cereals, the States cannot do without coffee, and in that particular line we boss the show!

BRAZILIAN NOTES.

(From the *Brazilian Review*.)

Exchange, *June 15th*, 1901.—Bank Rate on London opened on Monday, 10th instant, at 11 3/4d. fell to 11 1/4d. on 13th instant and closed this evening at 11 1/2d.

The figures . . . . show the value of Exports to have fallen from over £4,000,000 during the month March to £2,874,127 in April, and though even at that figure the value of Exports must considerably exceed that of Imports, unless the demand for bills for private and Government remittances, that not only absorbed the enormous trade surplus accumulating since the beginning of the year but devoured nearly £3,000,000 drawn by the Banks as well, unless that have been satisfied, however favorable the balance of trade may be, that of payments must be against us still.

Against facts argument is useless, and the fact is that, favourable or unfavourable as the balance of trade may be, the disappearance of the surplus points to the existence of an invisible demand ready to become active at any moment that rates are sufficiently favourable. Otherwise it would be impossible to explain the manner in which bills to the extent of so many millions have been mopped up. It is, however, certain that the merchandise has been shipped and drawn for and that bills have been sold in the different markets. But it is equally certain that they are enormously in excess of current requirements of the Import trade and Government put together, as that the surplus *must have* been absorbed by private demand or must still exist. That there can be any very considerable amount of bills held-back is, however, not probable, because shipping houses in general do not hold sufficient capital in the country to permit it. Where then has the balance of over four millions represented by the balance of trade and overdraft of the Banks since January gone to, but to satisfy private remittances and to *pay debts!*

Nothing could better illustrate the doctrine that currency depreciation is *debt* than this apparently inexplicable phenomenon..... As the balance of Exports turns in our favour the surplus is applied to the liquidation of debt and the currency rises in value. If this process be supplemented by the reduction of the volume of the currency it is naturally still more stimulated; but so long as depreciation exists, debt exists; and, until by means of a surplus of exportable commodities we are able to wipe it out, there will always be an invisible and unrecognisable demand ready to press on the markets.

No doubt every upward spurt of exchange liquidates a portion of this indebtedness and leaves the situation so much the better. Consequently, so long as issues of paper money are not increased and the balance of recognisable foreign payments for Imports and Government account be kept steadily in our favour, although every spurt may be followed by a reaction, something will be always gained and the value of the currency surely, if slowly, be raised. How much debt has been thus paid of lately it is impossible to state, but it is certain that it must be very considerable, amounting to several millions sterling and that, as it has not to be repaid, the market must be so much the gainer. At the same time as debt has been paid off on one side, other, if smaller, obligations have been accumulated on the other through the Banks, which have drawn liberally on their home resources in anticipation of the coffee crop. At the present moment it is probable that the value of Exports is very slightly in excess of that of Imports and Government requirements, and, consequently, taking into consideration the invisible demand, that the balance of payments is against the country for the moment Were the Banks in a position to continue to draw, the transitory deficiency of bills might be got over, but as it is with nearly £3,000,000 to receive, it is likely that the Banks have as much speculative paper as they care to carry.

The prospects for the moment are consequently not encouraging, and unless there be a pretty general carry-over of "bull" accounts at the end of the month, it seems quite possible there may be another slump. At the same time it can only be transitory, because the new coffee crop is virtually untouched and as soon as the markets' oversale of £3,000,000 is satisfied, as it will be in a month or two, a new rise appears inevitable. Last year with a smaller crop it took about seven months to liquidate an oversale of about £6.000,000; at the same rate the present oversale counting from 31st May should be paid off in three months and leave things ready about the end of August for a new and decided rise.

Thus slowly, though, surely, the rate rises, but until par be finally reached and depreciation disappear altogether, oscillations are inevitable because, so long as debt exist, the invisible or dormant demand for bills may become active at any moment and exceed the instantaneous supply. There are only two means of attaining stability:—by paying debts gradually, as we are doing, with surplus exports and raising our money to par; are by reducing our par and utilising our surplus products, first to pay off debt and then to keep it from re-accumulating and exchanges steady. Of course, in the latter case this would not prevent rates from oscillating until foreign indebtedness were finally liquidated, although such oscillations would be artificially limited by the maximum; but whether by one method or the other, it is certain that until the debt our markets owe abroad, represented by the depreciation of the currency, is finally settled, there can be no real or lasting stability.

During the week ended June 14th coffee shipments (*embarques*) here and at Santos increased a little and gave bills to the value of £291,000 as against only £243,000 the previous week and only £157,000 last year. Rubber shipments, however, are shrinking rapidly and gave only £49,500 last week for both Pará and Manáos, whilst stocks are about 300 tons. Tobacco and sugar shipments may be also considered as almost finished for the season as also the Nut crop of Amazonas, which helped to considerably swell the total in the months of March and April. The supply of bills, at present, must therefore be particularly circumscribed and practically limited to relatively insignificant shipments of coffee, cocoa, and general produce. It is of course possible that Santos shippers may assist the market by selling largely ahead, but in the present undecided state of the coffee markets it seems not very probable. The prospects for the current month seem therefore to make for a dull and sagging, if not falling, exchange market, with a revival as soon as coffee is shipped again in large quantities. A reflection, however occurs to us at this point, as to whether in view of the uninterrupted and heavy nature of shippments and the glutted appearance of the foreign markets, the coffee can be shipped as rapidly as it arrives without a heavy fall of foreign prices, and if not, how exchange might be affected thereby. Of course if the coffee cannot be got rapidly rid of there will be no new boom of exchange, all the bills being then required for liquidation of the market's actual oversale, but only, perhaps, a steady improvement, that, however, would greatly depend on the course of foreign prices. Still, whatever may happen, we look for much better rates in the course of the year.

Coffee.—Entries at Rio and Santos during the week ended June 14th, were 23,676 bags larger than for the previous week and 72,971 or 159 % more than for the corresponding week last year. Up to 14th instant entries for the current crop amounted to 10,681,085 as against 8,742,844 for last crop; and in all probability will reach the record figure of 11,000,000 bags.

Shipments, however, are still more active, being 31,855 bags greater than the previous week and more than double those of the corresponding week last year. Consequently, in spite of the extraordinary entries for the time of the year, stocks are falling and now stand at 624,349 bags for Rio and Santos jointly as against 733,131 a week ago and 392,189 on 15th June last year.

Declared sales were also larger, 131,000 bags as against only 112,000 for the previous week and 61,000 last year.

Entries of new coffee continue to increase and at Rio now represent about 30% of the total, the quality, however, being decidedly poorer than usual even at this period of the crop. The weather continues all that can be desired and the trees look strong and promise well for the 1902-1903 crop.

Large entries are expected in or after the second week in July.

The Government of São Paulo has asked the Minister of Foreign affairs to instruct the Brazilian Consul in London to make enquiries as to the manner that Temperance societies would be willing to co-operate with that Government in popularizing and encouraging the use of coffee.

Stocks.—The following widely different figures are current, all of them supposed to represent the actual stock of coffee in this market.

	May 31, 1901	July 1, 1900
Centro dos Cafésistas ...	... 252·202	152·170
Jornal do Commercio ...	... 248·114	152 112
Several Leading Brokers ...	... 207·703	107·671
The Brazilian Review ...	... 135 529	132·291

Allowing, even, for the respective initial differences on 1st July, there is a difference between our own estimate and that of the Centro dos Cafésistas of 96,794 bags; of 92,764 with the estimate of the *Jornal do Commercio;* and of 96,744 with that of Mr. F. L. P. Nunes and other Brokers. The last instance is particulary noticeable; because beginning on 1st July with a stock 24,620 bags larger than ours, Mr. Nunes' figures for stocks on 31st May were positively 72,174 bags larger! The difference is so considerable as to make it worth while to determine which of the four is the most accurate; and with this object we beg to submit to the trade the method employed by ourselves and adopted by the Commercial Statistics Bureau, which we believe to be as accurate as is possible in such matters.

We divide stocks into three categories; deposit in the city; at Nictheroy; and afloat in the Harbour. These are obtained in the usual way by adding the respective entries to each original stock and deducting the respective shipments.

Entries are obtained by daily returns furnished by the Central and Melhoramentos railways; at the Trapiche Vapor, Ferry and Caes Pharoux for the Leopoldina and other Barra Dentro entries; and by the Customs for coastwise or the sea-borne entries. The total of all these gives the entries for each day, from which the coffee re-shipped to deposits in Nictheroy is then deducted when the balance gives the precise amount of coffee entering this market for sale.

PERUVIAN COCA, COCAINE, CINCHONA, ETC.

The vaule of the coca leaves exported from Peru in 1899 was £17,359, against £22,437 in 1898; of cocaine, £67,507, against £65,197; of cochineal, £499, against £709; of borax, £61,102, against £57,422; of matico, £147, against £389; of cinchona bark, £7,830, against £3,046; and of rhatany, £755, against £604. No weights are given for Peruvian exports, as a whole, but they appear in relation to various centres. Thus, Salaverry exported 335 tons of coca leaves in 1900, and 214 tons in 1899, and 284 kilos. of cocaine in the former year as well, this being the beginning of the alkaloid trade at this port. Most of the leaves were sent elsewhere in Peru, probably to be re-exported. Germany received direct 16,019 kilos. of coca and 110 kilos. of cocaine, whilst the United Kingdom received direct only 60 kilos. of the latter. Mollendo sent to Liverpool in 1900, 3,099,555 kilos. of borax, and 48,575 kilos. of bark; to London, 93,051 kilos. of bark, and 670 kilos. of coca leaves; to Hamburg, 2,133,718 kilos. of borax, 32,962 kilos. of bark, 7,962 kilos. of rhatany, 212,922 kilos. of coca leaves, 261 kilos. of cocaine, and 598 kilos. of matico; to New York 138,569 kilos. of coca leaves, and 137 kilos. of cocaine. The total export of bark was 183,549 kilos.; of borax, 6,036,076 kilos.; of rhatany, 11,564 kilos.; of coca leaves, 352,161 kilos; of cocaine, 398 kilos.; and of matico, 598 kilos. There was no sarsaparilla exported from Mollendo in 1900, but 35 kilos. were exported the previous year. From Cuzco 617,150 lbs. of coca leaves were exported, the average price being 16s per drum of 25 lbs. in Cuzco. The shipments have gone principally to Hamburg, *viâ* Mollendo, but some hundreds of pounds went to New York. About 11,993,900 lbs. of borate of lime, worth about £51 10s. per ton have also been exported from the Arequipa district.

TRADE WITH PERSIA.

The following communications from Mr. E. G. Foley, wh is travelling on the Persian frontier in behalf of the India Tea Association, are published:—

H. B. M. CONSULATE,

Dated, SEISTAN, *6th June*, 190

To the Secretary, Indian Tea Association, Calcutta.

Since my letter of the 29th ultimo, and wire of that date announ ing my arrival here, I am glad to report satisfactory progress. Th result of my free tea to the Persian sight-seers at the Gymkhana the British Consul's escort of half a troop of the 7th Bomba Lancers, held on that afternoon, resulted on my being besieged b buyers of tea at their own price of 7 and 6 krans per pound Orange Pekoe and Pekoe equal to Rs.2 and Rs.1-13-6 per poun About 40 or 50 men of all classes were eager to buy the Orang Pekoe and Pekoe at the above prices, but I had to refuse and te them I had only samples and no tea for sale. There were peop from the town of Nasturabad and adjacent villages only. Th Governor also wanted to buy a small chest, but I would not let hi have it. The Persians like the Russians, prefer land-borne sea-borne tea, and the fact was strongly impressed upon me b several of the Persian merchants, including the Agents here the two largest Persian firms at Meshed. They say that sea-born tea is affected by the "Shabnam" or "Zhalah," which literall means dew, but really air or moisture; hence all teas from Banda Abbas were not in great favour, and caravan tea will always b preferred and command a higher price. Besides, the samples se on to Herat and Kandahar, I have sent samples to Kirman (whic is served through Bandar Abbas) to two European gentleme resident there I learnt of these gentlemen from a German Nava Captain, who has been travelling through Persia for the past nin months and arrived here to get to Quetta six weeks ago. As h was going to Gwadar on the coast to get to Karachi, and woul pass near Kirman, he very kindly undertook to see them delivere The samples have labels with prices at Quetta. But I have writte to these gentlemen to show the samples to the leading merchan at Kirman; and to say that the prices would be 7, 6, 5, and 4 kra for Orange Pekoe, Pekoe, Pekoe Souchong, and Dust at Seistan and that particulars could be obtained from our Consul her The German Naval Officer was very much taken with th compressed tea, and declared he was certain that it would b served out to the German Navy, as tea was part of their rations coffee in the morning and tea *at night*, and that samples shoul be sent to the Naval Department, Berlin.

The Russian duty of three roubles per pood (38 lbs.) is, I find, onl on tea brought from the Russian side, carried by Russian railway or Caspian boats; whereas tea and all goods from India crossin the Russian frontier have to pay duty equivalent to their valu except indigo. The latter pays a duty of about one-third less tha its value, as it cannot be got in sufficient quantities in Turkesta This information is from a merchant here, who has given u trading in English or Indian goods, and is now dealing entirely i Russian-made articles, chiefly cloths. This wan trades in indig as the only Indian article. He was one of those who impressed o me the preference of the Persian to land-borne tea over sea-born The man has travelled to Samarkand, Bokhara, Khokand, an Tashkend several times.

I have left 35 lbs. of Orange Pekoe with a firm of Shikarpu

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, othe have no effect, and none do good. Sugar and water, or a little glycerine, giv relief when the throat is inclined to be dry; this applies to persons whose throa are affected by the weather. About a third of a teaspoonful of Condy's Fluid a tumbler of water, if used as a gargle every morning, will clear the throat an brace up the uvula, which, in some singers, is so long that it interrupts the pu emission of the voice, and introduces a grating undertone, while it also tends make a tremolo on the upper notes."—*The Idler*, February, 1900.

merchants at Seistan, to be sold by them, so that they will be able to satisfy themselves as to what prices are procurable here. One of the men of this firm has traded in tea in Bokhara, Samarkand, and other places in Turkestan; also in Ladakh, Baflistan, Leh, and Cashmere, and its neighbouring districts.

The little experience that I have already had in a sparsely-populated district like Seistan has shown me that the taste for tea is universal among all classes of Persians, and that they prefer to get the very best of everything and pay for it. With these prospects before us, I would strongly recommend the Association to test the whole of the Persian markets by sending tea into Persia from four different quarters to four different centres: (1) from Quetta to Meshed *viâ* Seistan and Birjand; (2) from Resht on the Caspian to Teheran; (3) from Bandar Abbas to Kirman; (4) from Bushire to Ispahan *viâ* Shiraz. The second and third can be reached by caravan from Quetta also. The sea route, no doubt, would be cheaper, but the land-borne tea would fetch a higher price and pay better. The caravans would touch at all the principal towns and villages on these roads and would dispose of the tea as they go along. Kirman from October to March could be reached from Robat—our last station in Baluchistan and on the Persian (Seistan) frontier—in ten days. The caravan for Teheran would go *viâ* Meshed, but that for Ispahan would have to be sent by sea to Bushire, and then by caravan to Ispahan. The cost of carriage overland by Pathan camels is Rs.6 per maund for every 500 miles; Rs.6 from Quetta to Seistan; Rs.12 to Meshed, and Rs.9 to Birjand, half-way between Seistan and Meshed. The class of tea required is Orange Pekoe and Pekoe, which could be re-packed in Calcutta in bales, each bale holding from 2½ to 3 maunds net. The inner wrapping of the bales to be of sheeting white and blue—and turkey red or blue—Saloo; the raw hide outside that, and finally gunny. All this packing material would sell separately and well; and the profits on this alone would almost cover the cost of carriage. I have seen how these bales are made up and could easily pack in the same way. All extra weight is saved, and no loss from breakage of boxes. These bales are as tight as drums, and can stand any amount of knocking about, and are water-proof besides. There is seldom much rain or wet weather in these parts, except in December and January. The caravans would have to leave Quetta by the end of September or early in October, before the Winter sets in, as camels cannot stand much cold, besides fodder or camels' food dies down then and gets scant. My suggestion is that four lots of 500 maunds of tea each should be despatched as suggested, three by land and one by sea, with a European in charge of each. I could find the men, retired Government officers nearly all of them and all Persian speakers, and two of whom I know have been in Persia several times, men quite strong and fit for rough work and travelling, and reliable in every sense of the word. The cost of carriage by rail for tea by this route is now Rs.2-8 per maund, to which has to be added Rs.6 for every 500 miles of carriage per maund, *plus* establishment. The salary I would propose for experienced men speaking Persian is Rs.400 per mensem, *plus* travelling expenses; the tea if purchased would cost on the average about 7 to 9 annas at the outside if purchased in the open market. If contributed, there would be only the cost of carriage and establishment against an average selling price of nearly, if it not quite, Rs.2 per pound. Of course, these prices will not last if there is a general scramble to throw tea into Persia. But if the Association kept the business in their own hands for a season or two, *i.e.*, all the gardens in Assam, Sylhet, Cachar, Dooars and Darjeeling, etc., and worked the business as one syndicate, they would command the market, as the producer would then be dealing directly with the consumer without the intermediary of a middleman who has hitherto reaped the benefit. Two thousand maunds of Orange Pekoe and Pekoe is not so very large an order for gardens to contribute. It could all be blended and packed in bales as recommended by me in Calcutta. I would suggest 100 maunds of indigo accompanying each one of these four expeditions. Pathan camels can carry as much as two chests or eight maunds; an ordinary camel not more than five, though really they don't carry much more than four maunds.

Samples of tea were sent to Russian Consuls and Russian doctor and the Cossack guard at the Russian Consulate here. It is my intention to send a half-chest from Meshed to the Shah of Persia at Teheran, through our Consul-General and Ambassador at the Court of Teheran.

E. G. FOLEY,

H. B. M. CONSULATE,

Dated, SEISTAN, 15*th June*, 1901,

I am sending samples of Russian cotton and woollen cloths, and wool procurable here and at Birjand - prices with quantity, weight, and names are added on slips pinned on. The nappy cotton cloth called Makut Chikun sells at Rs.2-8 to Rs.3 per yard in British territory, particularly in the Punjab, where it is smuggled in by Pathan traders, Russian goods not being allowed to enter British territory. Negotiations are now pending between the two Governments regarding the admitting of Russian goods into British territory. There is a 5 per cent. export duty on all goods leaving Persia as well as on all imports. The export duty is fixed on prices current in the market. Ghee is the chief export from these parts. I am also enclosing samples of "Kundet" or vegetable wax and some of its seed under separate cover together with the samples. Price of this wax at Birjand is 7 krans and 2 Shahis (18 Shahis equal to 1 kran equal 4½ annas) for 1 man of 6½ lbs. avoirdupois. It is sent largely to Karachi. Particulars regarding shrubs, etc., on which it is found will be sent from Birjand, from where it is sent. I have just met the Russian Consul and Italian Customs' Officer, and learnt satisfactorily that the duty on tea from Persia (Indian and other into the Russian frontier or railway station of Askaoad) is three roubles per pood, equal to about 2d or 2 annas per pound, duty on all other goods, except indigo being on an equivalent to their value. The Russian Consul told me, on my asking him how the Cossacks liked the tea I gave them, that they would never drink Russian tea again if they could get Assam. Indian tea could be introduced into Russian Turkestan and the Turkoman country by rail to Merv, Samarkand, Bokhara, and Tashkend, and also into Russia proper, but for the last it would have to be sent across the Caspian till the Orenburg-Tashkend Railway was opened.

E. G. FOLEY.

COST OF PRODUCTION OF COFFEE.

The following correspondence has appeared in the New York *Journal of Commerce*, in which the cost of production in Mexico and Brazil is compared:

"According to the owners' statements the cost of producing Santos coffee on the Fazendas Schmidt and Dumont, which probably have more coffee trees than any other plantations in the world, is four cents per pound bagged, ready for shipment on the plantation; five cents per pound in Santos; six cents per pound in warehouse in New York. At this price nobody makes any money except the brokers, railway companies, and steamship lines. These figures are based on the average product of the plantation, which would probably be somewhere between numbers five and six, New York exchange standards.

"Of course, the smaller plantations cannot produce at the same price as the larger ones and the question of the survival of the coffee planter is getting to be largely a matter of transportation. Undoubtedly many coffee planters will be forced out of business from mere inability to pay their labourers for the picking of the coffee and the care of the plantation. Probably the first decrease in production will come from this reason. The planter who shipping facilities are close to a railroad can perhaps make expenses at the above figures, but the one who must cart his product five or twenty-five miles to a railroad station must go to the wall. Of course, this applies with greater force to those planters in Mexico, Venezuela, and Columbia, who must put a couple of bags of coffee on a "burro" and take anywhere from one day to five days' journey before they can reach a shipping point. All of them are at present losing money largely and it is only a question of time when they must stop.

"On the other hand those large plantations along the line of the Tehuantepec railroad in Mexico have a rate of freight of 50 cents per hundred pounds from the plantation to New York, as against 250 cents for the planter in São Paulo. These Tehuantepec plantations claim that they can put washed Oaxaca coffee in New York at a cost of five and one-half cents per pound. Now suppose the Brazilian planter receives nothing at all for his coffee on the plantation. It still costs him two and one-half cents per pound in New York in actual transportation expenses. It is probable that no one

will dispute the statement that washed Oaxaca will always bring at least three cents per pound more than the average Brazil coffee. Consequently, while the Brazilian was getting two and a-half cents per pound for his coffee which would only pay the transportation expenses, the Tehuantepec planter would obtain five and one-half cents for his coffee at which price he could live, but not pay any dividends on his stock. There is no place in the world that can compete with him in coffee production, largely on account of his superior transportation facilities, and the superior quality of his product. Moreover, he can also raise rubber, pineapples, sugar, oranges, lemons, and other products which pay a profit to reduce the cost of coffee production. A rubber tree shades his coffee tree and it costs him five cents per pound to produce the rubber after the tree is matured. The rubber sells for 65 cents. A handsome profit surely.

"Fortunately for the Brazilian the area suitable for coffee planting in this region is limited or the Brazilian would have harder competition than he ever had before. There is no doubt but that were there area enough in Mexico along the line of this railway, all other coffee planters would be driven out of business, and no one in the world could compete with such plantations as the "Doa Rios" and "Ubero", run by American capital on American business principles, with a stable government and a railway depôt on the plantation itself. Moreover they have two outlets, one by way of Coatzacoalcos to New York and Europe, and the other *viâ* Salina Cruz to San Francisco and the Pacific Coast. This road is now being four-tracked so that it will be able to handle all the freight which is presented to it with facility, even to the extent of competing with a Panama canal, because the saving in ocean travel is several days in favor of the more northern route.

"The practical question of decrease in coffee is: "How long is the purse of the planter? and "How long will he fight against what appear to be hopeless odds?" and "How can he pay his labourers for picking his product?"

Note—ED., *B. R.*—The cost of production of coffee as of everything else is a relative and not a positive quantity, and is a function of general local prices. The price of any commodity is entirely distinct from its cost of production, and is determined by the ratio of supply to demand. But if price decline in such a manner as to fall under the cost of production, it is clear that either the cost must be reduced or production fall off. If, on the contrary, as is the case with Brazilian coffee, production instead of decreasing increase, the only logical conclusion that can be arrived at is that, however low prices may have fallen they have not yet reached the limit at which production becomes impossible.

Because the cost of production may have ruled 4, 5 or 6 cents per lb. at one time, it does not follow that it will always do so, or, even, that it does so now. As exchange rises the cost of production declines, and the fact that Brazilian coffee has been sold as low as 5 cents in New York without stopping but rather stimulating production shows that the premises on which the whole argument of this correspondent is founded are unreliable. We do not pretend that at 5 or 5 1/2 cents planting can be very profitable. Indeed, if it leaves any profit at present it must be a very bare margin. But it does not, therefore, follow that it must be always so, or that, by reduction of cost the margin may not be considerably widened in a manner that would be, probably, impracticable elsewhere.

In the first place a re-adjustment of charges to the altered circumstances created by the rise of exchange is ultimately inevitable. Not only must the currency rates of wages be reduced, but railways and intermediaries of all kinds will be forced to reduce their charges also. Half a loaf is better than no bread; and if, as is stated, coffee at current prices is so unprofitable to the planter as to leave him only losses, the time cannot, evidently, be far off when they must be reduced or he must give up planting altogether and there will be nothing for the railway to carry! Long before that could happen, if, as the correspondent of the *Journal of Commerce* states, railway freights really represent a charge of 21/2 cents per lb. or 110 % on the prime cost of the coffee, there must be a tremendous margin for reduction in that item alone.

The interest of the railways are identified with those of the planter to the extent that they depend exclusively on coffee for their traffic, and would work at the bare cost of maintenance rather than shut up altogether. The very causes that are at present prejudicing the planter, *viz*, the rise of exchange and "over-producion" are a source of profit to the railways and make it easier for them ultimately to reduce their charges.

As regards the cost of delivery from the plantation in Mexico New York, we have no means of verifying the statement that rules only 50 cents per hundred lbs., but it seems extremely and probably, if correct, applies only to a limited area and d not include the cost of handling at all. Anyhow, the cost of livery from São Paulo plantations which is put down at 250 ce per 100 lbs. is grossly exaggerated. The maximum freight charg in the Paulista railway, for example, is only 1$500 per *arroba* of kilos., equivalent, at even the relatively high exchange of 12d., only 112 cents per 100 lbs., whilst, at 35 cents a bag, ocean frei amounts to 26 cents, thus bringing up the total to 138 in lieu 250 cents per 100 lbs. We do not include duties and other charg as they have evidently not been included in the calculation of comparative cost of delivery estimated for Mexico.

The railways engaged here in this traffic nearly all earn ha some dividends of 12 to 14 % and could, in São Paulo at least, p bably reduce rates to half without losing money. On the ot hand, coffee has been constantly carried to New York at 10 ce per bag without loss and could be again if necessary. So th altogether, a reduction of carrying charges from 112 to 60 or cents per 100 lbs. is by no means an impossibility. The method estimating the cost of production followed by the correspondent the *Journal of Commerce* is, however, misleading and arbitra Brazilian coffee is now selling in New York at little over 6 cen or ½ cent under what he estimates to be the cost of delivery, a has before been sold at 5 cents, the price he estimated as the c of delivery at Santos. In spite of such low prices, however, cof does not cease to be produced nor to be shipped, which certai would be the case had the price really fallen under the cost of livery. At 5 or 6 cents per lb., coffee may not leave much profit planters, but, before Brazilian coffees could be driven from markets, there are wide margins yet to be reduced not only in prime cost of production but of freight and handling. Sho extensive cultivation prove too costly, it must be made intens and labour replace planters as proprietors, as was the case w cotton in the Southern States. But, come what may, coffee w never cease to be profitably produced, because Brazil possesses almost unlimited area and climate suitable for growing coffee su as no other country enjoys.

POSITION OF COFFEE.

[From the *Bulletin des Halles.*]

The new season will commence in a couple of days, and everyc is agreed that the crop on the trees is the largest ever known. will be recollected that in their last monthly circular, Mess Duuring & Sons estimated that the yield might reach 11½ to millions of bags, that is to say, it may exceed that which is abo to be finished by 600,000 to 1,000,000 bags. This time last ye we were discussing estimates of 2½ millions for Rio and 6 millio for Santos, or 8½ million bags in all, as being the probable ma mum, but we shall have an actual crop of about 2,900,000 bags Rio and 8,000,000 bags for Santos, a total of 10,900,000 bags.

This enormous difference of 2,400,000 bags, between the estimat at the opening of the season and the reality, is, of course, exe cising an influence on prices. Mainly, however, because of the r in the exchange, the depreciation which has followed in the r value has been greater in coffee on the speculative markets. Th on June 23, 1900, good average was quoted at Santos at 7,300 re and, notwithstanding a certain recovery from the lowest point, is only quoted at present at 4,500 reis, or 2,800 reis less. Th month's deliveries, which were quoted at 46·25 fr. on June 23, a at present worth 35·25 fr., or 11 fr. less.

In fact, the positions are as opposite as they possibly could be the opening of the two seasons. Last year with such moders estimates coming after a crop of 9,000,000 bags (the result of whi was shown in a reduction of 429,000 bags in the visible supplie people were generally, of course, in favour of a rise, but this feeli was considerably modified further on by events. In the end, no withstanding the strong opposition of the large interest committ to a rise, a marked depreciation has taken place, and instead of t rise whch was expected, actual prices are 11 fr. lower than year ago.

This year it is exactly the opposite. The season will termina with visible stocks about 1,000,000 bags heavier than last year, a

there are expectations of a colossal crop. With certain exceptions people are, therefore, more in favour of a fresh depreciation in prices, notwithstandiug their present low level, than of any improvement. Such appearing to be the prospects it is difficult to say whether they will be realised. Taking into account the disappointment of the past season, it is hard to be positive, and it is because of this uncertainty that some, notwithstanding all the above, see a prospect of a rise and even of a considerable one. They argue that, although the new crop may really be as large as is expected, the reis prices are so miserable that the planters will be compelled to abandon a considerable portion of their crop or not to export it, which according to them is the same thing. If this took place the receipts would compare unfavourably with those of last year, and we should then be led to see that, if in the preceding season we were misled by the enormous excesses of the crops as compared with the estimates, we may have exactly the contrary experience during the season about to commence. If to this is added, as is hoped, favourable news on the prospects of 1902-3, it will be seen that there is a good deal may take place. We do not do more than once again sum up the ideas of those who, notwithstanding the situation and the present estimates, have confidence in and ultimate rise in prices. They are not numerous, but it is they who for a long time have been the active parties in the markets, and therefore a certain importance must be attached to their opinion. On the other hand, the majority thinks that with a visible stock equivalent to about six months' consumption, and in face of the colossal crop we are about to go through, it is difficult to see how prices can be prevented from falling as low as, if not lower than, in September, 1899.

THE COFFEE TRADE.

The following plea of American coffee is taken from the *Merchants' Review:*

We're little beans from far Brazil,
From Cucuta or Guayaquil;
Some from Mexico have come,
And others call Laguayra home.

Some people think that Aden sends
Vast store of bales to make rich blends;
That's where they're fooled—and badly, too;
Our Mocha kith and kin are few.

The Java kinds enjoy great fame,
But surely there is room for blame
When ten times more of Java's sold
Than ever left the island's mould.

The Western continent supplies
A coffee which with Java vies;
In mighty cargoes, north we come,
Our total cost a goodly sum.

But who our place of birth can tell,
When grocers o'er their counters sell
Little but Java and Mocha mild?
The thought of this near drives us wild.

Now to the trade we make our plea:
Pray treat us fairly and you'll see
The glories of the Eastern bean
Grow dim, outshone by ours, we ween.

Give to the Rio its proper name,
Let Santos sorts enjoy the fame
Which now the Eastern coffees steal.
Do this and we shall grateful feel.

If Brazilian planters were more careful in the cultivation and preparation of the bean and did not hurry the product to market, they would greatly improve the average quality of the crop. Brazil can grow some of the finest coffee in the world; but, unfortunately, the proportion of high-grade is small. There is a richness in some East India coffee that is hard to match, and there are marks that are very poor. It must also be kept in mind that individual tastes differ so that a coffee which one pronounces fit for the gods to drink is not agreeable to another. Buyers must select coffee on its merit and for the flavor which best meets the requirements of their trade, and not on any general rule.—*American Grocer.*

DISTRICT ASSOCIATIONS.

WYNAAD.

Proceedings of a Meeting held at the Meppadi Club, July 24th, 1901. PRESENT:—Messrs. Abbott, Malcolm, S. H. Powell, junior, C. Lance, Nicolls, D. Mackenzie, Waddington, Carver, West, Trollope, Taylor, Day. *Visitors*—Messrs. Beley, Armstrong, Gillatt, and Morres. Mr. Winterbotham *in the chair.*

The notice calling the Meeting to specially consider the proposed Labour Bill was read.

1. Read letter from Mr. Hocken.
2. Read the letter of the Secretary to the Government of India, to the Chief Secretary, Government of Madras, dated January 5th, 1901, with Mr. Hodgson's reply thereto.

Resolved: that this Association cordially endorses Mr. Hodgson's letter and representations.

But Mr. D. Mackenzie, delegate to the U. P. A. S. I. Meeting, was particularly asked to point out—

(1) That the suggestion proposed by the last three lines of para. 3 of the Government of India's letter, taken with the last four lines of para. 5, debars the Planter from any redress except through the Civil Courts, as against his local labour, to which the proposed Act is inapplicable; at any rate to the circumstances in Wynaad where a great deal of work is done by local coolies not living on the estates.

(2) That it is absolutely necessary that advances made subsequent to the execution of the contract should be considered as advances under the contract.

(3) That on no account shall the Maistry be considered an Agent for whose actions outside the Labour District the Planter shall be responsible.

(4) That it shall be made clear that the contract with the cooly is not necessarily a monthly one. And Mr. Mackenzie was requested to ascertain whether under the Bill, as at present drafted, the Planter can proceed against the cooly.

(5) That before the Bill is finally drafted legal advice should be taken to see that the interests of the employer of labour are in no way threatened.

3. Read Agenda paper of U. P. A. S. I. Meeting.
4. A vote of thanks to the chair concluded the proceedings.

(Signed) H. B. WINTERBOTHAM,
Chairman.
(,,) C. E. ABBOTT,
Acting Honorary Secretary.

INDIAN TEA ASSOCIATION.

A meeting of the General Committee was held on the 16th July, at which were present:—Messrs. H. S. Ashton (*Chairman*); A. Tocher (*Vice-Chairman*); H. W. Boyd, W. Brown, D. A. Campbell, A. C. Lawrie, and R. R. Toynbee. Messrs. R. H. A. Greson and R. Magor were unavoidably absent.

In the Proceedings of the meeting held on the 18th June, it was stated that the General Committee were prepared to ask the Government of India to move in this direction. But it was added that they were not at present disposed to go further and to suggest that—failing the abolition of the Ceylon duty—the existing Indian tax should be enhanced to a protective rate These views had been communicated to the Central Travancore Planters' Association, by whom the question was raised.

The Honorary Secretary to that Association now stated in reply that his Committee supported the proposal to move, in the first instance, for the abolition of the Ceylon duty. But he also said that there would be no objection to an *ad valorem* duty of 5 per cent. being levied in Ceylon, as in India

The General Committee had understood from the previous correspondence that the principal objection to the Ceylon duty was that it necessitated the sale of Indian tea in Colombo in bond. This

restriction was said to have an adverse influence upon prices. They also believed that in the case of teas sent from India to Russia, it was found to be more advantageous to tranship at Singapore rather than at Colombo, mainly owing to the fact of the latter not being a free port. It seemed to them that if such were the case, neither of these two objections would be removed unless the duty were entirely abolished. They could not therefore, on the statements before them, agree with the Central Travancore Planters' Association in thinking that the reduction of the duty to 5 per cent. *ad valorem* would be sufficient. To meet the case they considered that no duty should be levied in Ceylon upon Indian teas, and no duty in India upon Ceylon teas. But they thought the existing duty in each country should be retained in the case of non-British teas.

The Central Travancore Planters' Association were to be addressed in accordance with the foregoing. After receiving their reply, the Committee proposed to consider the question further, and thereafter to approach the Government of India, in such manner as might be thought desirable.

Considered a memo., dated 13th July, from the Sub-Committee appointed to formulate proposals for the sale of tea in India.

At their last meeting the General Committee had had before them a Report by the Sub-Committee, in which it was suggested that Messrs. Andrew Yule & Co.'s offer to organise and to work the proposed Tea Distributing Agency should be accepted.

Before finally accepting this recommendation the General Committee had asked for some further particulars. These were supplied in the memo. now submitted, which was as follows:—

"I am directed to state that the Sub-Committee have discussed with Mr. David Yule, of Messrs. Andrew Yule & Company, the different points raised in the General Committee's memo., dated 3rd July.

2. "Mr. Yule is of opinion that it would be very difficult, if not impossible, to frame reliable estimates of the expenditure which will be incurred. The Sub-Committee agree with this opinion. But they think the particulars which they now submit will be sufficient to enable the General Committee to come to a conclusion as regards Messrs. Andrew Yule & Company's proposal.

3. "Mr. Yule is further of opinion that the proposed Agency should be worked as a department of Messrs. Andrew Yule & Company's business. He is not in favour of the formation of a limited company. Such a company would not—he pointed out—have a good commercial status, for its capital would consist of only the sum of Rs.40,000 and the tea contributed. Moreover, he holds that it would not be possible for Messrs. Andrew Yule & Company as Managing Agents or Secretaries of a limited company to advertise and to push the business in such a way as would be likely to make it successful. His idea is a business having the form of a National Agency under the auspices of the Indian Tea Association, and of which H. E. the Viceroy should be asked to be patron and the Princes and Chiefs of India, the members of Council, and other leaders of society vice-patrons. This idea is, Mr. Yule considers, incompatible with that of a limited company. The Sub-Committee agree with him upon this point, and they recommend that the Agency be established as a department of Messrs. Andrew Yule & Company's business.

4. "Messrs Andrew Yule & Company are prepared to guarantee to work the Agency for a period of three years on the following terms:—

(*a*) They will require to receive their actual out-of-pocket outlay for staff (including a proportion of Mr. Henson's salary), rent, blending, packing, printing, advertising, distribution of tea, travelling expenses, etc.

(*b*) They will provide such further finance as may be required after the sum of Rs.40,000 (which is to be provided from the American and Foreign Market Fund of the Association) is exhausted.

(*c*) They will keep a proper account of receipts and disbursements, which will be audited by chartered accountants.

(*d*) They will convene meetings of the Advisary Committee at intervals at their office; and they will issue such progress reports and accounts as that Committee may consider necessary for the information of subscribers.

(*e*) If during the three years' period there is a deficit, Messrs. Andrew Yule & Company will meet it. But at the end of the period, should there be a surplus, it will be divided *pro rata* among the contributors of the tea, the value of whose consignments will be credited to them at a valuation at time of record in the books of the Agency. Should the surplus be larger than the amount required to repay to the contributors the value in full of the contributions, the balance will be devoted to repaying the sum Rs.40,000 to the Association.

(*f*) Messrs. Andrew Yule & Company will be the owners of t business on the termination of the three years' period. Any pla such as office furniture, machines for packing tea, etc., that m have been debited to the working expenses during that period w be taken over by them at a fair valuation.

5. "The Sub-Committee recommend that these terms be acce ed by the General Committee; and that Messrs. Andrew Yule Company be asked to take steps to establish the Agency as quick as may be possible."

After consideration the General Committee decided to accept th recommendation, and to ask Messrs. Andrew Yule & Compa to take immediate steps to establish the Agency.

It was agreed that the Advisary Committee referred to in t memo., should be constituted as follows:—

1. A representative of Messrs. Finlay, Muir & Company; a representative of Messrs. Macneil & Company; 3, a represent tive of Messrs. Octavius Steel & Company; 4, a representati of Messrs. W. S. Cresswell & Company; 5, a representative Messrs. J. Thomas & Company; 6, a representative of Mess Moran & Company; 7, Mr. D. King; 8, the Chairman; 9, t Vice-Chairman of the Indian Tea Association *ex-officio*.

The Advisary Committee would have power to fill up vacanc among their number giving preference to representatives of the firms who were subscribers of tea.

A letter, dated 3rd July, from the Hon. Mr. Granville L. Acwor Chairman of the Central Travancore Planters' Association, wi reference to the development of the Southern Indian markets, w also discussed. Mr. Acworth stated that a scheme to expl Southern India had been formulated by the Kanan Devan Plante Association. It was to the effect that a limited company with capital of Rs.50,000 should be established, estates taking up shar in proportion to their acreage. If this plan were carried out thought the Indian Tea Association's Agency should not operate Southern India. It was decided to inform Mr. Acworth th arrangements had been made to put the working of the Tea Distrib ing Agency into the hands of Messrs. Andrew Yule & Co.; a that the Committee could not restrict the area within which th firm should work.

THAT "LITTLE DISH."

How we do like a little dish of something nice, served up hot!

Charles Lamb would have sold his shirt for a tender suckling p done to a turn. Doctor Johnson used to say that a dish of tea w the most fragrant of life's beverages. "Why, what am I a-thinki of, I shall forget my own name next," said Toby Veck, "It's tri —the best tripe ever stewed." And his daughter Meg smiling gave him the basket, in which reposed a hot steaming dish of favourite meat.

"My wife prepared nice, dainty little dishes to tempt my appetit said Mr. Henry White, of that beautiful Devon town, Torqu "but somehow I seemed to have lost all inclination for food, a after sitting at the table trying to swallow a little, I used to s to her:—

"It's no use. I can't eat it. You may as well take it awa This sort of thing soon told a tale, for one can't go without fo for long without losing strength. Seeing my condition, a frie strongly advised me to try Seigel's Syrup. He said it had cur him, and might do me good.

"My appetite no longer needed coaxing. I could eat well-ni everything that was put before me. Each dose seemed to give life and vigour. To-day, no matter what ails me, Seigel's Syr puts me right."

That "little dish," in fact, is once again the favourite.

"Some three months ago my wife got thoroughly run dow For over a fortnight she could keep nothing on her stomach." Henry White, when certifying to the truth of this on Septemb 13th, 1900, at his house, 10, Pediford Terrace, Torquay, Devon, d not say what was the matter with his wife.

We know why the "little dish" failed to digest, and we qu the words of the famous physician to prove it: "In the nerv and irritative form of dyspepsia, this is a very prevailing sympto As is also a sensation of sinking, as if the stomach required fo

due to the fact that the food has left the stomach in a half-digested condition."

Who could enjoy a "little dish," when the food could be but half-digested? "She was troubled a good deal with wind, and seemed to be losing her strength. I fetched a bottle of Mother Seigel's Syrup from Holloway's Drug Stores, and she commenced taking it. In a short time she was quite well again." H'm, some men would now sell their shirt for a bottle of this remedy.

This essay, then, upon "little dishes" proves that while man and woman can in no wise *always* relish that favourite dish, yet a cure is ready to hand. One that has served men and women alike for more than the past thirty years.

MARKET REPORT.

[*Per Mail advices of* 12*th July* 1901.]

COFFEE.

The London Commercial Record says:—A generally quiet tone has prevailed in this market, and it has been difficult to effect sales unless at some slight concess on in prices, except for desirable qualities, which have met with a steady demand and late rates. East India did not show much change in value; good foxy green Salvador at 32s to 33s per cwt. and exhibited a greater decline than any other growth or grade. The continuance of heavy receipts in the Brazils have had an adverse influence on the market for "futures," and prices are lower; yesterday September sold at 28s 3d to 28s 4½d, December at 28s 9d, March at 29s 6d to 29s 3d, and May at 29s 9d per cwt.

London ...	... Santos ...	Sept. delivery	... 28s 3d.
New York	... No. 7 Rio...	,,	...: 5·05 cents.
Hamburg...	... Santos ..	,,	... 28¼ pf.
Havre ...	... Santos ...	,,	... 35 francs.

The sales to-day went off with very slow demand, but without alteration in values. Foxy good qualities are 1s 6d per cwt, lower on the week. To-day's auctions offered 7 barrels Ceylon, 938 bags East India, 12 barrels Jamaica, 27 bags Vera Paz, 1,336 bags Salvador. 1,140 bags New Granada. 353 bags Costa Rica, 1,897 bags Guatemala, 50 bags Colombian, and 289 bags Nicaragua.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ..	22,134	20,098	33,781	25,993
	Home Consumption.		Export.	
	1901.	1900	1901.	1900.
Tons ...	11,281	9,435	15,024	11,200

The preceding figures exhibit—	Tons.
In the Imports an increase this year of ..	7,788
Home Consumption an increase of	2,846
Export an increase of	3,824
Stock an increase of	2,036

Auctions this week have gone off as under:—

Ceylon.—30 casks 3 tierces 5 barrels 16 bags partly sold—*Plantation*, bold 65s; *Native*, medium 34s.

East India.—3,372 bags partly sold as follows:—*Mysore*, smalls 37s to 38s 6d, low middling to middling 42s to 51s, bold 61s, peaberry 54s 6d to 58s. *Coorg*, smalls 38s, middling to good middling 45s to 53s, bold 63s to 65s, peaberry 65s to 67s 6d. *Neilgherry*, smalls 30s to 38s 6d, fine ordinary to low middling 37s 6d to 41s 6d, good middling 48s 6d to 49s, bold 51s to 69s, peaberry 44s to 57s 6d. *Shevaroy*, smalls 33s 6d to 35s, fine ordinary 37s, middling to good middling 45s to 50s 6d, peaberry 46s 6d to 47s. *Naidoobatum*, smalls 33s 6d to 38s, low middling 40s to 45s 6d, bold 57s 6d to 70s, peaberry 45s to 66s. *Wynaad*, fine ordinary 38s, peaberry 48s.

Mocha.—8½ frazils bought in.

Jamaica.—9 barrels 27 bags partly sold, ordinary palish 28s 6d, peaberry 46s.

Costa Rica.—3,390 bags catalogued 1,800 bags sold, smalls 33s to 38s 6d, good to fine ordinary 34s to 38s, low middling to middling 40s to 49s, good middling 51s to 57s 6d, bold 62s to 77s, peaberry 38s 6d to 68s.

Guatemala.—Of 2,177 bags offered 980 bags sold, smalls 30s to 35s, fine ordinary 39s, low middling to middling 40s to 49s, good middling 55s to 55s 6d, bold 78s to 79s, peaberry 42s to 60s.

Salvador.—Of 725 bags catalogued 560 bags sold, good to fine ordinary 32s to 39s 6d, low middling greenish to middling 40s to 45s 6d, bold 48s to 58s, peaberry 34s to 54s.

Nicaragua.—Of 1,843 bags offered 970 bags sold, smalls 38s, good to fine ordinary 32s to 37s 6d, low middling to middling 40s 6d to 44s 6d, good middling bold 50s to 57s, bold 50s to 74s, very fine 104s, peaberry 34s to 95s.

Colombian.—Of 3,438 bags offered 2,700 bags sold—partly damaged and bulked, smalls 30s to 37s 6d, good to fine ordinary 35s to 38s 6d, low to good middling 39s to 46s, bold 43s to 65s to 6d, peaberry 36s 6d to 50s 6d.

Vera Paz.—171 bags about half sold—low middling to middling 44s to 49s, peaberry 50s.

Central American.—30 bags sold, smalls 33s 6d, fine ordinary 37s, peaberry 42s.

Mexican.—Of 305 bags offered 65 bags sold—smalls 35s, good middling blue 58s 6d, very fine bold 85s 6d, peaberry 52s to 64s.

Receipts in Rio and Santos.

Since July 1	1900-1. Bags.	1899-1900. Bags	1898-99. Bags.	1897-98. Bags.
Rio ...	138,000	66,000	76,000	102,000
Santos ...	207,000	170,000	162,000	166,000
Total...	345,000	236,000	238,000	268,000
Crop...	—	10,900,000	8,971,000	8,772,000

Rio Exchange 11 1/16d, previous day 11⅛d.

Havre, *July* 11.—Good average Santos July opened quiet at 35f. and closed quiet at 34¾f., September opened at 35¼f. and closed at 35f., December opened at 35¾f. and closed at 35½f., March opened at 36¼f. and closed at 36f., May opened at 36¾pf. and closed at 36½pf.

Hamburg, *July* 11.—Good average Santos July opened quiet at 28pf. and closed dull at 28pf., September opened at 28½pf. and closed at 28¼pf., December opened at 29¼pf. and closed at 29pf., March opened at 30pf., and closed at 29¾pf., May opened at 30½pf., and closed at 30¼pf.

New York, *July* 11.—Closing prices of No. 7 Rio were as follow:—

		July.	Aug.	Sept.	Oct.	Nov.
July	11...	4·95	5·00	5·05	5·10	5·15
July	10...	4·95	5·00	5·05	5·10	5·15

TEA.

Indian.—Public auctions comprised 7,500 packages, of which 2,800 were New Season's, compared with 7,000 packages (2,000 New Season's) previously and 8,300 packages (6,200 New Season's) at this time last year.

There was good competition for nearly all descriptions with a stronger demand for low Pekoe Souchongs and Pekoes, quotations for them being occasionally fractionally higher.

A useful selection from South India was included in the catalogues, amounting to nearly 1,900 packages. Some of the invoices again indicated improvement as against prior arrivals of the same marks, and consequently fetched higher figures.

Exports from here to other countries for the past twelve months are very satisfactory, being 13,219,000 lbs. opposed to 8,599.000 lbs. in 1899-1900.

Ceylon.—A much smaller quantity was brought forward—*viz.*, 7,500 backages on Tuesday, and 8,000 packages on Thursday—in all 15,500 packages, contrasted with 32,000 packages in the week before, and 27,100 packages for the corresponding period of 1900.

Partly due to the reduced offerings, a better tone prevailed, though the bidding was somewhat irregular, and many lots were withdrawn. Leafy sorts for prices showed a hardening tendency, while others on the whole went at former rates, suitable Pekoes and Orange Pekoes being taken more freely for outside quarters. The best breaks of Broken Pekoe and Broken Orange Pekoe attracted attention, and in some instances marked an upward tendency.

The average is 6½d per lb. On the 12th July, 1900, it was 6⅞d per lb.

Shipments hence to the Continent, &c., from 1st July, 1900, to 30th ultimo, were 16,227,000 lbs, and in the foregoing year 13,329,000 lbs.

Java.—Rather over 1,700 packages of direct import passed the hammer without material change. For 211 packages from Golpara, consisting principally of upper lines, 9¼d per lb. was realised.

Deliveries.—The clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.* :—

From 1st to 9th July,	1901	4,816,546 lbs.
Do. do.	1900	4,544,149 „

During the week the following have been printed for sale by public auction :—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	6,482	973	7,455
Ceylon	12,942	2,419	15,361
Java	1,567	185	1,752
Total ..	20,991	3,577	24,568

Also 967 packages from second hands.

Arrivals of Tea :—

	From Calcutta.	From Colombo.
	Lbs.	Lbs.
Ex *Matiana*	...	219,000
„ *Oraya*	147,000	462,000
„ *Historian*	...	671,000
„ *Cauton*	...	407,000
„ *City of Dundee* ...	344,000	...
Totals ...	491,000	1,759,000

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated July 12th, 1901, says :—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1901-1902	59,362	164,910	8,891
1900-1901	30,572	142,950	3,956

8,413 *pkgs.* INDIAN
16,189 „ CEYLON
1,752 „ JAVA
} Total 26,354 packages were offered in public auction this week.

It is satisfactory to note from the following figures that the Australian Colonies continue to take increasing quantities of Indian and Ceylon Tea. During the Season year closing 30th April, nearly 30 million lbs. of Indian and Ceylon Tea were shipped from India and Ceylon to Australasia, as against about 12 million lbs. six years ago. The figures are taken from the Circular of Messrs. Alfred Harvey & Co. of Melbourne.

EXPORTS OF INDIAN, CEYLON AND CHINA TEA DIRECT TO AUSTRALASIA FOR YEAR, 1ST MAY TO END OF APRIL.

	1900-01.	1899-00.	1898-99.	1897-98.
Indian ...	10,129,028	8,301,839	6,327,817	6,632,460
Ceylon ...	19,207,929	15,349,144	15,105,000	13,670,105
China ...	6,776,684	6,517,406	5,800,000	4,593,000
Total lbs. ...	36,113,641	30,168,389	27,232,817	24,895,565

	1896-97.	1895-96.	1894-95.
Indian ...	6,197,450	6,620,126	4,414,112
Ceylon ...	11,793,882	10,306,506	7,513,975
China ...	6,200,000	11,462,500	10,463,585
Total lbs. ...	24,191,332	28,389,132	22,391,672

INDIAN.—Auctions were again light and included only 2,801 packages of New Season's Tea The scarcity of useful liquoring medium Tea from 6d. to 10d. per lb. is producing a better market for such grades, and prices are showing a hardening tendency.

Week's average of New Season's Tea sold on Garden Account 1901, 4,660 pkgs., av. 6·79d. 1900, 4,662 pkgs., av 6·68d.

New Season's Tea sold on Garden Account 1st June to date 1901, 14,707 pkgs., av. 6·69d. 1900, 15,717 pkgs., av. 6·83d.

CEYLON.—Supplies were smaller than for some time past. The sales were divided in about equal proportions between the Public Auction held on Tuesday, and the Trade Auction on Thursday. At the former sale many Teas had again to be withdrawn, though a fair market was found for them afterwards by private treaty. At the auction to which the Trade were only admitted, the Teas were well supported, and prices in many cases showed a slight improvement.

Average for week 6·45d, against 6·83d. same week, 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 666,799 pkgs., av. 6·58d. 1900, 672,648 pkgs., av. 7·25d.

JAVAS.—These Teas were well competed for, and met with a rea sale at steady rates. An invoice from the "Goalpara" Esta commanded good prices.

Bank Rate 3 per cent. Exchange on London three months' sight : Calcutta 1/4 1/16. Colombo 1/4 3/32.

COCOA.

A very quiet tone prevailed at the auctions on Tuesday, bare 600 bags selling under the hammer out of 4,145 bags catalogue In the business done little or no alteration was noticeable in price Of 542 bags Jamaica offered, 150 bags sold—fine fermented 65s 65s 6d, common to fair 57s to 60s 6d. 28 bags St. Vincent most sold at 59s to 63s for ordinary to fine, and 68s 9d for superio 1 bag Dominica quitted at 60s. Of 1,681 bags Guayaquil, 210 ba sold—reddish Caraquez 70s, dark greyish 68s. Of 311 ba Colombian, about 100 bags sold at 62s to 64s for sea-damage bulked. 94 bags good to fine Costa Rica realised 63s to 65s. T following were are bought in :—501 bags Trinidad, 177 ba Grenada, 3 bags St Lucia, 300 bags Samana, 25 bags Brazil, bags Para 100 bags Venezuelan, 198 bags African, and 109 ba Ceylon. Private transactions include 50 bags good red Trinid at 70s to 71s, 350 bags fair common Grenada at 61s per cwt, a 600 bags Guayaquil Arriba at a price not reported.

PEPPER.

BLACK.—The market is dull in tone, and for arrival the only sa reported is a little lot of 10 tons Singapore June August shipme at 6 1/16d. On the spot 300 bags have been sold privately at 6 3/32d 6 1/16d for greyish to fair quality.

At public sale on the 10th instant 152 bags Singapore we bought in at 6 1/8d. 10 bags Penang sold at 6 1/4d for good bold hea and 5 7/8d for rather light greyish. 10 bags Malabar withdrawn.

WHITE.—The market remains quiet, and the values have tend in buyers' favor. Small sales of fair Singapore have been made the spot at 9 1/4d, and of Penang at 8 3/4d. For arrival nothing repor ed done in Singapore or Penang; of Siam, 30 tons Septembe November shipment have changed hands at 9d per lb.

At auction on Wednesday of 113 bags Singapore only 12 ba sold—good fair bold 9 7/8d. 120 bags Penang bought in at 8 3/4d per

GINGER.

COCHIN.—Very difficult to quit, and the 91 cases 208 ba catalogued all retired unsold, at 50s for good bold bright Calic washed, 38s for medium and small washed rough, and 34s per cw for cuttings. Privately sales made to a small extent at 37s per cw for fair medium and small washed rough.

JAMAICA.—Was not represented under the hammer.

CINCHONA.

The Amsterdam correspondent of the *Chemist and Drugg* writes that 425 bales (40,523 kilos.) Java bark have been added the auction to be held there on July 18, so that the total amount be offered on that date is now 4,715 bales, 259 cases (450,752 kilo Java cinchona-bark, besides 5 cases (312 kilos.) quinine. These cases contain 79·01 per cent., 79·44 per cent., 79·61 per cent., 10 per cent., 8·37 per cent. sulphate of quinine, and are therefore n entirely pure.

The Board of Trade returns show the following statistics :—

Imports.

1900	June	7,107 cwt.	at	14,868*l.*
1901	„	3,836 „	„	7,728*l.*
1900	1st half	30,978 „	„	66,110*l.*
1901	„	22,597 „	„	57,257*l.*

Exports.

1900	June	3,947 cwt.	at	11,064*l.*
1901	„	3,494 „	„	10,650*l.*
1900	1st half	25,043 „	„	61,559*l.*
1901	„	12,968 „	„	34,874*l.*

In their July circular Messrs. Woodhouse remark that in spite the temporary depression in the quinine market the present stati tical position, taken as a whole, cannot be considered unfavourabl On the one hand, the exports of bark from Java for first six mont show an increase of about 1,100,000 Amst. lbs. compared with la year, and 130,000 lbs. compared with 1899, but this is probab more than balanced by decrease in exports from British India. will be noticed that during the last three years the exports fro Java during last six months of the year have been nearly the same a total, though they have differed very much month by month. The

have averaged slightly over 1,000,000 lbs. per month. The stocks of bark in London (which are now 11,107 packages, against 16,598 packages in 1900) were reduced by 7,600 packages last year between July 1 and October 31. A similar reduction this year would not leave London with much stock. The stock of quinine is now slightly the largest of recent years, but as importation since January 1 are 200,000 oz. less, and deliveries 100,000 oz. more, it is evident that it must compare more favourably with last year now than it did on December 31. After all, it only represents about three months of the world's consumption, and in the absence of stocks of bark it forms the only reserve to meet any extra demand that might arise. Consumption shows a marked increase this year, especially in the United States, British India, and Italy.

QUININE.

A quiet tone still prevails in this market, and the business transacted since our last report has been done at 1s 3d der oz. It is easier now, and there are sellers at 1s 2¾d.

INDIA-RUBBER.

The market this week has been quiet and prices show a downward tendency, closing with sellers of hard spot at 3s 8¾d, and forward at 3s 9d. Soft cure fine offers forward at 3s 7½d. Hard entrefine has been sold at 3s 7¼d. Peruvian.—There have been sales of ball August delivery fair quality at 2s 5d, and slab at 1s 11¼d same delivery.

In auction to day only a small part sold at barely steady prices.

Para 29 packages, Peruvian 77 packages, and Mollendo 12 cases retired.

Orinoco.—3 packages offered and one sold, negrohead at 2s 4¼d per lb.

Central American, etc.—139 packages offered and 82 sold, good scrap 2s 5½d, fair ditto slightly mixed 2s 3d, clean pale scrap very slightly heated 2s 4d, tarry and porous slab 1s 8¾d, to 1s 9d, weak scrap part mixed 1s 8d to 1s 10d, pressed strips heated 1s 3¾d, dirty slab and sheet 1s to 1s 3¼d.

Mangabeira 32 packages, and Madagascar 10 packages retired.

Mozambique. 241 bags offered and 15 sold, red ball slightly heated part softish and mixed 2s 6d to 2s 9d, brown niggers 2s, sandy Lamu ball 1s 9d per lb.

Nyassa. 20 bags sold, reddish ball slightly mixed to fair 2s 8¾d to 2s 9½d, brown ball 1s 1¼d, ditto heated 1s 9d.

Assam 88 packages and Penang 48 cases retired.

New Guinea.—5 bags offered and 1 sold, dark coated ball 2s 1d per lb.

(Average for all India 6·16d., July 12th.)

Garden.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.
Neilgherry ...	**153**	**7·70**												
Kodanaad ...	104 p	8	64½c	10 11½	40	5¾	...	...	...	...	...	...	...	...
Prospect ...	49 p	7¼	...	...	21	7	28½c	7½	...	...	...	...	...	...
Travancore ...	**1434**	**5·37**												
Ellangy ...	84	4½	...	..	60	4¼	24	5¼	...	...	...	...	...	...
Kan Dev H Co. A	104 p	5½	...	...	28	5¾	42½c	6¾	26	5	8	3½	...	...
,, Munaar ...	150	6½	22	7¾	40	7	16	9¼	50	5½	...	...	22	4½
,, Perai Vurrai .	14	6¾	...	...	14	6¾	...	...	...	..	...	...	...	...
Kinmylies ...	123½c	3¾	...	...	112½c	3¾ 4	...	...	...	...	9½c	2¾	2½c	2¼
Ladrum ...	52	5¾	26	6¼	26	5¼	...	...	...	...	...	...	...	...
Lockhart	72½c	4¾	9½c	6¼ 9	34½c	4½	6½c	4½	20½c	4¼	...	...	3½c	3
Merchiston	102 p	4¼	15	5	39	4¼	21	5	...	...	17	3 3¾	10½c	3
Poonmudi T Co B...	111 p	5	...	...	32	5¼	28	6¼	22	4½	12	3¾	17 p	2¾ 5
,, Braemore .	71 p	5¼	14	6½	25	5	10	6½	16	4¾	2	3½	4½c	3
,, Poonmudi ...	97 p	5	19	7	33	5	11½c	5¾	17	4¼	13	2¾ 3¾	4½c	2¾
Stagbrook ...	265 p	5½	120 p	8 8¼	59	5¼	22	4¾	61	4 4¼	...	...	3½c	3
SthnInd T Co K K	155 p	5¾	45	6	...		43	7	24	4¼	...	...	43 p	3½ 5
Surianalle ...	34½c	7	11½c	7½ 10	15½c	5¼ 7½	...	...	8½c	4¼ 4¾	...	...	...	...
Wynaad ...	**146**	**5·12**												
Tanga Mulla ...	18	5¾	...	...	...	...	18	5¾	..	...	...	...	...	...
Wynaad T Co Per	128 p	5	28	6¼	...	...	22½c	6½	75	4½			3½c	5

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Madras, 1st May, 1900

			RS.	A.	P.
Picks, best steel, Miners', 5 lbs.	...	...per dozen...	17	0	0
Do. do. 6 ,,	...	... ,, ...	20	0	0
Headed Shafts for Miners' picks	...	... ,, ...	15	0	0
Picks, best steeled, Road, 6 lbs.	...	... ,, ...	17	8	0
Do. do. 7 ,,	...	... ,, ...	19	12	0
Mamooties, all steel, 9″ x 7″	...	... ,, ...	11	0	0
Do. do 10″ x 8″	...	... ,, ...	11	8	0
Do long-neck, steel, 5 lbs.	...	... ,, ...	15	8	0
Do. do. 6 ,,	...	... ,, ...	23	0	0
Do. do. 7 ,,	...	... ,, ...	26	0	0
Quintanies, all steel, 12″ x 5½″	...	... ,, ...	16	0	0
Do. do. 15″ x 6″	...	... ,, ...	17	0	0
Felling Axes, round eye, 4 lbs.	...	... ,, ...	26	0	0
Bill Hooks	...	... ,, ...	16	0	0
Pruning Knives ...	...	... ,, ...	12	0	0
Do. **Saws**	...	... ,, ...	25	0	0
Cross Cut Saws, 4 feet long	...	... each ...	5	0	0
Do. 5 ,,	...	... ,, ...	9	0	0
Digging Forks, 3 prong		...per dozen ..	27	0	0
Do. 4 prong ...	...	... ,, ...	29	0	0
Mamootie Forks ...	...	... ,, ...	23	0	0
Shovels, Ordinary, all steel	...	... ,, ...	17	0	0
Hammers, best steel, Rivetters, flo :ging, etc., over 2 lbs.					
		per lb. ..	0	8	0
Hammers, best steel, Miners' Drilling (Anchor)		... per lb. ...	0	6	
Do. do. Sledge ...		... ,, ...	0	8	
Hammers, steel, Road, over 3 lbs. (Tennis)		... ,, ...	0	4	
Do. do. do. 3 lbs. and under		... ,, ...	0	6	
Crowbars, iron, steeled points, English muster		... per cwt. ...	19	0	
Do. do. do ordinary ,,		... ,, ...	15	0	
Pitting Bars, iron, steeled points, ⅞″ x 3′—0″ 1½″ wide at point, 6½ lb., per doz.			13	0	
Do. do. do. do. 3″ ,, 7 ,,			14	0	
Do. do. Octagon steel ⅞″ x 3′—0″ 1½″ ,, 6½ ,,			20	0	
Do. do. do. do 3″ ,, 7 ,,			25	0	
Do. do. do. 1″ x 3′—6″ 1½″ ,, 9¾ ,,			28	0	
Do. do. do. do. 3″ ,, 11 ,,			33	0	
Steel Jumpers ... ... **SB**		... per doz. ...	26	0	
Road Rammers, cast iron, under 12 lbs.		... ,, ...	9	0	
Do. do. do 15 ,,		... ,, ...	8	0	
Do. do. 15 lbs. and over		... ,, ...	7	0	
Wheel Barrows, galvanized ...		... each ...	23	0	
Carpenters' Adzes		each Rs. 2-8 and	2	12	
Anvils, best warranted		...per cwt ...	26	0	
Grindstones ...	24″ x 4″ Rs. 10	30″ x 6″ Rs.24	36″ x 6″ Rs.28		
Bench Vices ...	3½″ jaw, Rs.15-0; 5″ jaw, Rs.34; 6″ jaw...			45	0
Single Splitters		...each ...		7	8

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[w. 15-9-00—t f.o.]

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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DOMESTIC OCCURRENCE.—The fee for inserting a domestic occurrence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 16th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad.

August 6th.—Weather—very variable, one day very heavy and the next very light, rains. Wind moderate but cold. *Works*—Handling, weeding and re-supplying. *Labour*—Abundant. *Health*—Good.

Coorg.

Polli Betta, *7th August.—Weather*—We have had a short spell of wet and very gloomy weather after a nice break which put a "polish" on the coffee. The borer campaign still continues but will soon be over. No signs of rust as yet. Supplying is very nearly completed. Other seasonable works continue to make satisfactory progress. There is a report that plague has invaded Yegadeven Koté in Mysore Province.

THE ANNUAL MEETING OF THE U. P. A. S. I.

Custom demands from us a series of remarks on the Annual Meeting of the U. P. A. S. I., but there is very little to be said that is not of the character of the "I concur" of a once well-known member of the Madras Legislative Council. The interest of the meeting may be said to have centred in discussions as to methods of pushing sales of tea and coffee throughout the world. As regards Coffee there is just a shadow of bathos hanging over the suggestion that links India and Paris as the two markets to receive special attention. Yet it is certainly wiser to pick out a couple of markets in this way, than to try to throw Indian coffee broadcast about the world on the chance that someone may pick it up, take a fancy to it, and follow the excellent example of Oliver Twist. Again, it is perhaps well that two such widely different markets as India and Paris should be canvassed at the same time. Although in both instances special agencies are intended to be employed, so that planters will

not have the direct management of affairs, they cannot fail to see a good deal of the wires worked in each case, and those who set themselves to study and compare methods will doubtless acquire useful information. India is a coffee-producing country, it is largely a coffee-consuming country also, and coffee planters should never rest until the official statistics of imports show that not a pound of foreign coffee enters the country from year to year. No country can produce finer coffee, so that all people who want "the best" can be supplied with Indian; no country should be able to produce at so much less cost as to be able to compete with India in the sale of her lower descriptions in her own markets.

Before the Annual Meeting opened there was a possibility that South Indian tea planters might prefer some scheme of their own to that of the Indian Tea Association for the pushing of sales of Tea in India. We are glad to note that the I. T. A. scheme has received cordial support, and that Messrs. ANDREW YULE & Co. of Calcutta, who are to work it, may rely upon the co-operation of planters in these parts. It would have been a thousand pities if there had been any rivalry between this firm and the planting community of the South. Now, the organising powers and the experience of the one will be brought to the aid of the other, and steady developments of demand should be witnessed during the next two or three years. As to foreign markets there is force in what was urged about the conquering of one market rather than a vague endeavour to reach every market in the world. What we have already said in this respect about Coffee applies also to Tea, but we must point out that too much concentration of effort is as much to be deprecated as too wide a dispersion of it. *Divide et impera* is an admirable motto, when forces are prepared to follow up victory with victory in fairly quick succession. It conveys anything but the fruits of wisdom when it is read as meaning that years can be spent on the capture of, say, the Russian market; and that other markets will patiently await their turn in the meantime, and graciously succumb to the conquering hero from Russia when he condescends to turn his attention their way. The principle we would advocate is this: give attention to the cultivation of demand for Indian Tea and Coffee in every market that appears to offer a likely opening, but let there be strong concentration of effort in regard to, say, a couple of markets in each case. For instance, let India and Russia be the main centres of Tea operations, and India and France the scenes of the Coffee war.

There was no discussion regarding New Products at this year's meeting. There were, however, interesting references to methods of cultivation, first, in Dr. LEHMANN'S instructive address, and then in the still more instructive replies to questions that resulted from the keenness with which he was examined and cross-examined at the close of his address. Then, too, there was a good deal said about steamer and rail freights. The ground to be covered by coffee-planters is wide. If they want to hold their own as "struggle-for-lifers" they must have land, and labour available when required; they must select the product best suited to their land and must raise it on the most economical terms; it must be taken to the best market at the lowest possible outlay for transport charges; and buyers' attention must be specially attracted to it by means of advertisement, etc., etc. At every stage there is need for the closest supervision with a view to reduction of cost or increase of proceeds. At every stage, too, it is combination that will best succeed. The individual, for instance, cannot hope to get land-taxations revise or freights reduced; the united body of planters can. We a glad to see that this is now generally realised, and that the is a fair chance of the principle that "union makes strengt being put into useful application before the time for anoth meeting of the U.P.A.S.I. comes round. The Associati can fairly claim to have more than justified the expectatio of those at whose suggestion it was established. It has be peculiarly fortunate in having a succession of very ab Chairmen and an unfailing supply of ready debators a sound speakers. It has achieved and deserved a lar measure of success; but there is still a great deal of wo before it.

"PRIVATE" TEA SALES IN LONDON.

Reports as to the early "private" tea sales in London a not encouraging enough to warrant the belief that the ne scheme is a success. Indeed there is almost ground for t fear that the experiment will be abandoned before it h received a fair trial. Dealers are inclined to boycott t new venture, but this only helps to prove how greatly i porters are in the hands of the great wholesale buyers. It unfortunate that at a time when there is the utmost need entire agreement between producers in India and Ceylo and in London between the importers from these two centre certain newspaper remarks should tend to stir up strife, o at the least, discord. In England, certainly, a scheme taking shape for the regulation of tea sales, by a gener syndicate of proprietors and companies who should feed t market in exact proportion to its requirements. A move this kind, if well carried out, would be very beneficial planters. But it must always be borne in mind that scheme of the kind can succeed when production is, a continues to be, largely in excess of demand. Whether sal are effected in London publicly or privately, only enoug taking one year with another, can be sold to meet deman Production must be regulated to meet the world's requir ments, or demand stimulated so as to equal production- approximately, of course. The conduct of "private" sal can have very little influence on prices so long as dema and supply are very far from being balanced. We great doubt, in fact, if these sales will not be found to exerci precisely the contrary influence to that which it was hop they would produce. What is wanted is not rival sales, b keen rivalry among buyers; and the quickest way to bri that about is to run supplies rather below than above curre market requirements.

NOTES.

Coffee in Coorg. Official estimates of the Coo coffee crop put the total down about 2,700 tons, as against an annual average export 3,358 tons per annum during the last ten years.

German Quinine. The exports of "quinine, quini preparations, etc.," from Germa during the four months ended April amounted to :—

	1901	1900	1899
Kilos.	69,800	77,600	88,500

Java Quinine. The exports from Java duri February amounted to 51 cases,

f which were shipped to New York and 1 to Japan. From January 1 to February 28 the shipments have been :—

	1901	1900	1899	1898
Cases ...	235	352	128	119

Tea Stocks in London. According to telegraphic advices the stock of Ceylon tea in London on the 1st instant was 28,900,000 lbs., month's landings being 0,500,000 lbs., and deliveries 8,800,000 lbs The stock of Indian tea on the same date was also 28,900,000 lbs. : month's landings being 4,700,000 lbs., and deliveries 8,300,000 lbs.

Colombo Tea Sales. At the public sale of tea at Colombo on the 31st ultimo 11,597 packages = 907,212 lbs. were offered, of which 8,532 packages = 672,609 lbs. were sold. The *Times of Ceylon* reports :—"Teas generally were in less demand, resulting in irregular, and in most cases easier, prices, with the exception of fine to finest sorts which were steady."

Kanan Devan P. A. In the Proceedings of the Kanan Devan Planters' Association recently published, there was an error. In para. 5 of the Minutes the amount expended on the Munaar-Mettu road was printed as Rs.291-6-0 ; it should read Rs.29-16-0 (chukrams). The point intended to be brought out is that only Rs.29 odd was paid out of a grant of Rs.378

Indian Tea Exports. The following figures of tea exports, taken from the Calcutta Customs daily entries, are issued by the Indian Tea Association :—Quantity of tea entered for export to the United Kingdom for the second half of July, 1901, 91,97,024 lbs. ; quantity entered during the corresponding period of last year, 11,139,593 lbs. ; total from the 1st April, 1901, to the 31st July, 1901, 25,111,630 lbs. ; total from the 1st April, 1900, to the 31st July, 1900, 30,615,467 lbs.

Calcutta Tea Sales. The tea sale at Calcutta on the 2nd instant comprised about 20,000 packages, all districts being represented. Good Assam Pekoe Souchongs were again in strong demand, but the higher grades were slightly easier than last week, quality not being quite as good. A few fine teas sold well, amongst which may be mentioned—Chamong Broken Orange Pekoe, Rs.1-4-0 ; Halmirah Broken Orange Pekoe, Rs.1-2-0 ; Maryoong Orange Pekoe, Rs.1-2-0 ; Rajabatta Broken Orange Pekoe, Rs.1-2-0 ; Chamong Orange Pekoe, Rs.1-1-0 ; and Tamulbari Flowery Orange Pekoe, Rs.1-0-6.

Ceylon Tea in Canada. A Canadian firm that deals in pure Ceylon Tea has lately made a speciality of Tea Demonstrations. It has given these in the leading stores of such cities and towns as Port Hope, Belleville, Lindsay, Peterboro', Kingston, Brockville and Ottawa, and has spared neither money nor pains. The young lady in charge is a graduate of the School of Domestic Science. The *Canadian Grocer* remarks :—Excellent results are being obtained from the demonstrations, and in Ottawa in one week one store in which the demonstrations were being carried on sold nearly $200 worth of tea.

The Indian Tea Crop. The following telegram, with reference to the tea crop in various districts, has been despatched by the General Committee of the Indian Tea Association at Colombo to the Committee of the Association in London, *viz.*—*Assam*—Immediate prospects fair. Outturn last month poor. *Cachar*—Immediate prospects fair. Outturn last month poor. *Sylhet*—Immediate prospects fair. Outturn last month poor ; remains deficiency. *Dooars*—Immediate prospects fair. Outturn last month poor. *Terai*—Outturn to the end of last month is stated to be 25 per cent. under last year. *Darjeeling*—Immediate prospects bad. The outturn to the end of the last month is stated to be 20 per cent. under last year.

Amsterdam Bark Market. The shipments from Java for the first half of July were 691,000 Amsterdam lbs., against 180,000 Amsterdam lbs. last year. Bark auctions were held in Amsterdam on the 18th ultimo, and resulted in a decline, the unit coming out at 9 cents (about $1\frac{3}{4}$d. per lb.), against 10·45 cents (about $1\frac{9}{10}$d. per lb.) at the last auctions. Altogether 4,974 packages were offered, containing 450,752 kilos. of bark, with a quinine equivalent of 24,508 kilos. The manufacturers' bark amounted to 387,286 kilos., containing the equivalent of 22,848 kilos. of quinine sulphate, and the druggists' bark to 63,466 kilos., with an equivalent of 1,660 kilos. of quinine. Of the manufacturers' bark an equivalent of 20,668 kilos. were sold, and of the druggists' bark an equivalent of 1,651 kilos. were sold, making a total of 22,319 kilos.

The London Tea Market. In a telegram dated 1st instant Reuter reported that the London market for Ceylon tea was generally steady, Broken Pekoes being in buyers' favour. Pekoe Souchongs were quoted at $4\frac{1}{2}$d., and the average for the week was $6\frac{1}{2}$d. (both the same as last week). 30,000 packages of Ceylon tea were offered for sale, and 22,000 were disposed of ; while of the 15,000 packages of Indian tea offered, 12,000 found purchasers, at an average $8\frac{1}{4}$d. per lb. ($\frac{1}{8}$d. up). In their weekly telegram dated 2nd instant to the Colombo paper, Messrs. Gow, Wilson and Stanton report that there is a dull tone generally among buyers, and that the market for medium liquoring Pekoes and Broken Pekoes is steady, while low priced Broken Pekoes are easier. The price of fair liquoring Ceylon Pekoe Souchong is $5\frac{1}{4}$d. and the average price of Ceylon tea sold on garden account this week was $6\frac{1}{2}$d. (both the same as last week).

Ceylon Tea Shipments. The following are the latest returns issued by the Colombo Chamber of Commerce :—

July shipments	...	9 millions.
August estimate	...	7 to $7\frac{1}{2}$ millions.

The *Times of Ceylon* remarks :—The July estimate was 10 to $10\frac{1}{2}$ millions. The figures for July last year were 11,993,600 lbs., and for August 7,568,667 lbs. Last month's shipments and this month's prospects should stiffen the home market considerably. Reports from almost all districts point to wet and cloudy weather, with scarcity of flush ; and, in some quarters, a still shorter estimate for the current month has been framed. The total shipments to the U. K. from January to July, 1901, amounted to 68,113,000 lbs., against 73,718,930 lbs. for the same period last year. We may add that the shipments to Australia for July were 2,500,000 lbs., against 1,316,957 lbs. last year ; and the total shipments to the Antipodes from January to July amounted to 12,780,000 lbs., against 9,355,690 lbs. for the same period last year.

Buenos Aires Coffee.

Says the *Brazilian Review* :—Anyone who has once drunk Buenos Aires Coffee will appreciate the unconscious "sarkusm" of the Porteno journalist who pretends that "there is no opening for Brazilian coffee in that country because its quality and flavour is not such as can be appreciated by the delicate palates of Argentine gourmets." In parenthesis, Buenos Aires coffee is made mostly of beans! If people want to know what real coffee is and how to make it they have to come to Rio. There are not many things we do better or even as well as anybody else, but in making coffee we are *hors ligne*. And when it is considered that most of it is made from *escolha*, the refuse that is absolutely unexportable, it is evident that the virtue of coffee resides mostly in the making of it. We heard of a well known local roaster who practically uses nothing but *escolha*, which he buys in lots of thousands of bags at a time and even brings from Santos; and yet his coffee is as good as any other and far better than any one is likely to get in Buenos Aires or anywhere else outside Brazil.

Brick "Tea."

A correspondent of the *Pioneer* describes "tea bricks" such as are in use among the Hunyas as made :—(1) the best, as made up with a flavouring of cardamums and catechu, and (2) both best and common, as mixed with bullock's blood, to make the leaf adhesive for compressing into bricks. As he could not, of course, either procure or use bullock's blood amongst Hindu surroundings and workmen, he substituted arrowroot for it. As to leaf, both qualities of brick were composed of very poor stuff, the ordinary one, of what planters would call prunings. This writer made 1,000 lbs. of these bricks, 500 lbs. of best quality, from Pekoe Souchong and Souchong; and the same weight of ordinary from Bohea and dust; some of which were taken into Hundes, on trial. The report on the venture was that both qualities met with approval in all respects and were considered good value, as compared with the China bricks, but no trade could be done in them, as the Hunya officials had to take and dispose of a certain quantity of the Chinese article, of which both these officials and the Chinese Government made very handsome profits; and that the tea thus forced on the country was sufficient for all demands The Hunya not only boils or stews his tea with *sattu*, barley meal, *ghi* and salt for its liquor, but eats the leaves too!

Mr. Renton's work on the Continent.

Messrs. Ch. & A. Bohringer, of Colombo, have addressed the *Times of Ceylon* as follows :—Enclosed we beg to hand you copy of a letter received from one of our constituents from home, and shall be glad if you would publish it in your daily issue, if room can be spared.

(*Enclosure.*)

As a supporter of Ceylon tea only, I was astonished to hear Mr. Heath complain about Mr. Renton going to the retail trade in Germany to the detriment of the large Hanseatic importers. The retail trade in Germany is quite a different thing from what it is in England. Our retailers do not only consist of shopkeepers but they are composed of a great number of private dealers who do the bulk of the retail business. It is only too natural that the large importers of tea in Germany should be dead against Ceylon tea since they are afraid to lose their monopoly they enjoyed so far, in direct China imports. Whoever believes that the large importers will introduce Ceylon tea of their own free will, is mistaken, and he does not know the ins and outs of the tea trade as it is done in Germany. I know perfectly well that a number of inland wholesale dealers are getting Ceylon tea direct or f London, simply because they cannot get what they want in Hamb or in Bremen. Mr. Renton is certainly on the right track visiting the various wholesale dealers in the inland towns Germany and to talk to them about Ceylon tea over and over a until they give orders for Ceylon tea to their London and H burg friends, thus compelling the large Hanseatic importer push Ceylon tea even if it goes against their principles. success will prove that Mr. Renton cannot follow any other cou

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Cinchona Bark Prospects.

Messrs. C. M. & C. Woodhe reported on 9th July as follows "In spite of the temporary depression in the quinine mar the *present* statistical position, taken as a whole, canno considered unfavourable. On the one hand, the export Bark from Java for first six months show an increase of ab 1,100,000 Amst. lbs. compared with last year, and 130,000 compared with 1899, but this is probably more than balan by decrease in exports from British India. It will be not that during the last three years the exports from Java dur the last six months of the year have been nearly the sam a *total*, though they have differed very much month by mo They have averaged slightly over 1,000,000 lbs. per mo The stocks of Bark in London (which are now 11,107 pa ages, against 16,598 packages in 1900) were reduced 7,600 packages last year between 1st July and 31st Octo A similar reduction this year would not leave London v much stock. The Stock of Quinine is now slightly the lar of recent years, but as Importations since 1st January 200,000 ozs. less and deliveries 100,000 ozs. more, it is evid that it must compare more favourably with last year now t it did on 31st December. After all it only represents ab three months of world's consumption, and in the absenc stocks of Bark it forms the only reserve to meet any e demand that might arise. Consumption shows a mar increase this year, especially in United States, British In and Italy.

THE UNITED PLANTERS' ASSOCIATION OF SOUTHERN INDIA (Incorporated).

ANNUAL MEETING.

[Chiefly quoted from the *Madras Mail*.]

FIRST DAY, *July* 31.

The Annual General Meeting of the United Planters' A ciation of Southern India commenced at the Resident's Co Bangalore, on Wednesday, the 31st ultimo, at 11 A.M., Mr P. Hodgson presiding. The following delegates from affiliated District Associations were present :—

DELEGATES.

Central Travancore ...	Hon'ble Mr. G. L. Acworth. Mr. E. Latter.
Coorg	„ C. H. Murray-Aynsley. „ A. Lambert.
Kanan Devan ...	Baron J. von Rosenberg.
Nelliampathis ...	Mr. J. C. Abbott.
Nilgiris	„ H. P. Hodgson. „ J. Liebenrood.
North Mysore ...	„ O. Scot-Skirving. „ F. J. Parton.
South Mysore ...	„ J. G. H. Crawford. „ A. M. Elder.
Shevaroys ...	„ R. Gompertz.
Travancore Cardamom Hills ...	„ E. Latter.
Wynaad ...	„ D. Mackenzie.

In order to hold the meeting in July it was necessary to suspend Rule 2 of the Association, which provides for the meeting being held in August or September. This was done. The Annual Report and the statement of accounts which had been passed the previous day by the Council, were then formally adopted.

The Report reads as follows:—

SECRETARY'S REPORT FOR 1900-1901.

No change has occurred in the membership of the Association during the year. Mr. Brooke Mockett has succeeded Mr. Frank Mangles as one of its joint representatives in London, Mr. John C. Sanderson continuing to represent the Association as hitherto. The Hon'ble Mr. G L. Acworth retains his seat as "Planting Member" of the Legislative Council of Fort St. George.

The chief event of the year, one that overshadowed the whole Empire, was the *Death of Queen Victoria*. Planters shared the universal sorrow at the demise of Victoria the Good, and the Chairman voiced the feelings of the whole community in a telegram to the Viceroy, which read as follows:—

"This Association desires to convey, through Your Excellency, its heartfelt sorrow for irreparable loss sustained by the death of our beloved Queen, and respectfully to express deepest sympathy with the Royal Family in its bereavement."

As time passes the aims of the Association become more comprehensive, and the scope of its operations widens. It has to deal with old subjects as well as new, the former predominating, as it is usually found impossible to bring any important matter to the point where "Finis" can be written, except after long deliberation and discussion, and steadfast effort. No better evidence of this could be given than is to be found in the progress made in regard to the subject of local.

Labour Laws.—The year under review has witnessed marked progress, but the new law is still on the legislative anvil. During the year Government has submitted the amended Bill for an expression of opinion, and your Chairman has responded with a memorandum of points in regard to which he feels that the Association will consider the amended draft unsatisfactory. The subject is entered on the Agenda paper of the 1901 Meeting for further discussion.

Another very important matter discussed at last Meeting was the question of *Foreign Markets for Tea*, which is connected with the still wider question—How to stimulate the demand for this product. A definite decision as to a plan of action can certainly be arrived at, but work in accordance with any such plan should be regarded as unending, for while Tea continues to be cultivated and manufactured planters will obviously benefit by efforts to extend sales and command improved prices. Increased interest has been shown in this subject since the last Annual Meeting was held. This Association has not attempted to act independently of the Indian Tea Association, but has endeavoured to stimulate discussion in the hope that benefit may result. On the other hand, the Indian Tea Association has operated independently of the U. P. A. S. I., but it has expressed its readiness to consider representations from the planting community in Southern India, and has manifested no desire to exclude planters in the South from taking an active share in the carrying out of its schemes.

The development of Foreign Markets for Tea and the expansion of *Sales of Indian Teas in India*, cannot but be regarded as cognate subjects. The Indian Tea Association has hitherto maintained a separate fund in regard to the work of advertising, canvassing and distributing samples in America and other Foreign Markets, but it has lately given increased attention to the potentialities of the Indian Market, and has decided to intrust the working out of a scheme for the extension of sales of Tea in India to Messrs. Andrew Yule & Co., a well-known Calcutta Firm. This Firm is, of course, free to operate in Southern India as well as in other parts of the continent; but it should be mentioned that a suggestion has also been put forward with a view to the elaboration of a local scheme for the development of demand for Tea in the South. It appears probable that the District Associations concerned will consent to the exploitation of Southern India being left to Messrs. Andrew Yule & Co., provided that this firm intends to work in the South with the same energy as in other parts of India. The whole subject, in its widest form, is entered upon the Agenda paper of the present Meeting. It is one of vital interest, and connected with it, in the relation of "means" to "ways," is a suggestion that has been made that Tea planters in India should move for the imposition of a Tea Cess, similar to the Ceylon Cess, for the purpose of raising funds to defray the cost of pushing Indian Teas in Indian and other markets. This also is a point that will come up for discussion at the ensuing meeting.

It may be well to mention here that while the above subjects have received the attention of Tea planters throughout India, Coffee planters in the South have had under consideration the question of ways and means for the development of demand for the commodity that is their staple produce. In many respects the conditions affecting Indian Tea and Indian Coffee differ greatly, yet to Members of this Association the subjects of *Markets for Coffee* and a *Proposed Coffee Cess*, for the purpose of raising funds for the conduct of a campaign in behalf of increased consumption of the fragrant berry, are quite as important as the corresponding questions in respect to Tea.

In both instances a double line of preparation is desirable: the one to relate to consumption in India; the other to have for its object the capture of Foreign Markets, and the conversion of consumers therein into devotees, not merely of Tea and Coffee, but of *Indian* Tea and *Indian* Coffee.

The prevention or regulation of the *Adulteration of Coffee* has been frequently urged by this Association as one means of stimulating consumption of the pure infusion. At the 1900 Meeting a resolution was passed that a number of gentlemen in England be asked to form themselves into a Committee, to act and to communicate with the London Chamber of Commerce, and to take such other steps as they might deem advisable, for getting the subject of Adulteration of Coffee again brought before the Chancellor of the Exchequer and to the notice of the House of Commons. The gentlemen specially named were:—Sir H. Seymour King, and Messrs. J. C. Sanderson, Brooke Mockett, J. Lullin, P. Macfadyen, J. Clifford, and M. A. Ord-Mackenzie, "with power to add to their number." The thanks of the Association are due to these gentlemen, every one of whom complied with its request, and to Mr. J. Innes Rogers (of Messrs. J. Travers & Son, Ld.,) who kindly joined them. They arrived at the conclusion that it was desirable that Indian planters should make representations in regard to this matter to the Indian Chambers of Commerce and Local and Central Governments in India, and by them, or through them, to the India Office, the Board of Trade and the Chamber of Commerce of the United Kingdom. The Madras Chamber of Commerce, it may be remarked, has expressed entire approval of the agitation against Adulteration of Coffee, and its readiness to join this Association in any endeavours it may make to prevent it. The Malabar Chamber of Commerce has expressed itself to the same effect.

Connected, though less directly, with the subject of the development of demand for Indian planting products is that of Imperial Fiscal Federation, with a view to the levy of *Imperial Differential Duties* in favour of British, as distinct from Foreign, products.

A resolution was passed last year "That, considering the critical condition of the Tea and Coffee Industries this Association do communicate with the Indian Tea Association, the Ceylon Planters' Association, the Indian Chambers of Commerce, and with the leading firms of Merchants and Brokers interested in Tea and Coffee, etc., in this country and in England and the Colonies, with a view to ascertaining whether a movement in favour of a commercial combination of Great Britain and Her Colonies and India against the world which would, by a system of Differential Duties, afford some protection to British grown products and manufactures would receive support, and that a Committee of this Association be appointed to carry the above into effect." A special circular was prepared, and was despatched to numerous Chambers of Commerce, etc., in various parts of the Empire.

It would be difficult to summarise in brief space the very heavy correspondence that was received in reply. It may be broadly stated, however, that, though some few of the bodies addressed took an adverse view of the suggestion thrown out, generally speaking, the replies were favourable and encouraging.

The French Import Tariff.—Uncertainty has prevailed during the greater part of the year as to the action to be taken by the French Government in regard to the import Tariff in that country on Tea, Coffee, Pepper, etc. The latest news is to the effect that settlement of this matter has been postponed to early next year. The settlement affects the future of Indian Tea and Coffee in the French Market, which is one to which planters should certainly not give decreased attention.

Paris Exhibition.—In Circular No. 48, dated 25th July, 1901, the Indian Tea Association submits its statement of accounts in connection with the Paris Exhibition, showing that no further claim on this account will be made against the Association

A gold medal was awarded to the Association for its exhibit of Coffee.

Dr. Geo. Watt.—It was resolved last year to request the loan of this gentleman's services from the Government of India, so as to permit him to work in Southern India for six months and investigate plant diseases and insect pests in the planting districts. No reply has been received.

Roads and Communications.—The Governments of Madras and Mysore were addressed during the year regarding the repair of the Bhund Ghaut Road to Mangalore.

Postal Irregularities.—In accordance with a resolution passed last year the postal authorities were addressed on this subject

Proposed Harbour on the West Coast.—The Association has addressed the Madras Government with respect to the need of a good harbour on the West Coast, and has also been in correspondence with the West Coast Chamber of Commerce at Calicut, the Malabar Chamber of Commerce at Tellicherry, and the Madras and Bombay Chambers.

The Madras Chamber of Commerce is occupied with the question of the improvement of the Madras Harbour, but the Chambers that represent the mercantile community on the Malabar Coast are in full accord as to the need for a harbour. Government desires that a special port be named as the one at which such a harbour should be constructed. When this is done, it will no doubt arrange for the necessary survey and the drawing up of plans and estimates.

Freights.—The Madras Chamber of Commerce requested the support of the Association in an effort to bring about a reduction of the high rates of freight now charged by the B. I. S. N. Co. and the Clan Line; and the subject of a reduction of *Rail Freights on Coffee* was also mooted during the year. *Accounts* duly audited, are laid on the table, together with a Balance Sheet showing the financial position of the Association as on the 24th instant.

The Reserve Fund stands at Rs.7,039-12-0, of which Rs.7,000 is invested (fixed deposit bearing 5% interest per annum), the rest standing in current account with the Association's bankers. Of *The Paris Exhibition Fund*, Rs.986-6-2 has been invested in the purchase of 3½% Government Paper of the face value of Rs.1,000; the remainder, *viz.*, Rs.8,072-5-7, lies with bankers, in current account.

The Ladybird Fund stands unaltered at Rs.1,276-3-4, *The Transvaal War Cheroot Fund*—at Rs.20.

The General Fund shows cash in hand Rs.201-6-10, as against an opening balance of Rs.611-15-10. There are, however, sundry subscriptions still unpaid.

The actual financial position of the Association has improved, the Balance Sheet showing a surplus of Assets over Liabilities to the extent of Rs.19,292-11-11, as against Rs.16,604-10-11 on 31st July, 1900.

It should be specially noted that the accounts submitted relate to a broken period—31st July, 1900 to 24th July, 1901—not to a complete year. As far as possible, expenditure for the whole year has been provided for, and *per contra* the subscriptions paid and still unpaid relate to the year.

In conclusion, I have to express my sincere thanks to the Chairman, Planting Member of Council, and the Honorary Secretaries of the various District Associations for their unfailing courtesy during the year.

THE CHAIRMAN'S ADDRESS.

Mr. H. P. HODGSON then delivered the following address:—

GENTLEMEN,—Since we last met we have had to mourn the loss of our beloved Queen Victoria, a name which has been an honoured and revered one to each of us throughout our lives, and the memory of which must dwell with us to the end. In his Annual Report the Secretary has given you a detailed statement of the work of the year, which tells you what has been done in the direction of giving effect to the Resolutions passed on the various subjects that were before the Meeting last year. I now propose to touch upon the most important of these myself.

New Markets for Coffee.—I had great hopes when we parted last year that something would be done to establish a Fund for the purpose of pushing our coffee in the various consumi markets, but I regret to say that, so far, nothing definite h been achieved. Several District Associations have expresse themselves in favour of the proposal, but what is required definite undertakings from individual owners to subscribe such a Fund, and these, with very few exceptions, are st wanting. Considerable correspondence in this connection h been circulated, and more than one Association has writte asking me how much money is required, and how it would expended. I could only reply that the larger the sum guara teed the more extensive would be our operations, and th the nature of these operations must necessarily depend up the amount of money available. One proposal I was able make, *viz.*, that support should be given from the Coffee Fu to the Tea Shop, which was started in Paris after the Exh bition, for the sale of Indian tea in the cup and in packet, offering coffee in the same way. I showed by a letter fro Mr. W. S. Shaw, who kindly represented us at the Exhibitio that this could be done at a small cost, and that as our coff had been so much appreciated, as served in the Tea and Coff room at the Exhibition, there was every chance of a go business being established. I regret to say, however, th nothing could be done in the absence of definite support, a this opportunity has, I fear, been lost. The subject of t Coffee Fund will no doubt receive your further attention duri this meeting. Suggestions have been made that Governme be asked to introduce a compulsory cess on coffee, similar that levied on tea in Ceylon, but I fear it is very unlike Government will consent to such a measure, and I consider impolitic to ask for anything which has not a fair chance being granted. I would also point out that coffee is large produced by natives, who would not appreciate the possib advantages to be derived, and who would probably strong object to the proposal. It seems to me, therefore, that anything is to be done a commencement must be made voluntary subscriptions.

Adulteration of Coffee.—I think I may say that we have be the means of an influential meeting being held in London discuss this question, the proceedings of which have been c culated. You will know it was the opinion of that meeti that nothing could be done without the support of a larger bo than is represented by our Association, and it was suggest that a petition should be presented to the Chancellor of t Exchequer, through the Government of India from the Cha bers of Commerce in India, and also from all Associations i terested in coffee in the British Empire. It will be for you decide if we are to give effect to this proposal, and if so t best means of doing so.

The Coffee Market—Notwithstanding the optimistic hop expressed by some last year, I regret to have to record th since we last met the coffee market has fallen into st lower depths, and although the crop of 1900-1901 was most Districts considerably above the average, prices o tained were so poor as to constitute a record of low pri as paid to the producer. From a table recently issued the Director-General of Statistics, taking the price in 18 as the datum—100, prices dropped last year to 47, and as ov 7 million bags of stocks are being carried forward, and t reputed largest crop on record is about to be harvested Brazil, there can be little hope of improvement for so time to come, and coffee planters in South India have unenviably anxious time before them. The one ray of light the dark sky of the outlook is the rise in Brazilian exchang which is apparently steady at between 12*d.* and 13*d.* This tending to place our produce more on a level with Brazil th it has been since it was so heavily handicapped by the closi of the Indian Mints in 1893. There can be no doubt that t coffee production of Brazil was stimulated by the high curren

prices paid to the Brazilian planter from 1886 to 1897, and it remains to be seen how far production there will be affected by the lower currency prices now ruling. In any case, an effect cannot be felt for some time to come, as going concerns will continue to be financed in the hope of improvement.

Tea Fund.—The subject of pushing tea in foreign markets has caused very extensive correspondence during the year under review. Several schemes are afloat which have followed each other in rather bewildering succession, and it is not surprising therefore that tea planters in some Districts are holding back subscriptions until something definite is arrived at. In this connection I trust what I am about to say will be taken in good part, as it is said in what I believe to be the best interests of this Association and of planters themselves. It is, in my opinion, sapping the power of the U. P. A. S I and weakening the bond of union among planting interests that individual councillors representing District Associations should have taken independent action without submitting their schemes for the sanction of the U. P. A. S. I. In the interests of our head Association this should be avoided. The Indian Tea Association and other Associations should know that, in considering the wishes of Southern Indian planters, the U. P. A. S. I. is their spokesman, and that it would facilitate business if they dealt directly with that body, and no other. A campaign for pushing the sale of tea among the natives of India is being inaugurated by the Indian Tea Association, and the consideration of ways and means to carry it out in Southern India will be part of the business of this meeting. You will have to decide whether the funds required for the purpose are to be obtained through the I. T A. or by other means to be proposed. Great results are by some expected from sales of tea in India, but I would warn planters not to pin their faith too much on the belief that this will be a panacea for over-production; for, at the best, only a comparatively small amount of the best tea production of India can be thus absorbed, and even this must take years to accomplish, as the *taste* for tea has to be formed before the *market* for it can be found. It should, therefore, in my opinion, only march concurrently with the pushing of tea in other markets where the consumption is already large, but at present supplied by other than British-grown tea. It would be a dangerous and false policy to sink at a stroke all the great work that has been done, and is in contemplation in other countries, and this is a point that deserves the very careful thought of tea planters.

Restriction of Output.—The proposal, which came from Ceylon, to restrict output by a rateable reduction of the plucking area has, after a short but loud flourish of trumpets, been doomed to the failure which is certain to follow schemes, however attractive, that are unsound in principle, and Ceylon herself was the first to abandon it. We declined from the first to join in the proposal, as being impossible to work and quite uncommercial. Production is being reduced by finer plucking both in India and Ceylon, and as this means the raising of the standard of quality, may be regarded as a proper and business-like way of arriving at the same end. It should, however, be borne in mind that in the struggle for existence among producers, the country which can put the largest quantity of medium quality, of any product, into the markets of the world at the lowest price with a profit is the one which will survive.

Import Duty on Tea.—Considerable discussion has arisen about the import duty on Indian Tea into Ceylon, and the necessity for like protection in India. This subject will come before the meeting. My own view is that it is the interest of the tea planter to see as few duties as possible imposed on tea in any country as they tend to restrict consumption, even if such duties are for the protection of our own industry. I think, therefore, our effort should be directed only to the removal of the existing import duty in Ceylon, and that we should ask the assistance of the Government of India to this end.

French Import Duties.—The Association has taken an active interest in this very important matter. A Notification of the Finance Department informs us that the French Government has decided to prolong till the end of February, 1902, the minimum tariff; but this cannot be regarded as a final or satisfactory settlement. It will be very upsetting to business that the possibility of an alteration to the maximum tariff should be hanging over it at the time of year when the heaviest shipments of produce effected are being made.

Legislation Labour Bill.—This bill was referred lately by the Government of India to the Government of Madras with suggestions for alteration of certain clauses and for the omission of others. The Madras Government thoughtfully submitted the correspondence to our Association for remarks, asking for an early reply. I accordingly dealt with the matter myself, to avoid delay, and copy of my letter, with correspondence attached, has been circulated to District Associations, and will, I hope, meet with your approval. It is disappointing that this Bill, which is of importance to the planter and the labourer, is still in abeyance, though the Special Committee appointed at the instance of the Government of India sat as far back as 1896.

Coffee-Stealing Amendment Act.—The forms for estimates of crops, and the information as to the books necessary to be kept on estates for the purposes of the Act, as adopted at the meeting last year, were forwarded to the local authorities as asked for, but I have heard nothing as to whether they are approved.

Scale-pests and Plant Diseases.—As resolved last year, we applied for the loan of Dr. Watt's services to investigate and advise on this subject, but no reply has been vouchsafed to the suggestion. It seems unlikely, therefore, that we shall receive any help from Government in the direction of scientific investigation, which in every other country is done by State aid.

Harbour on the West Coast.—The correspondence on this subject rather shows that Government is not averse to consider the necessity for establishing a port on the West Coast which can be kept open in the South-West monsoon. We have been asked to give our opinion as to the best locality for such a Port, but are diffident in doing so, seeing so many questions surround an intelligent decision. The futility of suggesting localities without previously studying the subject is exemplified by the fact that several Associations have suggested Calicut as the desired port. Calicut is an open roadstead, and could not possibly be made into a safe port during S.W. gales. It is, we think, preferable that Government, with its information as to the practicable situations at which a safe port could be constructed at a reasonable cost, should suggest the place, and this we hope it will do, as any safe port on the West Coast would be better than none.

Differential Duties.—As arranged at last year's Meeting, the Sub-Committee drew up a circular letter, of which 500 copies signed by your Chairman were sent to Chambers of Commerce and other bodies interested throughout the British Colonies, and many replies favourable to the suggestion have been received. The proposal for a Commercial Union of the Empire is not without its supporters among statesmen in England. Mr. Chamberlain, speaking as Chairman of the Congress of Chambers of Commerce of the Empire held in London in June, 1896, expressed his view that if the terms of such a Union could be arranged on lines acceptable to England and her Colonies "it would be the strongest bond of Union between the British race throughout the world and that such a proposal might commend itself even to an orthodox free-trader." The Dominion of Canada is the champion of the cause, and with the new Federal Chamber of Commerce in Australia effective pressure may yet be brought to bear on the Free Trade Policy of the United Kingdom.

Exchange.—Before concluding, I feel that I ought to say a few words on the action taken by a certain planter during the past year to stir up an agitation in the country on account of the Exchange Policy of Government. Support has been sought to the formation of a so-called League to agitate among the people against the Government policy. I think you would all wish that we should avail ourselves of this opportunity to publicly disassociate ourselves from this movement, as being now both futile and unpatriotic. At the time when action could be legitimately taken everything possible was done by your then Chairman (Mr. Romilly) in this country, and by Mr. Acworth and myself in England, to see that the effect the Government exchange policy would have on producers was fully set forth. The question was submitted to the arbitration of a tribunal of mixed interests, and their recommendations, which are now in force, are considered by the Viceroy and the Government of India to be working well for the country's good. It behoves us to await in patience the final result, even though we may be to some extent sufferers.

I think I have now briefly touched upon the chief matters of interest with which we have dealt in the past year, or which are still pending your consideration. I must apologise if my address has been somewhat lengthy; the number and importance of the subjects for consideration will, I trust, be accepted as my excuse for taking up so much of your time. I must take this opportunity to place on record the good service rendered to the Association during the past year by your Secretary, and to thank him, myself, for the ever willing aid that I have found him always ready to give. The work of the Association increases yearly. During the past year 87 circulars have been sent out and 1,053 letters have been received in the office, which will speak to the amount of work done. I would ask councillors to remember that when certain matters are referred to them from the Secretary's office it would facilitate and expedite business if they would accept the personal responsibility attached to their position, and reply with as little delay as possible. It has occurred several times that by the delay caused in referring to their Associations, replies have come in too late to be of use. Thanking you for your support and consideration during my term of office, I now place my resignation in your hands.

The Hon'ble Mr. G. L ACWORTH (Central Travancore) said:—GENTLEMEN,—The Chairman has referred to the agitation that went on in the Press in regard to the Exchange question. I must say that I am glad he has taken the matter up and has noticed it, and that he said that we entirely disassociate ourselves from it. I daresay some of you saw in the Press a letter, the writer of which said:—"What is the Member of Council doing, why is he not moving in this matter; what is the use of our representative if he does not agitate about the Exchange question?" I think the Chairman has given a good reason why I held my peace. If the writer had known more about the subject, he would have known that Madras is not the place to begin an agitation. If you want the Exchange question taken up at all, it must be taken up in Calcutta. I believe, I hope and I think that the Exchange question is dead. I believe the present policy to be working exceedingly well, and I really do not think that we are as much sufferers as we supposed we would be. I wish to repeat what I said before, namely, that the Chairman was right to notice this matter and to say emphatically that we disassociate ourselves from it.

THE LABOUR LAW.

The first subject considered under the heading of Legislation was the Labour Law, in connection with which the Chairman called attention to the correspondence on the subject which had already been circulated, and asked the meeting to consider his reply to the Government of Madras and, if it approved, to adopt it.

Mr. D. MACKENZIE (Wynaad) made certain suggestions w reference to the remarks of Mr. Hodgson and the Governme of India.

The Hon'ble Mr. ACWORTH said that he thought t objections of the Wynaad Association were really all met Mr. Hodgson's letter What he desired to suggest himself w that if any Association or Associations had any objections suggestions to make with regard to any particular Clause of t Bill, they should refer the matter to the Planting Member, that when the Bill came up before the Council and was refer to a Select Committee, he could take action on the suggestio He did not think there was much use in discussing the Clau at the Meeting or in Committee.

The CHAIRMAN agreed with Mr. Acworth's suggestio stipulating only that all correspondence with the Planti Member should be carried on through the United Plante Association, so that a record might be kept for the informati of the Chairman and other members.

A Resolution, which ran as follows:—"That the Cha man's letter to the Government of Madras with reference the Madras Labour Bill be adopted," was accordingly adopt

The only other item under this head was the Coffee Steali Prevention Act. In the absence of information as to what h been done regarding the special forms drawn up last year submission to district officials, the subject was allowed to dr

DUTIES

Under the heading of "Duties" the subject of British Dut on Tea and Coffee was allowed to drop, the feeling of t meeting being that this was the proper course during the p sent period of strain on the finances of the British Governme

THE CEYLON IMPORT DUTY ON TEA.

The Hon'ble Mr. G. L. ACWORTH said that all must ha noticed the Resolution passed by the Central Travancore As ciation on this subject, but he feared it was almost now o of the subjects of the past, unless they could get the Gove ment of India to help in the matter of the Ceylon imp duties. What was originally suggested by his Association w that they should not endeavour to get a removal of the Cey duties, but that they should try and get countervailing dut on Ceylon imports into India levied. His Association w actuated by two reasons, one of which was that there wa large amount of rubbishy tea sent from Ceylon to India a blended on the West Coast This was denied by Ceylon, a the Indian Tea Association itself took the trouble to get samp from Bombay and sent them down to the Central Travanc Planters' Association saying that the samples were the low grade that could be got, but that there was nothing objecti able in them. That was true, there was nothing objectiona in them; but Bombay was not the right place to go to for su samples. He could assure them, from personal experience they went into the bazaars of the West Coast ports, such Calicut, Cochin, Alleppy, Tellicherry and Mangalore, they wo get for 8 As., 10 As., 12 As., or even a Rupee a pound, for that w hardly fit to be used as litter for horses. He felt rather stron on the subject because, in view of the endeavour to be made popularise tea in South India, if such stuff was allowed circulate in the bazaar, it would certainly be prejudicial to th interests. The second reason was that by threatening Cey with a countervailing duty it was felt that Ceylon might rem her own duty. But since then it had been felt that it would better that Ceylon should herself remove the impost on tea a let Indian tea in free rather than that there should be count vailing duties on the teas of each country. As the Chairm had said, free imports tended to freer consumption, and t was now all that they asked for. In South India they w peculiarly well situated for placing their teas on the Cey market, and he was quite certain that in this matter Ceylon planter would not suffer. A portion of the Cey

Press was against the planter in this matter. If they looked at a map of the world and examined the position of Colombo, and when they remembered that all the fleets trading to the East made it a port of call, they would see what a splendid despatching centre it made. From Colombo British grown teas could be sent West to Europe, and East to Australia and America. This would be to the advantage of Ceylon in every way. It would tend to the increased prosperity of the port, to the advantage of the Ceylon planter as well as the Indian planter, and it would result in the moving off of teas instead of slumping them down in the London market, where there was a glut of tea and to which it was sent only because it was the only place to send it. It was, of course, striking out a new line to establish a blending establishment, but they must now move on new lines if they did not wish to lose their trade. He thought therefore that this Association should approach the Indian Tea Association and urge on it that, instead of approaching the Government of India in a formal manner, it should give good and sufficient reasons why not merely Indian but all British grown teas should have free import into Colombo. He therefore proposed :—"That this Association urge on the Indian Tea Association the necessity of approaching the Government of India with a view to its urging on the Government of Ceylon the desirability of abolishing the Import Duty on Tea, and that the Association should point out to the Government of India the immense advantages that might thereby accrue both to the British grown tea and the port of Colombo."

Baron von Rosenberg seconded the Resolution but took exception to the statement that all the rubbishy teas blended on the West Coast came from Ceylon. He had experience of a very rubbishy tea indeed of Indian manufacture

Mr. Acworth having replied to Baron von Rosenberg, to the effect that he had not said that *all* the rubbishy teas came from Ceylon, the Resolution was put and carried. This Resolution was regarded as having included the next subject, Indian Import Duty on Tea, which accordingly was dropped.

THE FRENCH IMPORT DUTIES.

After some informal discussion it was decided that an immediate representation on this subject was necessary.

It was accordingly proposed by Mr. D. Mackenzie and seconded by Mr. J. Liebenrood :—"That, having regard to the temporary and uncertain nature of the present fiscal arrangements affecting the importation of tea, coffee and pepper into France, the Government of India be strongly urged to represent to the Secretary of State for India the serious effect that any enhancement of the tariff would have on our industries, and that immediate action be taken in the matter."

The Resolution was carried.

The Chairman said that this Resolution should be sent to the Chambers of Commerce in India. The Association acting independently could ask their support.

This was not a Resolution but an instruction to the Secretary.

THE PROPOSED TEA CESS.

The Hon'ble Mr. G. L. Acworth, in introducing this subject, said that there was very little to be said on this matter. South India had already signified its feelings in no uncertain manner on the proposed compulsory tea cess. With the exception of 150 acres, all had voted solidly for the cess, and all that remained for them to do was to emphasise this at the Annual Meeting they were now holding. He therefore proposed :—"That the Association cordially supports the movement for the imposition of a cess on tea."

The Resolution was seconded by Mr. Mackenzie.

Baron von Rosenbeg, in supporting the Resolution, thought that it was, as it stood, rather bald, and something should be added to it impressing upon the Indian Tea Association the necessity for ascertaining the views of the Government of India in the event of the majority of the planters being in favour of such a cess.

The Chairman agreed with Baron von Rosenberg, but Mr. Acworth said that he had intentionally drawn his Resolution in the form in which it stood, and he declined to add to it.

It was eventually decided to pass Mr. Acworth's Resolution, Baron von Rosenberg's Resolution, which ran as follows, being passed as a rider to it :—

Proposed by Mr. J. Rosenberg and seconded by Mr. E. Latter :—"That the Indian Tea Association be asked to regard the matter as urgent, so as to lose no time in ascertaining whether the Government of India will give effect to the wishes of the tea planters should a large majority be in favour of the measure."

Both resolutions were carried.

THE PROPOSED COFFEE CESS.

Mr. R. Gompertz (Shevaroys), in opening this subject, said :—

After what our Chairman said in his address I feel some diffidence in advocating the proposed compulsory cess. He stated that there are many small native proprietors who would be very much averse to the tax. With all due deference to his opinion, it seems to me that this is begging the question. So far as I know, we have had no means of arriving at what their views may be. But in a matter of this kind absolute unanimity is, of course, impossible, and even if a majority of the native proprietors were against it, their number —and the acreage they represent—is so small that it is possible they might not affect the issue. With these preliminary remarks I have only to say that the arguments in favour of a cess upon tea apply with equal force to one upon coffee. Both industries are now in a most precarious state, and unless we, coffee planters, do something to push the sale of our coffee as the tea planters are pushing the sale of their tea, we can only go from bad to worse. I know that some people argue that the differences between the two industries is so radical that it is quite impossible to compare them. They say that whereas India and Ceylon supply the greater part of the production of the world in tea, the quantity of coffee produced by us is wholly insignificant, being not $\frac{1}{60}$th part of the total production of the world They say also that whereas tea-planters have already done a good deal to help themselves, coffee planters have done almost nothing. With regard to the first of these arguments I submit that, though the object of the industries may differ in degree, in kind it is absolutely the same. Indian tea planters may aspire in time to produce all the tea that the world consumes, so that the shrub may no longer be grown in China. But such a consummation looms far in the distance. Their present object is *to educate the public taste to prefer their teas* to those raised in China. And this is not only *essentially but identically the same thing* that Indian coffee planters are aiming at. True, they cannot hope, and do not aspire, to supply the whole world with coffee ; but they wish to bring the superiority of Indian coffee prominently before the public, and to educate the taste of the better classes to prefer Indian to South American brands, and to be willing to pay a higher price for it than for any other kind of coffee. This used to be our position a few years back, and it is only because we have done nothing to preserve it, "our pride of place in the markets of the world" (as our worthy Chairman ably put it in this assembly two years ago), whilst our American rivals have been doing all they could to wrest it from us, that the public taste is becoming vitiated, and requires to be gently guided back again in the virtuous paths of orthodoxy and the firm conviction that it is a little vulgar to drink anything else but Indian coffee, no matter what they have to pay for it. And to do this Indian planters must strain every nerve to improve the quality of their staple, as I have frequently before insisted ; but all their efforts

will be vain without the assistance of a special agency for bringing their coffee prominently before the leaders of gastronomic fashion; and this cannot be done without money. It is said that the amount we could hope to raise is too small to be of any use. It is small, I admit, but it is quite enough to make a good beginning The statistics collected by the Labour Enquiry Committee showed that the area under coffee in Southern India was about 280,000 acres. I addressed my own Association on this subject last year, with the result that the Shevaroy planters *unanimously* resolved that it was desirable to approach Government and to request that a tax should be levied upon coffee of 4 annas per acre, to be collected by Government and used for advertising and pushing the sale of Indian coffee if a sufficient majority could be secured. This measure, if adopted, would bring in an income of Rs.70,000 per annum; and though the sum is small—comparatively—surely *something* might be done with it in the right direction. The Shevaroy Association was absolutely unanimous in voting for the above Resolution, and amongst the many others interested in coffee, but not belonging to the Association, who were asked to vote upon it, there was only one dissentient voice. If other Associations were equally unanimous, I submit that we should have a good case to lay before the Government

With regard to the second objection, that, whereas tea planters have done a good deal to help themselves and have raised large sums by voluntary subscriptions, coffee planters, have done little or nothing, I am bound to admit that the apathy they have displayed is truly deplorable. I think the reason of this is, to a large extent, the bugbear above disposed of *viz*, that whereas Indian tea planters aspire to supply the whole world, Indian coffee planters produce less than $\frac{1}{60}$th of the world's consumption; and that any benefits which might accrue from their efforts to increase consumption would be quite inappreciable to them, since they would be equally shared by the $\frac{59}{60}$ who did not subscribe. As I have said above, this view arises, in my opinion, from a misconception of the position Increase of consumption is a good thing no doubt, but that may be left to natural cause. The task of the Indian coffee planter, in European markets, is to educate the taste of present consumers, rather than to try and increase their number. As I said last year:—"When it is remembered that the world's production is close upon a million tons per annum, of which India and Ceylon *together* contribute less than 15,000, it will be readily conceded that we do not much want the drinkers of tea to take to coffee. What we do want is that the taste of the drinkers of the million tons of coffee annually produced, should be educated and prefer that raised by us; and that they should be willing to pay a much higher price per pound (as until very lately they were) for the 15,000 tons we can place upon the market, than for a pound of any of the 985,000 tons produced by other countries." As for our poorer kinds, for triage, broken and "native" coffee, there is ample sale for the whole of it—aye and for ten times that amount—in the vast continent of India. But we must not forget that India is, relatively, a poor country, and that few amongst its teeming millions could afford to purchase anything but inferior kinds which would be almost unsaleable in the markets of Europe; and which, in view of the education I have advocated above, it would be very unwise to send there. This might be sold by the same agency employed for pushing the sale of tea in India. And I maintain that this could be done without any rivalry at all. Just as a greengrocer exposes apples, pears, peaches, etc., for sale and lets his purchasers take their choice of what they prefer, so I would have tea and coffee sold side by side by the same agents. But that is a matter of detail which may well be left till we have obtained the necessary funds. If the tea agency be objected to for selling coffee—or should the tea planters themselves object—others might easily be found. In the Indian Coffee Growers Co. we have an organisation ready to our hands. They are doing go work in promoting the sale of Indian coffee in India; and t much higher prices obtained this year for black and refuse coff (in proportion to the price of parchment or cleaned coffee) sho that their influence is begining to tell. But, as I have sa the distributing agency fixed upon is a matter for future con deration. In conclusion, I beg to propose:—"That, in t opinion of this Meeting, it is very desirable that a tax of 4 ann per annum be levied on every acre, or part of an acre, und coffee above the age of three years, and the proceeds hand over to the U. P. A. S. I. for the purpose of advertising, a pushing the sale of India coffee; and also that Governme should be asked to collect the tax if it be decided to impose it

The Resolution was seconded in a general way by Mr. Lar bert, who remarked, however, that his Association felt al that if a tax was introduced it should be on a cwt. basis a not acreage basis. He seconded the Resolution merely in ord that the matter might be thoroughly threshed out.

The general feeling of the meeting was opposed to the pr posed cess, and Hon'ble Mr. G. Acworth made an eloque appeal to Mr. Gompertz to withdraw his resolution, as it wou militate against the success of the proposed compulsory tea ce with the Government of India. On the other hand, if the t cess was imposed, the coffee cess would have an increa chance of subsequently being passed, on the ground of the being a precedent in the cess on tea.

DIFFERENTIAL DUTIES.

On this subject the following formal Resolution was passed:-

Proposed by the Hon'ble Mr G. L ACWORTH and seconde by Baron VON ROSENBERG:—"That this Association wish to record its gratification at the many favourable answe received from the Chambers of Commerce in the variou Colonies. The Association is still unchanged in its opinio as to the desirability of a commercial union throughout th British Empire. and is prepared to support any further mov ment in this direction."

At this stage the meeting adjourned for luncheon.

On reassembling at 3 P.M. the subjects of Tea Markets i India and Green Tea were discussed in Committee an adjourned till next day. The subject of markets for the Sa of Coffee in India was relegated to a Sub-Committee consistin of the Chairman and Messrs Parton, Lambert and Baron vo Rosenberg to frame a scheme for pushing the sales of coffe In this subject was also included the proposal to establish shop in Paris. On the Adulteration of Coffee the followin Resolution was passed:—

Proposed by Baron VON ROSENBERG and seconded b CRAWFORD:—"That in accordance with the suggestion of th Special Committee in London the Association do address th various Trade Associations and Chambers of Commerce in th United Kingdom with a view to securing their support in th effort to take steps to again bring the subject of the adult ration of coffee before the notice of the House of Commons."

The meeting adjourned at 5 P.M., till 11 A.M. next day.

SECOND DAY, 1*st August*.

Agricultural matters were taken up first, in order to giv Dr. Lehmann, Agricultural Chemist to the Government Mysore, an opportunity of addressing the Meeting. After few preliminary remarks regarding his investigations into suga cane cultivation and manufacture of sugar in India, he read paper on the subject of leguminous shade for coffee, which wa as follows:—

GENTLEMEN,—Last year when speaking about the subject mulching I had intended to include green manuring, as it very closely related to mulching, but did not do so as I did no consider the subject of sufficient interest to you to make m already rather long talk on this subject unduly long. Howeve

a few weeks ago, I received an American bulletin on "Shade in Coffee Culture." Some of you may have received this bulletin or at least heard of it. In it the author appears to judge the different coffee-growing countries by the proportion of leguminous shade the planters grow on their estates. He apparently justifies this opinion by the assumption that the leguminous shade adds to the store of nitrogen in the soil by simply growing there, and that, therefore, those planters who make use of this nitrogen producing plant must be considered as the most progressive. With such a verdict before me I did not consider it out of place to touch on the subject of green manuring this year, especially as the subject of leguminous shade has been much discussed in South India and the advisability of green manuring is being considered by some planters. For one of the great advantages of green manuring is, that, under certain conditions, some of the leguminosæ increase the store of nitrogen in the soil. I therefore hope that I shall not be wasting your time by briefly considering the subject as a whole. The factors which I propose to touch upon are :—(1) The effect of green manuring on the store of available inorganic plant-food in the soil. (2) Its influence on the store of nitrogen in the soil. (3) Its mechanical influence on the soil. (4) The effect it has on the store of moisture in the soil. (5) Its practical application to the average coffee estate in Mysore.

THE EFFECT OF GREEN MANURING.

The effect of green manuring on the store of available inorganic plant-food in the soil.—The great bulk of plant-food in the soil is present in an insoluble condition. But in order that plants may assimilate their food it has to become soluble, for only substances in solution can pass through the cell-wall of the roots. Some experimenters, and among them some of the best known agricultural chemists, hold that the chief part the plant roots play in making plant-food available is to take up a portion of the very small quantity already held in solution by the soil water, and thus enable the latter to take up more plant-food in solution. But the fact that plant rootlets excrete an acid (as indicated by blue litmus paper brought into contact with them turning red) shows, I think, that it is only reasonable to suppose that they play a more important part than this. The fact that growing roots coming in contact with a polished marble slab etch the latter appears to point in the same direction. If this be the case, it is evident that when the plants have completely decomposed and they themselves have again become available plant-food, the soil will be richer in inorganic available plant-food than before; and it is very probable that this increase is greater than it would have been without the assistance of the plant used for green manuring.

Influence of green manuring on the store of nitrogen in the soil.—There are various ways in which the store of nitrogen in the soil may be affected. When we speak of nitrogen as plant-food we, of course, always imply *combined nitrogen*. Free nitrogen such as found in the atmosphere is of no direct use as plant-food. If, therefore, combined nitrogen is dissociated it is lost as plant-food. Some nitrogen is doubtlessly lost in this way, especially during fermentation processes, and this element of plant-food is, therefore, continually reduced. There are also other sources of loss, some of these even more important than the above. One of the latter is the letching out of nitrates from the soil. For the present purposes we may consider that nitrogen can only be assimilated by plants when in the form of nitrates. The normal processes of fermentation and decomposition of substances containing nitrogen, such as poonac, farm-yard manure, etc., when taking place in the presence of a free supply of air, tend to produce nitrates. But these nitrates, as you know, are not fixed in the soil like potash or phosphates. Every heavy shower of rain, therefore, tends to wash out a certain quantity of nitrogen from the soil. Any crop growing on a field will prevent this loss by assimilating the nitrates as they are formed in the soil, and storing up the nitrogen in a much more complex form in its tissues. By decomposition and fermentation, or rather oxidation, this nitrogen will again become gradually available as plant-food, and any crop grown for green manuring will, therefore, save nitrogen from loss by letching. But so far as we know at present none of the higher plants, such as we could use for green manuring, can, with the exception of the leguminosæ, increase the store of nitrogen in the soil. The rain water generally contains some combined nitrogen, and this can be made use of by the plants. But as probably most of this nitrogen came originally from the soil, it cannot materially increase the supply of combined nitrogen. The nitrogen found in poonac, bone, dried blood, farm-yard manure, and most other fertilisers, was originally obtained from the soil. And when we apply these fertilisers, we are simply taking the fertility of one piece of land and applying it to another piece. To increase the total quantity of combined nitrogen in the soil appears, therefore, a difficult task, and this no doubt accounts for the high price of nitrogen fertilisers It is self-evident that the larger the percentage of nitrogen in the soil, other things being equal, the greater the loss of combined nitrogen will be. Nevertheless, we have proof that the store of combined nitrogen has been gradually increasing, instead of diminishing. It would lead too far to give even a rudimentary outline of the work which has been done to try to find out how this loss of combined nitrogen is compensated for, and how this increase has taken place. It will be sufficient to know that Hellriegel and his co-workers discovered that certain leguminous plants appeared to be able, under then unknown conditions, to store up much more nitrogen than there was combined nitrogen in the soil and seed from which they had grown. Sometimes more than 1,000 times the combined nitrogen was reaped in the crop than was originally present in the seed and soil combined, and care was taken that no combined nitrogen other than was in the soil and seed could get access to the growing plants. The further investigations of these experimenters showed that this marvellous increase of nitrogen was due to certain bacteria, living on the roots of the plants, enabling them to make use of the free nitrogen of the atmosphere. These bacteria and the legumes experimented with had to work together. When the bacteria were absent the plant roots could not make use of this source of nitrogen. The experiments which lasted a term of years, and in which a number of experimenters were engaged, are most conclusive. But the leguminosæ, though they possess this power of working together with certain bacteria to assimilate free nitrogen, do not always make use of this power. In fact, they only do so when starving for nitrogen, and starving to such an extent as to make it easily noticeable even to the unpracticed eye that there is something radically wrong. The older leaves die prematurely because the protoplasm contained in them is withdrawn, as it is required to form new leaves. The leaves are not developed properly, being, for one thing, below the normal size and each successive pair (even when full grown) being smaller than the predecessors. This starving for nitrogen continues even for some time after the tubercles have formed and the bacteria have taken up their work. On soils which are as rich in combined nitrogen as the average coffee estate in Mysore, I doubt very much if any of the leguminosæ will make use of this wonderful power to assimilate (with the assistance of bacteria) free nitrogen to any large extent. If this be the case, leguminous shade cannot add much nitrogen to the store already in the soil. Of course, it is not beyond the range of possibility that even this very large store of nitrogen is not sufficient to supply the available nitrogen required for the growth of leguminous shade, as the small quantity of carbonate of lime undoubtedly retards nitrification. But until we have experimental proof to the contrary I think we are justified in assuming that

the leguminosæ are not likely to assimilate much free nitrogen when growing on these coffee soils which contain fully double the amount of nitrogen generally considered sufficient. But there is another factor which makes the use of leguminous shade to enrich the soil in nitrogen somewhat doubtful. It is self-evident that so long as the tree is growing, and its tissues remain alive, it does not matter how rich in nitrogen these tissues may be. For they cannot be made use of by the coffee growing underneath. In order to be of value as manure these tissues must not only be dead, but completely decomposed. The only portion of the tree which comes into consideration is, therefore, that portion which drops to the ground and is decomposed there. This is, of course, principally the leaves. But, as a rule, the protoplasm of leaves is withdrawn from them before they drop in the ordinary course of events, and as most of the nitrogen is contained in the protoplasm it is likely that little nitrogen will be left in the leaves when they drop. But before being able to say anything definite on this point chemical analyses will have to be made. But I should be surprised to find any very large percentage of nitrogen in these dead leaves. Two very large IF's and several smaller if's stand therefore in the way of assuming that leguminous shade adds materially to the store of nitrogen in the soil. One of these large IF's has also to be considered in the question of green manuring, namely, that whether the leguminosæ make any use of their power of assimilating nitrogen when growing on the average coffee estate. But I must not dwell on this subject longer now, and shall be very brief on the remaining three topics.

The influence of green manuring on the mechanical condition of the soil with legumes which completely cover the soil this is very similar to the effect of a mulch. It prevents puddling and increases the amount of humus in the soil with all the benefits of the latter. But as I have already spoken about this last year I need not repeat the influence of green manuring on the moisture of the soil. Here the effect is entirely contrary to that of mulching. The transpiration of moisture from the leaves is considerably greater than the loss in evaporation of water from the soil caused by the protection to the latter by the crop. A casual examination, however, will appear to indicate the contrary because the top inch or two of the soil under a heavy crop of clover, for example, will contain decidedly more moisture than a similar piece of bare fallow alongside of it. This is due to the fact that the wind has completely dried out the top inch or two of the fallow, but not being able to strike the soil under the clover the latter has remained moist. But when we examine the two soils at a greater depth it will be found that the one on which the clover is growing is very much drier. If you remember, last year, when speaking about mulching, I told you that Dr. Wolney had made very extensive experiments near Munich, proving that a mulch retains a considerable amount of moisture when compared with a bare fallow. In conjunction with most of these experiments were others to enquire into the loss of moisture on plots on which various crops were grown. These invariably showed, as stated above, that the soil having a crop was much drier than those not cropped and unprotected by a mulch.

PRACTICAL APPLICATION.

So far as I can judge at present, green manuring is not likely to be very succesful on an average Mysore coffee estate unless in exceptional cases. Some of these exceptional cases may be, a very sandy estate, one with very stiff soil on which organic matter cannot be added in a more economical way. It might also be of advantage in a new clearing where practically no shade has been left and where it is necessary to prevent puddling, washing, or protect the soil for some other reason. But in all of these cases mulching will probably give better results. The only place in which green manuring is likely to give bet results than simple mulching is on a new clearing decide deficient in nitrogen. But it is a doubtful question whet such jungles should be opened out at all for coffee. Moreov there are many practical difficulties in the way which wou make green manuring almost impossible in coffee. But wh I am of the opinion that green manuring is not likely to universally successful on coffee estates I look for very satisfa tory results from it on most of the cultivated lands of Myso and shall be greatly disappointed if it does not work marvels most of the light sandy raggi soils in Mysore.

At the conclusion of Dr. Lehmann's address an interesti discussion ensued on the subject of green and artificial man ing, Dr. Lehmann answering such questions as the delega put to him.

The Chairman moved a cordial vote of thanks to Dr. Lehma for attending and giving them such a useful address and su valuable information.

PERSONAL EXPLANATIONS.

The Hon'ble Mr. Acworth (Central Travancore) made a p sonal explanation regarding his speech yesterday on the cof cess and with the permission of the Chairman asked that should be considered as having been made in Committ Further personal explanations were made by Mr. Scot-Skirvi the Chairman, and Mr. Acworth regarding the references ma in yesterday's proceedings to the Exchange agitation.

REDUCTION IN CURING CHARGES.

This matter was brought up by Mr. Liebenrood, to ascerta whether any assistance would be given by the Association obtaining a reduction in the curing charges in the critical st of coffee prices. A desultory discussion in Committee elici the fact that it was not a matter in which the Association co properly move, and that if the planter was deserving of symp thy in the present crisis it did not cost the curer any less cure a ton of coffee now that prices were less than half wh they used to be. Under these circumstances no action w taken by the Meeting, and the subject was allowed to drop.

CULTIVATION.

Mr. Robert Gompertz (Shevaroys) introduced this subject the following speech :—

GENTLEMEN,—Most of you will remember that at our l Conference I brought to your notice a new system of cultiv ing coffee—new at least in Southern India—inaugurated Mr. Leeming, which I suggested should thenceforth be known "Leeming's System," and under this name it has since attra ed a good deal of attention. I showed that by this method t cost of production would be very much reduced, and wha then said was received with so much attention that two of t delegates who heard me shortly afterwards visited Mr. Lee ing's estates in order to see, with their own eyes, whether I h overstated its beneficial results. One of these gentlemen (M Buchanan) unluckily got an attack of fever on his return fr Scotforth, and I had no opportunity of seeing him before he l Yercaud; but the other (Mr. Parton) whom I see now pres (and who will, no doubt, correct me if I make any mistake) t me he had come up quite prepared to be disappointed af what I had said at the Conference; but, now that he had se for himself, he thought I had understated the success of t system rather than overstated it. About a month ago a plan of considerable experience was deputed by certain gentlem who took a great interest in the subject to visit and report Mr. Leeming's estates. A copy of this Report has been sent me, and I propose to read it presently. I said last year "Gentlemen, if Mr. Leeming's results do not fall off—and fr Brazil analogy we have no reason to suppose they will—I thi he deserves our warmest thanks, for he has solved for us t problem of cheap production. Think of the saving in labou no handling, no pruning, only 300 trees to manure inst

f 1,200; and little more than $\frac{1}{8}$th of the manure formerly re-uired to be purchased; and last, not least, better crops than ve have been able to obtain under the old and costly system. do not say that it is new—for there is nothing new under the un—but I do say that, as regards Indian planters, it ranks as discovery of the first importance which will probably revolu-ionise the culture of coffee in Southern India." Those who vish to see the whole of what I then said will find my speech *n extenso* in the Book of Proceedings of the Conference of 1900. The Report I am about to read will enable you to judge vhether, or not, I was over-sanguine. I wish I could claim hat my predictions about the rise in Brazilian Exchange, and s effect upon the price of coffee, had been equally well fulfilled The Brazilian Government confidently expected that their pro-ramme, if faithfully carried out, would raise their Exchange to 8d. by the 1st July, 1901. They *have* faithfully carried out he programme they laid down, but Exchange still hovers at bout a shilling, and in spite of the most elaborate proofs that was mathematically bound to rise to 18d. it obstinately efuses to do so. We must remember that "the best laid chemes of mice and men gang oft agley" and that it took the ndian Government a good many years to raise Indian Exchange o what they determined upon—*viz.*, 16d.—though strengthened y so drastic a measure as closing the Mints. But if Brazilian Ex-hange is unkind, and crops, which their newspapers assure us vill not pay the cost of picking, continue to be picked and cured nd to swell the too abundant stocks which already glut the narket, we must just patiently abide the issue, feeling sure that, hough long delayed, Brazilian Exchange is certain to rise even-ually, and that this *must* bring us better times. Meantime, as it s clear that, at present prices, the old method of production oes not pay, it behoves us to see whether "Leeming's System" vill afford us any relief. I take this opportunity of stating, with Mr. Leeming's permission, that he is at Yercaud in the second veek of each month; and that if any planter wishes to see his states he will then be happy to show them round; but he has sked me to add that, as he is a very busy man, he is unable to nswer letters enquiring about his system. I will now read the Report above alluded to. For some reason best known to him-elf, the gentleman who wrote it desires that his name shall be uppressed. This is, I think, a great pity, as if I might mention is name his Report would carry greater weight; but I think ou may infer from the fact that as he was deputed by others, e must be an experienced planter:—

REPORT OF A VISIT TO SCOTFORTH.

"I visited Scotforth, Shevaroy Hills, on the 12th June, and vas conducted by Mr. Leeming over the whole estate. I am avourably impressed with the system in force there, of cutting ut coffee trees by alternate lines wholesale or alternate trees n one line diagonally, preferably the latter in the earlier stages, he trees thus left in freedom, unhandled and unpruned, show-ng up to immense advantage by their unchecked height and igorous lateral growth. They are left entirely to themselves o carry all the wood they can make and are never touched vith a knife, the old wood after crop dying and breaking back o new wood, of which there is an unfailing active supply. Any one verging on this system by allowing trees their heads, y allowing suckers and yet be wanting in courage to 'cut out' s only courting disappointment or disaster. Without freedom he trees running up in close order will only cause the lower rame of the tree to perish. It is beginning at the wrong end ltogether and no measure of success can possibly be attained nless one is prepared to face cutting out and make room for ateral growth of the tree, which will quickly spread and shoot pwards at the same time. In Scotforth one stands in avenues f magnificent trees with any amount of room to walk about in omfortably, no roads being needed, no difference being made s regards shade, beyond keeping it clear of the coffee. Culti-vation consists of yearly application of artificials in large shallow pits, deep trenching and growing of leguminous plants and beans to the prospective expulsion of weeds, and digging in with quintanies. Although my visit is ill timed as regards best appearance, subsequent to heavy cropping and dry weather and prior to application of manures, the trees are particularly healthy, of good colour and evidencing truly striking vigour as compared with the old established dwarf cultivation. As regards crop, results are highly satisfactory. A field condemned by a V. A. and recommended to be abandoned is now in great heart, cropping freely. Another of 27,000 trees disappointing in 1898 cut down to 13,500, gave 1,500 bushels cherry 99·00 = about 11 cwt. per 100 trees; cut down to 13,500 gave 1,700 bushels cherry 00·01 = about 12½ cwt. per 100 trees; cut down to 10,000, promises well again this year. Another field of 6,500 trees cut down to 3,300 trees in 1899, gave 750 bushels of cherry last crop. I saw lines of 24 trees only in this field. It took three days for a cooly to get over. Mr. Leeming estimated that the field held 1,000 bushels cherry, but picking only 'ripe' some cherry dried up and was lost by the time pickers could come round; quality is in no wise affected, parchment running quite satisfactory and percentage of black being limited to a very small proportion. The estate is 80 acres mature coffee, now all brought under the new system, and 80 acres of young clearings planted 650 to the acre; the crop last year was 50 tons and promise for next year is very fair. Denuded of half of its trees, it has never given such a big crop or been worked so cheaply. On another estate, worked by Mr. Leeming, results are even more satisfactory. The owner left the Shevaroys in disgust and was Manager of an estate near mine for some time, as he was unable to make the place pay him; under the new system, he is at Home in receipt of an income, although prices have fallen 60 per cent.! The main factor in favour of Mr. Leeming's system is the very appreciable reduction in working expenses, yielding a maximum crop on a minimum outlay, and although it does not appear to find favour with every planter on the Shevaroys, I am quite converted to it, *provided* conditions are in harmony with Scotforth, namely, elevation 3,000 to 4,000 ft. with sheltered aspect and fertile soil, especially in the face of present depression and possible low prices for many years to come, it being apparently the only method by which coffee cultivation may be made remunerative at £40 per ton.

Addenda.

My somewhat incomplete jottings under date the 17th June on my visit to Mr. Leeming's estate being appreciated by others interested, I wish to record further, partly in response to enquiries, that the elevation of Scotforth averages 3,500 ft. and the rainfall in normal seasons 65 inches. Crop last season was practically ½ ton per acre, *i.e.*, 80 acres. Old coffee all brought under the new system yielded 40 tons. 18 acres young coffee planted 8′ × 8′ gave 10 tons. Total crop just picked = 50 tons, which on half the number of trees is almost double of any previous one.

The young coffee unfortunately suffered severely from borer last season, causing as much as 10 to 15 acres to be sacrificed. The acre carrying a minimum number of trees shows a maximum amount of damage, which, in planting wide, is a serious drawback in places liable to borer attacks. Personally, I do not favour wide planting in new extensions, and would much prefer planting 6′ × 6′ or even 5′ × 5′. Take 2 or 3 crops and then cut out freely and let the trees left in have their heads. Being asked whether young trees in young coffee planted close should be allowed to run up unchecked or be stumped for a time and then given their heads, Mr. Leeming seemed to think it made but little difference one way or the other as long as room was made for lateral growth by 'cutting out' as soon as the trees to be left in needed free space. As regards

quality of crop impugned by cavillers of the new system, I particularly enquired whether proportion of B. C. or triage, was larger than when the estate was pruned formerly or compared unfavourably with estates pruned and cultivated on the old dwarf system, to which Mr. Leeming replied that he did not like to say much, as it is difficult to compare estates unless quantity of crop, elevation, rainfall, shade, etc., are on much the same lines. But taking all into consideration, with present experience, he could say the quality of Scotforth coffee is improving under the new system.

Cultivation.—Besides applications of artificials in round shallow pits, Mr. Leeming lays particular stress on growing beans for digging in nitrogenous green manure and on digging drains 3' deep $\times 1\frac{1}{2}$' wide about 40' apart. I think I have now brought in all salient points."

Some discussion followed in Committee, Mr Gompertz affording such further detailed information as seemed necessary on Mr. Leeming's scheme.

In open Meeting the Chairman referred to the extreme importance and interest of the speech and statement read by Mr. Gompertz, and asked permission to have them printed in the proceedings for further information and guidance of planters. He mentioned his own experiments in this connection, and thought that all planters interested in coffee should give the scheme a fair trial over a limited acreage of about 5 acres, and carefully note the results.

THE LAND TAX ON THE NELLIAMPATHIS.

Mr. J. C. ABBOTT (Nelliampathis) sought the advice and assistance of the Association on the question of the land tax levied by the British Government in the British portion of the Nelliampathis He said the tax on all heads was heavy, and the planters complained that they got no adequate return for their money. It was generally felt that Mr. Abbott should exhaust all official channels of relief before coming to the Association. The subject was accordingly allowed to drop.

TEA.

The subject of tea markets (including sale in India), which was partially discussed yesterday, came up again to-day and practically was started *de novo*.

The Hon'ble Mr. ACWORTH said :—Mr. Chairman and Gentlemen,—I am very much obliged to you for allowing a discussion on this subject which is one of great and vast importance to tea planters in South India. I have not much to say, because on what I would speak is so patent an advantage that it is hardly worth using many words. All planters know that various schemes have been brought before the public for pushing the sale of tea in South India, and thus trying to relieve the London Market, till finally all the Associations were fully in accord as to the desirability of accepting the scheme of Messrs. Andrew Yule & Co., of Calcutta. If we were at first doubtful, it was because we did not know they were going so far. But since then I have received definite information to that effect. Now, gentlemen, I wish to urge your very hearty acceptance of this scheme and to ask you that, on going back to your Associations, you will say that all here were unanimously in favour of it. So strongly did my Association feel on this subject that when the Kanan Devan scheme was put before our Association it came forward with a most liberal subscription in cash, and it was perpared to go further and to add a percentage of its produce to the amount. The scheme now proposed it is prepared to support in exactly the same manner. At the present moment only donations of tea are asked for; these donations we are prepared to give and should the I. T. A. come to us later and say that money is required to put the coping stone to the scheme, though I have not the authority of my Association for saying so, I am perfectly convinced it would come forward as liberally as it did the other day with funds. So far so good, but whilst on the subject I should like to say a few words on another subject under the heading of cess, and that is that my Association is not altogether satis with the management of the Indian Tea Association in the wa disposes of the Foreign Market Fund. We think the Associat is a little slack, and it is perhaps natural that it should be because all the gentlemen on the Committee of the Associat although they represent the great tea firms, are also the repres tatives of many and various other products, such as indi jute and all the other products that pour out of Calcu Therefore, they cannot give the whole of their time and att tion to tea. I beg, therefore, in the event of a cess be imposed—which I hope it will be—that we in South India, v have now a considerable stake in the matter, should appro the Government in company with the local Associations of Ass Silchar, Cachar, the Dooars, Darjeeling, etc., and ask tha representative of each Association should be placed on Committee of the Indian Tea Association in order to assist present Committee to deliberate and also because they will able to devote their whole time to the question of pushing and nothing else. Of course, if we had a representative on Indian Tea Association, he would have to be paid, as he wo have to leave his estate and live in Calcutta, and we could expect him to do so at his own expense. But the amount t will fall in under the cess will be so large that we sho certainly be able to afford him a living wage. There is other thing that we object to in the I. T. A., and that is way in which it scatters its resources. We in Travancore that if it would only devote its attention to one country, s as Russia, and strain every nerve in pushing the tea of t country in a country that has already acquired the habit drinking tea, it would meet with very much more success th it does at present in dribbling away £100 here and £75 the to shops in Belgium and Paris, etc. Finally, I think the I. T is slack in the matter of green tea. The Committee of I. T. A. all represent great Companies and they can give order to their Managers to manufacture green tea. All factories, with the exception of Mr. Drummond Deane's, h machinery for the purpose of making green tea. We have s out printed extracts telling them how to manage it and if th want more information Mr. Drummond Deane is prepared give it them. As you have seen from *Indian Gardening*, mu correspondence has passed between the Editor and Mr. C. Larkin, of Canada. Mr. Larkin has urged over and o again the importance of pushing green tea in Canada wh there is a large market and where tea has become popular. think we must ask our Secretary to write to the Indian T Association and draw this subject to notice. I don't wish say that we are so dissatisfied that we wish to break av therefrom. Very much the contrary, I wish we could affili ourselves with every other producing industry in the coun and so form a great combine or trust, and make ourselves f times more powerful and certain of hearing when we appro Government.

Baron VON ROSENBERG (Kanan Devan) supported Acworth in asking for support to Messrs. Andrew Yule & who, he hoped, would commence operations in South In as soon as possible. With regard to Mr. Acworth's critici of the Indian Tea Association and the Foreign Market Fund, said that the inability to cope with the situation was largely to want of funds.

Mr. MACKENZIE (Wynaad) said a few words in support of scheme. He agreed with what fell from Baron von Rosenb about the Indian Association and the Foreign Market Fund. was felt by his Association that a long time must elapse bef the compulsory cess could be sanctioned and brought into wo ing order. In the meantime, a voluntary cess was necessa and to this end Wynaad was prepared to support the Fore Market Fund to the extent of a tax of 4 annas per acre un

ltivation and 6 pies per maund of made tea, and he hoped hers would do the same.

Further discussion then took place in Committee, when the llowing Resolution was adopted and was subsequently con-med in open Meeting :—Proposed by the Hon'ble Mr. Acworth id seconded by Mr. D. Mackenzie :—"That this Meeting rdially supports the movement to push the sale of teas in outh India through Messrs. Andrew Yule & Co., and trusts at every planter will assist by contributions, either of money tea, with a provision that South Indian teas only are used for stribution in South India."

A further Resolution was also passed, that contributions of a or money be forwarded by District Associations to the Indian ea Association of Messrs. Andrew Yule & Co. and that otifications of such donations should be passed on at once to the ecretary to the U. P. A. S. I.

The Meeting at this stage adjourned till 3 P.M.

COFFEE.

On reassembling, the subject of coffee markets, including sale India and the Paris shop, which was yesterday entrusted to Sub-Committee, was taken up.

Baron VON ROSENBERG presented the Report of the Committee the following speech :—

GENTLEMEN,—The Sub-Committee appointed by you to en-ire into No. 6 (*a* and *b*) markets including sale in India and e Paris shop, sat this morning and the results of its delibera-ons is embodied in the following Memorandum :—

"The Sub-Committee is of opinion that efforts should be first rected to capturing the Indian retail markets as being a large arket close at hand which can be attacked with a compara-vely small expenditure. It would draw attention to the exist-g machinery for distribution already established by the United offee Growers Co. at Coimbatore, which although only recently arted is already doing a considerable retail business. Assist-nce may well be afforded this Company in advertising. The bscriptions to the Coffee Fund would be put together and vested in shares of the Company by each District Association r its own benefit.

Proposed by Mr. R. Gompertz and seconded by Mr. J. G. H. awford. Carried unanimously.

Paris Shop.—The Committee is of opinion that support should given and that arrangements should be made to serve coffee well as tea and to sell coffee retail both raw and prepared. is hoped that support may be given to this last proposal rough the balance to credit at the Paris Exhibition Fund, nich, as the Paris shop is in direct continuation of the work ne at the Exhibition, would in the opinion of the Committee a legitimate use to make of a portion of this Fund. The pport now proposed could not be granted earlier as the counts of the Paris Exhibition have only just come in.

Proposed by Mr. R. Gompertz and seconded by Mr. J. G. H. awford. Carried unanimously.

You will remember that yesterday in Committee I advocated e course now recommended, and I should like now to say a few ords in open Meeting on the subject you have heard, that many anters, when asked to subscribe towards the Fund for ad-rtising and increasing the sales of Indian coffees, have ex-essed a wish to know in what shape these subscriptions are to employed. It is our opinion that an answer to this is rnished by the course we recommend, and the reasons are the llowing:—In the U. C. G. Co. we have ready to hand an gency for best employing our subscriptions and carrying out e object we have in view. Their object is to sell Indian ffees in India, and we have arrived at the opinion that for the esent this should be our object also, for by that means we can st arrive at the ultimate end we have in view, namely, the duction of supplies for the English market. You all know at at present our lowest grades of coffee do not pay when sent me, whereas here in India we have a ready market at our doors, which is at present to a large extent supplied with brands sent out from Home. It is the opinion of the U. C. G. Co., and we agree in that opinion, that this market can be captured by them and a considerable increase in their sales, after a comparatively short period of action, seems to warrant it. But we think we can look further than this. There is a *certain* demand for Indian coffees at Home, and their greater rarity would, as in the case of Ceylons, probably produce more competition and higher prices for the diminished supply. It is the belief of the Sub-Committee that eventually the whole of the coffee produced in South India will find a ready market in this country. That, however, is looking ahead. I am not a shareholder in the U. C. G. Co., but I know most of the Directors. They are prominent planters and they formed the Company with a view to exploiting the markets of this country. When we determined to try and raise a Fund for the purposes referred to, we did so under the impression that for our subscriptions we should receive no direct return, and that it would be solely an indirect one by increasing the demand for our Indian coffees. Now, if we adopt the recommendation of your Sub-Committee, we may in time—a short time, we hope—expect to have a direct return as well. A circular is being prepared and will be printed and given to the delegates, which will enable them to give an explanation to their Associations with regard to the coffee shop in Paris. I believe there is a consensus of opinion in favour of supporting it. We were asked to guarantee the sum of £200 per annum for two years. Sufficient funds for this are now, we know, at our disposal, and it only remains for you to vote their application.

Mr. GOMPERTZ said that he would be glad to support the scheme, but before doing so he would like to ask the Chairman whether the United Coffee Growers' Company would be prepared to put on their labels the proportion of chickory used in their mixtures. This was necessary before this Association could give any support to the Company, because this was a point they had been agitating for in their campaign against adulteration at Home, and if they supported the United Coffee Growers' Company, who did the same thing out here, they would be stultifying themselves.

The Hon'ble Mr. ACWORTH deprecated in some measure the qualms of conscience expressed by Mr. Gompertz, and gave his advice strongly in favour of adopting the scheme.

Mr. PARTON (North Mysore) supported Mr. Gompertz's contention.

The CHAIRMAN said that, as a Director, he could give no guarantee that the view of Mr. Gompertz would be agreed to, but he did not see why it should not be done, and promised to bring the matter before his Board. He then gave an account of the formation of the Company and its aims and objects, and explained that he had been loth to enter upon any discussion of the subject at the Meeting on account of his connection with the Company. He had invested Rs.3,000 in the Company more with the idea of pushing the sale of coffee than as an investment.

Before going into Committee the Chairman explained that the subject of the Paris shop would again come up under the subject of Finances.

In Committee the Report of the Sub-Committee was discussed, and the following Resolution adopted, which was confirmed in open Meeting :—"That the Report of the Sub-Committee regarding VI (*a*) Coffee Markets (including sale in India and VI (*b*) Paris Shop) be adopted.

THE DIFFERENTIAL DUTIES.

The Hon'ble Mr. ACWORTH (Central Travancore) said :—"Gentlemen, I do not think that we should merely record our opinion on the question of the Differential Duties in the form of a Resolution. It would be well if the views recorded in this Resolution should be published to the world. Of course none of us are hopeful of getting a Commercial Union with the British Empire in the near future; but, judging from the re-

marks of the Chancellor of the Exchequer when he was approached on behalf of the sugar planters of the West Indies, the Cobden School still seems to hold the reins of the fiscal system of Great Britain, and I regret it as much as you can. I am quite sure, however, that there is no use shutting our eyes to the fact that the trade of Great Britain is surely but slowly slipping away from her. I do not know whether you have seen the discussion in the *Times* on this subject. Viscount Masham read a paper on the subject; but Lord Farrar brought figures to prove that the trade of Great Britain is as great as it has ever been, and has been extending for the last year or so. To do this he took the figures of two successive years, one of which had been the most favourable in the last 15 years. In reply, Viscount Masham published figures for 6 or 7 consecutive years which proved that certain trades have departed for ever from England, which will never get them back. For instance, the glass-blowing trade, which was once of considerable importance in England; the trade in nails had almost departed, and the same may be said of the trade in chains and cables. The chemical trade has gone to Germany, and now it would seem that the trade of which we used to be more proud than of any other, I mean the great iron and steel trade, on which the welfare of Great Britain depends, is fast slipping away from us. Every steam-engine in our own dependencies and the Colonies is now ordered from the United States. Every bridge wanted in a hurry for military purposes, and many large contracts for such have gone to the States. Until we can combine in some sort of a way with the Colonies to have a most-favoured nation treatment among ourselves, I believe that the trade will go on slipping away. We admit everything into England free, with the exception of such taxation as is necessary for conducting the business of the Empire. We give no favour to anybody, and it does seem hard that the sons of Great Britain, who go out into the world to spend their lives in new countries, to add to the prosperity of the Empire, though they find every country shut against them, find no open door at Home. When I say no "open door at Home," I mean that no more favour is shown to him than is shown to other countries which turn their backs on him. We are helpless and can do nothing more than record our opinion that the action taken has done some good. If action is taken again in the matter, it must come from the Colonies. I honestly believe that if the great Colonies would move in this matter, we should have a Commercial Union very quickly. If only Australia and New Zealand would follow in the steps of Canada and bring pressure to bear on Great Britain, the Cobden School would be destroyed, and I hope I shall live to see the day.

LADYBIRDS AND SCALE PESTS.

Mr. J. LIEBENROOD (Nilgiris), in opening the subject, said that the Nilgiri Association had had a good deal of correspondence with the Collector of the Nilgiris, who had sent up specimens of black bug, with the fungus which attacked it, to Calcutta to the Government Entomologist. But the first lot of specimens sent had come to grief through the bottles smashing, and nothing could be done. Since then they had been unable to get specimens of the fungus, which only appeared at certain seasons of the year. As soon as he could get more fungus they would again forward specimens to the Government Entomologist. Mr. Stebbing, of the Madras Forest Department, was now also enquiring into the different scale pests and had also asked to have specimens sent him. It was apparent that the Government was willing to help planters to a certain extent in this matter, although it had refused to consider their request to have a specialist appointed to examine into these pests.

Baron VON ROSENBERG (Kanan Devan) described a beetle which had appeared in his District, a small brown insect covered with a white dust, which settled on the coffee and gave it a curious appearance. It did little or no harm to the coffee; but it was a coincidence that where this beetle appeared bug disappeared.

Mr. J. C. ABBOTT (Nelliampathis) described a beetle t appeared on the coffee in the Nelliampathis which had b identified by Mr. Greene, the Ceylon Entomologist, as be common there, though not in connection with coffee or tea.

The CHAIRMAN said that the proper thing to do was to s specimens to the Government Entomologist. An enlighte Government had appointed one Entomologist for the wh of India, and he was shut up in the Calcutta Museum and not of much use to them. He would very probably identify specimens if they were sent to him, and it might be usefu adopt such a course.

Mr. R. GOMPERTZ (Shevaroys) said that the Association asked last year for the services of Dr. Watt for six months, that no reply had been received. He suggested that a remin should be sent to the Government of India.

It was accordingly proposed by Mr. Gompertz and secon by Mr. Scot-Skirving:—"That a reminder be sent to Government of India inviting attention to the request to pl Dr. Watt's services at the disposal of the U. P. A. S. I. for months, and soliciting the favour of an early reply."

The Resolution was carried.

CROP ESTIMATES.

The Hon'ble Mr. ACWORTH (Central Travancore) said that several occasions the Government of India had asked that c estimates should be submitted with regularity and with accura but this was never done. The Central Travancore Associat was the only one that had sent in estimates. The matter really important, and they should, as far as possible, meet Government's views on this matter. They would not get Government to do anything for them if they did not com with such a small request. He thought that they should u on proprietors and managers the necessity for sending in returns asked for.

The CHAIRMAN said that under the new Coffee-steal Prevention Act they were asked to furnish a form for sendi in estimates. Last year they drew up such a form, which w issued to District Associations and various local authorities the form which the Association approved and suggested. He h been unable to ascertain if any answers had been received regard to that form. This form, if it had been sent in, wo be the proper way of obtaining estimates of the coffee crop.

Baron VON ROSENBERG thought that, from a commercial po of view in connection with the Home markets, it was desira that estimates should go forward as soon as possible every ye

Mr. A. M. ELDER (South Mysore) said that he was unable send in estimates till the end of June.

RAILWAY AND STEAMER FREIGHTS.

The CHAIRMAN said that correspondence had been forward to him by a certain firm of Agents relating to railway freig on coffee which showed that the railway freights on coffee w very high and bore very hardly on coffee planters at the pres time, when prices were low. This particular firm had addres the Madras and South Indian Railways on the subject wit view to getting a reduction of the rates, and, having failed, th wrote to the U. P. A. S. I., which was rather late. However, had addressed the Hon'ble Mr. Spring, the Consulting Engin for Railways to the Government of Madras, who addressed Railways concerned and managed to secure a reduction freights on coffee from the South Indian Railway. He thoug therefore, that they ought to express their thanks to Mr. Spri and the Agent of the South Indian Railway, and express a h that the Madras Railway would soon fall into line with South Indian Railway in this matter.

It was therefore proposed by the Hon'ble Mr. ACWORTH a seconded by Mr. Parton:—"That the thanks of the Associati be conveyed to the Agent and Manager of the South Ind Railway Company for the concession recently made with resp to rail freights on coffee and to the Hon'ble Mr. F. J. E. Spri C.I.E., Consulting Engineer for Railways to the Government

Madras, for the assistance he has given in regard to the matter, and also hope that the Madras Railway Company will see its way to make a similar reduction in coffee freights."

The discussion on steamer freights was carried on in Committee.

ROADS AND COMMUNICATIONS.

Mr. F. J. PARTON (North Mysore) seconded by Mr. Acworth, moved a Resolution expressing the thanks of the Association to the Madras Government and the Mysore Government for the prompt way in which the landships on the Bhum Ghaut Road were repaired and the Road made available for wheeled traffic.

Mr. CRAWFORD (South Mysore) asked for the advocacy of the Association, with regard to the construction to Hassan and the planting District there, of the proposed Mangalore-Arsikere Railway, but was referred, in the first instance, to the British Resident in Mysore.

Baron VON ROSENBERG said that he would have liked to have called attention to the state of the roads in his Districts, but he had not yet approached the Resident on the matter.

PROPOSED HARBOUR ON THE WEST COAST.

The Hon'ble Mr. ACWORTH, in opening this subject, said:—Mr. CHAIRMAN and GENTLEMEN,—You are aware that correspondence has been circulated by the Secretary on this question and some of the replies are altogether amusing. I have not seen all the replies, but the Associations were asked to give a vote in favour of the port they would select. Naturally, North Mysore voted for Mangalore, South Mysore and Coorg for Tellicherry. If there had been an Association midway, it would have voted for Cannanore; the Nilgiris and Wynaad plumped for Calicut. Putting it approximately, something like 4 to 5 different parties chose some port absolutely incapable of being made into a Harbour. It was, I think, rather a pity that the Government should have asked the question at all. As a matter of fact, the subject ought to be looked at on broad lines, and the broad lines are "What port has the greatest trade?" Though not an advocate of any particular port, I know which port does the biggest trade and I know also that the produce that an Association, or for that matter, two Associations, ships at that port is but a fleabite as compared with the trade of the port itself. I think, therefore, that it would be wiser for us in meeting here when addressing Government, to say "We leave it to you entirely. All that we ask is that you should give us some port on the West Coast. We leave it to your discretion to choose the best port; the port you choose we will acquiesce in."

The following Resolution proposed by Mr. Acworth and seconded by Mr. Mackenze was then passed:—

"That this Association, while thanking the Government of Fort St. George for consulting it in the matter, prefers to leave it to that Government to settle its port, but would emphasize once more the supreme necessity of a Harbour on the West Coast.

IMPROVEMENTS IN THE MADRAS HARBOUR.

The CHAIRMAN said that this subject was put down in the Agenda in consequence of a communication from the Madras Chamber of Commerce in connection with a grant for improving the Madras Harbour. It was resolved to ask the Secretary to write and inform the Madras Chamber of Commerce that the Association would be glad to support any action that did not clash with the construction of a Harbour on the West Coast, with which this Association was more intimately connected.

MONEY ORDERS.

Mr. D. MACKENZIE (Wynaad) called attention to the difficulty in cashing currency notes in the Wynaad, now that the Sub-Treasury had been prevented from doing so, and the excessive commission charged on money orders, resulting in planters having to pay a heavy premium in getting their own money up to the District. He mentioned by way of comparison that the commission in India on Rs.15 or £1 was the same as that charged in England on £10.

After some discussion it was decided that, as the question related to an Imperial matter, it was little use the Association tackling it single-handed, without the co-operation of the Chambers of Commerce and other public bodies.

WEIGHTS AND MEASURES.

Mr. LAMBERT (Coorg) on behalf of the Coorg Association, called attention to the diversity of weight and measures obtaining and after some discussion moved the following Resolution, which was seconded by Mr. O. Scot-Skirving and carried:—"That this Association draws the attention of the Chambers of Commerce in India to the wide diversity of weights and measures in use in the various parts of India including Native States and to the great inconvenience and dishonesty caused thereby with a view to action being taken thereon for the establishment of a uniform standard throughout the Indian Empire."

THIRD DAY.

THE ST. PETERSBURG EXHIBITION.

The first subject taken up for discussion to-day was the St. Petersburg Exhibition.

The Chairman in opening it said that the Ceylon Planters' Association had already taken action with a view to having its products properly represented at the Exhibition. He had a cutting from a Colombo paper which showed that they had already been considering the question, and among other things it was suggested that the Ceylon Planters' Association should be the sole retailers on that occasion, and if this was arranged, the Russian Consul would do his best to assist in getting the necessary permission and making arrangements with the Russian Customs authorities. It also said that the Russian public were used to things being done in the best possible style, and that, therefore, it would be a mistake to economise unduly in making any arrangements. If a tea room was to be opened there it was felt that it should be done well. A number of recommendations were made, but it was not necessary to read them. He merely made the remarks to show that Ceylon was already moving in the direction of having her products represented, and, therefore, it was time that steps were taken to see that Indian products were also represented.

The Hon'ble Mr. ACWORTH said that, as usual, Ceylon was ahead of India, in this matter, and it was most important that the latter should take action at once. He therefore moved the following Resolutions, which were seconded by Mr. Gompertz:—

(1) That this Association represent at once to the Indian Tea Association the supreme importance of Indian tea, coffee, and other products being adequately represented at the St. Petersburg Exhibition, and urges on that Association the necessity of at once approaching the Government of India on the subject and formulating a scheme worthy of such great industries.

(2) That this Association considers that it is absolutely necessary to be represented at the St. Petersburg Exhibition, and that the Governments of Fort St. Geogrge, Mysore, Travancore, and Cochin be addressed on the subject.

After some discussion in open meeting and Committee as to whether the statement of the Ceylon Association, that they should apply for a monopoly to sell packets of tea referred to Indian as well Ceylon teas, the Resolutions were passed.

FINANCES.

The allocation and investment of funds for the ensuing year were then decided in Committee.

A VOTE OF CONDOLENCE.

On resuming open Meeting the Hon'ble Mr. ACWORTH said:—GENTLEMEN—I think that before we part we ought to express our sympathy with the relatives and friends of our brother planters who have fallen in the war. Many were our personal friends, and I am sure we all feel deeply with their relatives. One of our most popular members is Mr. Romilly, and his

father-in-law has suffered very deeply indeed; I would like to include his name specially in the vote of condolence, which runs as follows:—"That this Association desires to express its deep sympathy with the relatives and friends of their brother planters who have fallen in the Transvaal War, and that a special letter of condolence be sent to Colonel Campbell, on whom family misfortunes have fallen so severely."

Carried.

OFFICE-BEARERS.

The balloting for office-bearers for the ensuing year was then proceeded with, with the following result.—

Chairman.—Mr. R. Gompertz.

Vice-Chairman.—Mr. J. A. Harris.

Member of Council.—The Hon'ble Mr. Acworth.

COMPLIMENTARY.

Mr. LAMBERT (Coorg) said:—GENTLEMEN,—I have been asked to propose a vote of thanks to the Hon'ble Mr. Acworth for the able manner in which he has filled the office of Member of Council and the great interest he has always shown in furthering planting interests. Personally, I am extremely glad, and I am quite sure the feeling of all the delegates is the same, that Mr. Acworth has been able again to accept office. We are strongly of opinion that as long as our affairs are in the hands of a gentleman of Mr. Acworth's notable abilities we can never be in a wrong position with the Government.

The Hon'ble Mr. ACWORTH, in replying, said:—Mr. CHAIRMAN and GENTLEMEN,—I am very much obliged to Mr. Lambert for the handsome way in which he has proposed the vote of thanks and to you for endorsing it. I am afraid I have not been able to do much yet, because there has been nothing to do beyond travelling about. But I can assure you that I do take an interest in the Association and will continue to do so. I am sure that it is only by standing together like this that we can make our concerns go thoroughly well with Government. There is, however, one thing I would like to say before we part, and that is that I think that the Association, as a body, is a little too suspicious of Government. The members seem to think that Government is always looking after us and trying to trap us, and that it takes so much interest in us that it studies our proceedings carefully. I really think that this Meeting on the present occasion has said too much in Committee. Our brother planters, I know, take a great interest in what appears in the *Madras Mail*, and they would be bitterly disappointed if nothing appeared of the proceedings of these meetings. It is a mistake to suppose that the Government watches these proceedings for what we say. What is said here, after all, is only an individual opinion and not the wisdom of crowned heads, so that we cannot expect Government to look upon our individual opinions as an expression of the collective wisdom of Lycurgus and Solon.

Mr. R. GOMPERTZ (Shevaroys) in acknowledging his election to the chair for the ensuing year said:—Mr. CHAIRMAN and GENTLEMEN,—Whilst feeling deeply flattered, I thank you very much for electing me Chairman. I trust I shall not be misunderstood if I say that I received the announcement with mingled feelings. Had I been 20 years younger, I should have received your decision with unqualified satisfaction, though even in his prime a better man could not help feeling nervous at having to succeed so able a Chairman as Mr. Hodgson. But at my age I feel great diffidence in accepting so great a responsibility. It has been well said that to grow old gracefully one must grow old betimes, and I would fain be allowed to do so. In Europe, nature does not give way so soon, but in this country the greatest age the Government allows its servants to attain before they are obliged to retire is 55 years, and, in some Departments, for instance the Commissariat, they are shunted even earlier. I have long passed the extreme limit Government has fixed as that at which a man is no longer fit for useful work. I feel the physical infirmities of advancing age to be a very serious handicap; but as, in spite of all these defects, you have been kind enough to elect me, I can only say that I will do my best (Cheers). Relying on your kindly criticism and loyal support, I gratefully accept the honour you have offered me; but I must beg you to remember that, however willing the spirit may be, at 65 the flesh is very weak (Cheers).

Mr. SCOT-SKIRVING (North Mysore):—I have been asked to propose a vote of thanks of which I am sure you will all approve, and that is the vote of thanks to our Secretary, Mr. Ormerod. I don't think it is possible to say much on such a subject, and I am quite sure that Mr. Ormerod's modesty would lead him to wish that I said very little. I shall therefore bow to what I conceive to be Mr. Ormerod's own feelings in the matter, and say very little. Since Mr. Ormerod has taken charge of the portfolio—if I may use the expression—the work has vastly increased, and during this last year it has been something terrific. I think that the best return we can make to Mr. Ormerod in the coming year is by all answering his communications with promptitude and doing all in our power to help him to get through his arduous duties in the forthcoming year. I propose a very cordial vote of thanks to Mr. Ormerod for his services in the past year.

Mr. ORMEROD replied briefly, acknowledging the compliment.

The CHAIRMAN after proposing a vote of thanks to the Resident for the use of the Court room, proposed a vote of thanks to the Press for its continuance of the kindly manner in which it had taken notice of planters' proceedings both now and during the year. He would specially mention the *Madras Mail* as continuing its kindness in this direction, and at the same time, as the native gentleman would say, he would beg for a continuance of such favours. He hoped the *Madras Mail* would print their proceedings as much *in extenso* as possible, because it circulated among planters of every District and was the quickest and perhaps the best means of arriving at a real knowledge of what was taking place. The book of proceedings was the only other way, and that did not come out for some months, so that the dissemination of knowledge with regard to what has taken place at Meetings, etc., was largely due to the *Madras Mail*.

VOTE OF THANKS TO THE CHAIR.

The Hon'ble Mr. ACWORTH said:—I think I have a most difficult duty to perform—a duty that becomes the harder, because for the past four or five years I have had to do it, and that is to propose a cordial vote of thanks to your Chairman Mr. Hodgson (Cheers). I say it is a difficult thing to do, because it is difficult to eulogise the Chairman without repeating oneself, so often have I had to eulogise the Chairmen who have conducted the deliberations here. As a matter of fact, we are singularly fortunate in that they have all been men of great ability and all have taken a great interest in the work, and Mr. Hodgson is certainly behind none of them. You know that Mr. Hodgson is not merely a very active-bodied, but a very active-minded man, and that his mind generally moves in the right direction. I can assure you that he has been of the greatest assistance to me whenever I have had to refer to him for any advice. One great advantage is that he does not let two or three posts go by, but answers right off the nail and always to the point. As he has helped me, so I feel he will help the Secretary and the new Chairman. His power is not confined to helping the Member of Council and the Secretary. Indeed he is untiring, for he not merely conducts the business but thinks of means of improving it and bringing the Association more into notice, of making its power more felt, and bringing its products before the world. I really cannot adequately express how much we are indebted to Mr. Hodgson, and I hope that you will accord him a very heart vote of thanks (Cheers).

The CHAIRMAN:—GENTLEMEN,—I thank you most sincerely for the kind manner in which you have received the vote of thanks

which Mr. Acworth has moved in such a flattering manner. I can only say that it must always be to any Chairman a great pleasure to work for those who are willing and ready to accord such hearty thanks for anything that he has done for them. When I looked round the meeting when it was opened, I missed several familiar faces that I have usually seen here, and we all regret their absence from our counsels. But, at the same time, we are glad to see a good many new faces, and I take that as evincing an extending interest in the work of the Association. Now that is really what we want. We want to see the interests of the planter extend, we want to see the District Associations taking an interest in the work of our Association, because to work together, to work in combination, is the only thing to do. In these days of combination, unless we do combine, I am quite sure that we shall fall to the ground. We want to stand together, to pull together, and, if necessary, to fall together; but I don't think that last is at all likely if we stand well together. Another thing I want to impress upon you very strongly is the necessity for advertising your produce. Unless your produce is properly advertised the sales always fall off. In fact, I may say that the only road to a good market is by advertising. If you throw your products on the market without any advertisement, it is like drift wood on the water, which is collected and used by others who advertise with much profit. I know what I am asking, it means that you must put your hands in your pockets to provide money. Now no one knows better than I do that at the present time the planter finds it difficult to provide money. But I must remind you that as for the working of your estates you must provide a certain amount of money per acre, and to do so you must draw up your estimates. In drawing up these estimates I would ask you to insert an item for advertising your produce, say, at 4 as. per acre. I am quite convinced that if you can do that it will be probably the smallest and the most profitable item in your accounts. I think, gentlemen, that we may say that we have had had a useful and an interesting Meeting. We have arranged plans for pushing, to some extent, the sale both of our coffee and tea, plans chiefly directed to pushing the sales in India and also on a small scale we have started to push the sales in Paris. As I said in Committee Meeting just now, it is my intention to go Home next year. I shall then be in Paris and I will visit the shop with the greatest interest, and I hope that I shall be able to report before next Meeting whether I really think that good work is being done. At the same time, I shall be pleased to look about and see if I can find any other agency or means of advertising and selling our produce in England or abroad. Among interesting items that we have had before us I think Dr. Lehmann's lecture on manures of different sorts was perhaps as interesting as anything else; also the practical questions he was able to answer must be of great use to us all. I should refer again also to the paper read by Mr. Gompertz on Mr. Leeming's system, and I must say the figures to me were astounding. I think that is a question that every coffee planter should take up and reflect upon. Last year many promised to go back and try the system, but I am not aware that anybody, except Mr. Parton, has tried it. But I really think that every estate should make an experiment by putting a few acres under the system; because the figures we have heard—I know they are given by a reliable planter—are, as I have said, perfectly astounding. The amount of work done by this Association during the past year has been considerable as you all know. I have had the honour of holding office of different sorts for this Association since 1896, so that most of the work in some form has passed through my hands, and I must say that every year I have been glad to see its power and influence extending in every direction. I hope, therefore, that the support accorded this Association in the past will be continued, and that when I come back—I am sorry I shall not be here next year—I shall find it more flourishing and in a prosperous condition. We have seen the accounts to-day, and we know that it is in a good financial position, and that, after all, is a strong point. If we have money we can use it for different purposes, and money is always a good thing to have. I would refer again to the hard times which have overtaken tea and coffee planters, but I have no doubt that with economy and careful cultivation, British pluck and intelligence will carry us through, and that we will once more come out on top. And this I sincerely hope will be the case, and that when I next meet you I will find that the tide has really turned. Gentlemen, I now declare this Meeting closed (Cheers).

GENERAL ARTICLES.

THE TEA TRADE IN THE U. S.

At last Wednesday's tea auction, says the *American Grocer* of the 31st ultimo, Blacks sold off. India and Ceylon sold as low as $6\frac{3}{4}$ cents in bond—the lowest price ever made on this market. Congou sold at 7 cents in bond; Formosa Oolong at $10\frac{3}{4}$ cents. Greens were easier. The tea trade is in a very discouraging position. Details of the sale in the regular market report.

Here are some percentage consumption straws, showing which way the tea leaf blows in Great Britain:

	India.	China.	Ceylon.	Total.
1888	46·50	43·50	10·00	100
1889	51·70	33·00	15·30	100
1890	52·50	30·00	17·50	100
1891	48·90	25·80	25·30	100
1892	52·75	16·75	30·50	100
1893	52·00	17·10	30·90	100
1894	54·60	12·00	33·40	100
1895	52·50	14·10	33·40	100
1896	54·00	10·80	35·20	100
1897	53·80	9·20	37·00	100
1898	56·70	8·30	35·00	100
1899	55·25	9·75	35·00	100
1900	55·25	7·75	37·00	100

The tea-taster must have a ticklish tasting outfit, or infit. His mouth becomes a chemical proving station. He mixes drinks with a consecutiveness that is tea-diousness itself, yet must recognize the individual tea-leaf and diagnose its properties. He tastes only, yet has a surfeit. We are told by a handsome man of thirty-two or so, who knows what he is talking about, that tea-tasting is not injurious, if done right. The weight of tea in hand; style of leaf; cleanness (showing lack of dust and stem); colouring—all go to make up the general verdict, as well as sipping the decoction. We take off our hat to a competent tea-taster, for he is a man of so keen a discernment in the mouth, his words should be steeped wisdom.

If reports are correct, the supply of basket-fired or uncoloured Japans is short-legged. Chinese tea of the Gunpowder variety has also a case of shrinkage. Strict Moyune leaves are commanding 2 or 3 cents a pound more or lower grades, with a corresponding increase on higher varieties. Paterfamilias had better lay in his "gunpowder" early, as his temper might explode if he doesn't.

THE SALE OF MANURES IN CEYLON.

In the Legislative Council of Ceylon on the 31st ultimo the Hon. the Planting Member moved the first reading of:—"An Ordinance for regulating the Sale of Manures or Fertilisers of the Soil." He said:—When I brought forward the motion for leave to introduce this bill, Sir, I went over the chief features of the proposed Ordinance, and it is not necessary therefore that I should go over them again on this occasion; but I may say that the principal grounds and reasons for this Ordinance are these. When agriculturists make their calculations with regard to the purchase of manures for certain purposes they rely upon getting certain ingredients in the artificial fertilisers which they use, and if those ingredients are not present a great deal of their labour and a great deal of their money may be wasted for no purpose. Instances have already occurred in which manures have been sold which did not contain the ingredients which they were supposed to contain. Hitherto the only remedy has been to bring the matter to the notice of the seller and get some compensation from him; but such compensation is really no compensation because the manures have probably been already applied and the loss sustained. It is of the

greatest importance that these manures should contain the ingredients that they are supposed to contain, and if this bill is passed the seller will have to take care that the manures do contain what they are supposed to contain, because he will render himself liable to a penalty if it is proved that they do not contain what he states in the invoice to be their contents. Those, Sir, are the grounds and reasons for introducing this bill. I may say that it is almost word for word a copy of the English Act which was introduced in 1893 except that it has been slightly adapted to Ceylon and that it omits altogether the reference to feeding stuffs which was included in the English Act. I beg, Sir, to move the first reading of the proposed Ordinance.

The Hon. the Mercantile Member seconded, and the bill was read a first time.

The Hon the Planting Member:—I beg to give notice that I will take the second reading at the next meeting of Council.

INDIAN TEA ASSOCIATION (LONDON).

REPORT FOR THE YEAR ENDING 31ST MAY, 1901.

The Committee have now the pleasure to lay before members of the Association a report of the work that has been done during the period that has elapsed since the last annual meeting held in July, 1900, together with their recommendations for the continuance of the work.

Funds.—The amount collected in Calcutta from the levy of 1900 for exploiting new markets was Rs.1,00,983 according to the latest statement received, this being a little short of what has been received during each of the preceding three years.

The planters in Southern India have, as on previous occasions, contributed to the fund.

America.—Throughout the year the joint advertising of Indian and Ceylon teas in the public journals of the United States has been continued under the able management of Mr. Wm Mackenzie. During the later part of the year India has also joined in the advertisements in the Canadian newspapers, the Committee having been informed by firms engaged in the trade that it was advisable that Indian tea should be advertised along with Ceylon in Canada as well as in the United States. In addition to these advertisements the sum of £1,000 was spent in subsidies for the encouragement of advertisements by importers.

So far the business in Indians has been almost entirely confined to black teas, but owing to the extensive advertising of Ceylon greens, a trade has at last been opened for green or unfermented teas. Several Ceylon gardens have succeeded in manufacturing a class of green tea which appears to suit the demand, and according to the last accounts large quantities would be taken, if regular supplies in uniform and attractive packages were put on the market. Hitherto the Indian greens which have been sent to America have not given satisfactory results, but it is probable that by a careful study of the requirements of the American market suitable Indian teas might be manufactured, which would be taken in place of Japans, and efforts to produce these will, no doubt, be encouraged by the bonus which is offered by the Association for green teas shipped to America.

Continent.—As stated in the last report of the Association's Committee, Mr. J. E. M. Haringtion was sent on a mission of enquiry and reported as to the position and prospects of the Indian tea trade in several countries in Europe. This report has been circulated amongst the members. The information obtained, though to some extent valuable, did not lead to any great results, as the report showed that in most of the countries visited, the early prospect of a large demand for tea being created was not very satisfactory, except at an expenditure beyond the funds at present at the disposal of the Association.

The Committee on Mr. Harington's recommendation decided to grant a small subsidy to the proprietors of tea rooms in Rome, and the result, though dealing in small figures, show that in time a considerable demand for good tea may be expected. Although the quantity of tea consumed in these rooms was small, the help given to them, during the first quarter of 1901, brought an increase of 40 per cent. in the cup sales and of 400 per cent. in the sales of dry tea. The proprietors of these tea rooms were so encouraged by the results attained that they have arranged to establish agencies in Florencé and Naples, without requiring any further assistance from the Association.

Constantinople.—Was also visited by Mr. Harington, but the Committee were of opinion that the trade with Turkey, and through Constantinople with ports in the Black Sea, is being well exploited commercial firms, and they therefore did not think it advisable spend much money there. They have, however, agreed to mak grant to Mr. Gatheral, the representative of the Indian Tea Association in Constantinople, to enable him to draw up a pamph giving information about Indian tea, for wide distribution in Turk

Belgium.—Negotiations are now in progress between the Committee and a firm of tea importers in Antwerp, for assistance opening an establishment, not merely for the sale of tea in Belgiu but for the purpose of forming a central depôt from which tea c be distributed to all parts of the Continent.

Germany.—Proposals have been made to the Committee assistance in opening tea rooms in Berlin and Frankfort. Spec reports have been obtained from people acquainted with t market, and the Committee propose taking action as soon as t necessary funds are available.

Paris.—The Tea Courts at the Exhibition last year proved a d tinct success and were attended by large numbers of visitors fr all countries in Europe. In continuance of the work at the E hibition handsomely fitted tea rooms have been opened at 48, R Faubourg St. Honoré, under the auspices of the Association, a with assistance in the shape of payments towards rent, etc., t arrangements being under the superintendence of Mr. H. Skerr Rogers. These tea rooms have been extensively patronised by t better classes of French people, and in addition to the direct inf ence which is being exercised by the sale of good tea at reasonab prices, there is a distinct indirect influence being exerted in t direction of inducing others to open tea rooms and shops throug out Paris. Anyone who visits Paris at the present time, cann but be astonished at the large number of shops over which a placed signs of "tea rooms," "Five o'clock tea," etc., indicati that a distinct taste for tea drinking has sprung up among the Frenc

India.—The members of the Association will have seen in t Indian newspapers a good deal of correspondence on the subject the opening out of the markets in India itself, and at the reque of the Calcutta Committee, it has been arranged to place at the disposal the sum of Rs.40,000, out of the 1900 levy, towards effor to be made to push the sale of Indian tea among the native pop lation. The working of the scheme is in the hands of the Calcut Committee, and it is hoped that success may attend their efforts encourage the consumption of tea by natives of India.

Russia.—The Committee have come to the conclusion that now the time to make a strong effort to establish a market in Russ for Indian teas. Messrs. W. J. & H. Thompson in their last annu report point out that Russia is a most hopeful market "because requires black tea, appreciates quality, and is taking more from every year by direct importation, or from London; it, too, is callin for better tea." Already Ceylon has begun to benefit by the e penditure which it incurred in Russia a few years ago. The dire shipments from Ceylon during the past three years being follows:—

1898-99	... ...	2,750,000 lbs.
1899-00	... ...	4,750,000 „
1900-01	... ...	9,500,000 „

The Committee are now in negotiation with a suitable agent, wh has been in the tea business for many years, and who, it is though will prove a good medium for spending funds to the best advantag It will require, however, a very vigorous effort to make an appre able increase in the demand for Indian Tea in Russia, a if funds are available, they think that £5,000 or more might spent there during the next year with very great advantage Indian producers.

New Levy.—A proposal has been put forward to levy a small ce on all teas exported from India, as is now done in Ceylon, in ord to obtain larger funds for exploiting foreign markets, but even the scheme should obtain sufficient support from the plantin community to induce the Government to take it up and collect th money, it cannot be put into operation for sometime, and the Co mittee, therefore, *strongly urge* on all connected with the tea indust to subscribe to the 1901 levy, which they consider should be rais at once at the usual rate of four annas per acre of cultivation, a half anna per maund of tea manufactured, to be paid to the Associ tion in Calcutta.

It is scarcely necessary for the Committee to support the recommendation at any length by reference to the large additio

ade in recent years to the area of tea cultivation throughout ıdia, and which will increase the production during the next two three years by many millions of pounds. With an extension of ıe market in the United States, especially in green teas, and by ıe opening up of a large market in Russia, which they believe is ow possible, together with smaller additions to the shipments to rance and other countries on the Continent, the Committee hope ıat a large portion of the increase in production may be taken by reign countries. But to push these markets *ample funds are quired*, and the Committee earnestly beg that *all interested in the a industry*, whether they belong to the Association or not, or hether they have previouly subscribed to the levy or not, should ow contribute to the fund.

(Signed) ERNEST TYE,
Secretary.

SISAL HEMP INDUSTRY.

Dr. Morris [in a letter dated Barbados, January 28th] has esti- ated that under favourable conditions the cost of cultivating and xtracting the fibre should not exceed about £10 or £12 per ton. he market price, however, is very variable. It has been as low as out £13 per ton; on the other hand, it has, for one or two years ntinuously, been as high as £30 to £40 per ton, or even higher. he plant will undoubtedly grow in Trinidad and Tobago. There re already a large number of plants running wild in the latter land. It is to be remembered that it is not a cultivation for small roprietors. It is carried on on very much the same lines as cane ltivation. I estimate that it requires a capital of about £7,000 £10,000 to start and maintain a plantation, say, of 1,000 acres in gular working. Anything less than the area above given would ot keep the scutching machines in full working, and thus add to ıe cost of management and the up-keep of the plantations. As nly about three per cent. of the weight of leaves is returned in bre, there is a heavy cartage of these to the factory. On an estate rning out, say, 500 tons of fibre, not less than about 15,000 tons leaves have to be brought to the mill. This necessarily involves nsiderable expenditure in carts and stock, or in estate tramways. is stated that in very rich soils the fibre is not so strong and undant as in comparatively poor soils in dry climates. Again, the Bahamas, it was found that absolutely barren land was quite seless and led to disappointment and loss.—*Proceedings of the maica Agricultural Society.*

ROPOSED GREEN TEA SYNDICATE IN CEYLON.

Mr. Edward Rosling writes to the Colombo papers :—

In view of the large amount of correspondence on green tea and e green tea trade generally, which has appeared during the last onth or two, it will perhaps be as well to put the position before u as concisely as possible. In the first instance a bonus of 10 cts r lb. was offered on 300,000 lbs. with a view to induce estates to mmence manufacturing. This vote though made in 1898 did not pire till October 1900. In other words in two years we made 0,000 lbs. At the expiry of this vote, the then manufacturers nclusively proved that they could not continue manufacture thout the aid of a further bonus and it was then decided to vote st 7 cts. on a million lb. then 5 cts. on the second million, hoping at has the bonus was reduced on this side, prices would corres- ndingly rise on the other. Unfortunately through indiscriminate mpetition prices have not risen, and it is feared that, unless some her means are found to protect the industry in its infancy, when e present bonus is finished, manufacture will fall off if not cease together. I propose that a Company or Syndicate or an Associa- on be formed, amongst the green tea producers, the objects of ich will be to increase and cultivate the trade in Ceylon Green as, primarily with a view to relieve the black tea market of some its surplus supplies. The points to be aimed at to obtain the ove object are:—(*a*) Control and regulation of supplies so as to oid a glut of green tea one month and a scarcity the next. (*b*) ıe blending of different estates' teas into a certain number of andard blends so that the purchaser may be sure of repeating s order for the same quality and any quantity. (*c*) To control d regulate prices with a view to do away with the cut-throat mpetition at present obtaining in the United States. A certain rcentage of any profit accruing to the Company, from its trading to be reserved to the Company, the balance to go to the growers of the tea. I would suggest the "Thirty Committee" be asked to support such an Association or Syndicate or Company, by either continuing a bonus on green teas sold to them or else by devoting a portion of their funds towards administrating the business of the Association. Arrangements could be made by which Colombo Exporters could purchase from the Association on favourable terms. By a scheme on these lines, if supported by the producers, all green teas would be controlled by the Association on a mutual system by which the growers would participate in a share of any profit.

The other side of the matter is shown in the following extract from the *Ceylon Observer*:—

As a result of enquiries made we have been told in some quarters that not enough particulars of the scheme have been given yet for a definite opinion to be offered, while elsewhere even from green tea makers we can find for it no cordial support. With a full desire that the position of the industry should be improved, we think it would be well if the leading Colombo Agents and dealers had been consulted before Mr. Rosling's green tea scheme had been promulgated. In a matter of this kind, we cannot help thinking that the judgment of men with large business experience must tell.

We have made special enquires in Colombo as to the feeling with regard to Mr. Rosling's letter proposing a Green Tea Syndicate. One firm expresses the following opinion:-

"We cannot see that Mr. Rosling's scheme is workable. A few growers standing out and working for a smart firm of buyers would upset the whole thing."

Another expression of opinion runs:—

"I hardly think that a Green Tea Syndicate or combine is necessary now. Green tea has caught on in Canada and the States very decidedly, and the manufacture is being taken up in Ceylon with a will. So much so is this the case that I think it may safely be left to individual enterprise without fear of a continuance of the conditions Mr. Rosling deplores, and which existed for a time. I would not like to discourage a Green Tea Syndicate but I have no faith in such combination working successfully"

Elsewhere it was pointed out to us that the total outturn of Ceylon Green teas this year to date has been about 800,000 lbs. Had a combination, such as is suggested by Mr. Rosling, been in existence, to maintain or raise prices, the quantity disposed of would unquestionably have been less. Low prices have stimulated the demand for this new article. Any increase in rates, until the market for it has been firmly established, will doubtless interfere with consumption. The expenditure necessary to introduce special Green tea machines into factories is small and so long as planters find it profitable to manufacture Green teas, they will do so. It would be unfair for the "Thirty Committee" to refuse the bounty to any one who turned out standard quality merely because he was not a member of the "Union." On the lines proposed by Mr. Rosling a Company or Syndicate is not desirable. Ceylon Green tea liquors appear to be liked in the United States and Canada and if these can be given along with leaf, similar in appearance to Japan or China greens, there seems no reason to suppose that our cousins will not be found eager to purchase large quantities of Ceylon instead of inferior liquoring Japanese and Chinese. What have the "Thirty Committee" done in the way of informing planters as to the makes of Green teas which are suitable for the American market?

COCOA CULTIVATION IN B. C. AFRICA.

Mr. J. C. De Jossselin De Jong writes to the *Central African Times*:—

About seven years ago I imported some cocoa seeds from the Dutch West Indies (Guyana), but they unfortunately got wet on the way up the river, and were quite spoiled when they arrived here. A few months ago Mr. F. W. Moir, through the African Lakes Corporation, imported some cocoa seeds, which, however, also arrived in a bad condition, due to having fermented on the way out. I have taken a great interest in these experiments, and although we have had bad luck up till now, I am of the opinion that sooner or later we will be more successful. As I have had some experience in cocoa culture the following may be of interest to planters here.

There is, perhaps, no other product of agriculture, the acquisition of which requires more care, trouble, difficulty, and perseverance than cocoa, but on the other hand, when success is obtained, there is no other product which gives more profit, and those profits increase every year. It is a well-known fact that there are many plantations which after many, many years (having been continually well looked after) have lost nothing of their original value, but have increased in value. I myself have seen, and worked on, plantations in Dutch Guyana, which were over 30 years old, and which every year gave a very heavy and good crop, and are doing so up to the present day.

The soil in which the cocoa was planted was a very heavy soil, much heavier than we are accustomed to find in many districts of B. C. A. However, marls and alluvial soils have proved to be a great success, especially those of an undulated nature.

Both the systems, of making nurseries and of putting out 2 or 3 seeds in the pits directly, are used. Also seeds are put in little loosely-made baskets and planted out in that way. The nursery system, however, is much preferred. The seeds before being put into the soil are first well washed to take the saccharine matter away, and they are then dipped in chalk: this is to prevent the seeds being attacked by insects. The seeds germinate in 10 or 14 days after planting, and appear above the soil. After 6 to 7 months they are large enough to be planted out. On one acre are planted 200 cacao, trees being 15 ft. by 15 ft. As a shade bananas are planted with the cocoa, and that there may be shade while the bananas are growing up, cotton and cassava are planted, the latter plants growing quickly, and not to too great a height. The best shade tree that is used is the Erythrina Indica, of which there are two species, the white and the red, the former being considered the better. This is a very quick-growing tree and soft-wooded, and when grown up gives a beautiful, large, spread-out shade. The trees are raised from cuttings, for if raised from seed they take too long to be of any use. The cuttings are about 6 to 9 feet long. These shade trees are planted at a distance of from 20 to 25 yards apart. Cacao does not grow useless under shade. Little or no shade, little or no fruit, the saying goes. Not only must cocoa be protected by shade against heat, but it must also be well protected against winds, as wind is one of its greatest enemies. Other great enemies of the trees are the climbing plants, the caterpillars, beetles and lice, and, more especially, weeds. The plantations, as well as the trees, must always be kept scrupulously clean. In Dutch Guyana there are two rainy seasons. The smaller rainy season begins about May and lasts till July, while the proper rainy season begins in November and lasts till the middle of February. They therefore have a heavier rainfall than we have here in most districts. The heat in the dry season, from the beginning of August till the end of November, is often very great. To prevent the soil drying too much and thus doing great harm to the trees, every plantation is so laid out that it can be irrigated, most of the plantations having fine streams or even rivers near at hand: others have proper reservoirs where the water is gathered in the rainy seasons. Plantations near the coast have to be careful of the salt water coming up the rivers with the tides, and keep their sluices well guarded and closed at such times. The cacao trees exposed to the sea winds are never very bright, the salt air having a very harmful effect. For this, however, we have no fear here. The cacao tree grows up pretty quickly, and begins to give fruit about the 4th year, afterwards bearing regularly. The trees are kept at a height of from 15 to 20 feet, this height being the best for keeping the trees clean, pruning, and picking. As an average each tree gives about 25 fruits every year, although there are trees which have been known to give 200 to 300 fruits. 10 to 15 fruits produce one pound of dry beans. The trees blossom nearly the whole year round, and the fruit ripens in 5 to 6 months. The cocoa when ripe has a deep orange colour. After being picked it is brought to the station (often in small canoes which go through the ditches made for irrigation purposes) where it is put in large wooden boxes to sweat and ferment for 48 hours. It must be often stirred up to get proper and regular fermentation. Afterwards it is put out to dry on brick or cemented drying places: the first two days only for a couple of hours. When properly dry the cocoa is stored, sifted, etc., then put into bags and sent to the European markets.

I am afraid that most districts of B. C. A. are not well suited for cocoa cultivation, some being too high, not having enough rainfall, and not well suited for irrigation; and here where the rainfall is not very great, and the dry season of too long duration we must irrigate, while to irrigate in districts not well suited for that p pose would require great expense in the formation of reservo As far as I have heard (not having been there myself) I should that the Ruo and Tuchilla districts and the south side of Mla especially at the base of the mountain where the land is of a flat nature and the temperature greater, might be the best suited cocoa cultivation for several good reasons. First of all there much heavier rainfall than in any other district of B. C. A. Nea all the land has large streams coming down from the mountai and therefore gives greater facilities for irrigation. soil is much heavier and looser than anywhere else and the plan tions could be laid out at a much lower elevation than anywh else under the afore-mentioned good circumstances. With rega to the Zomba district I hear it is well suited for irrigation, bu is on too high an elevation for cocoa.

With regard to the outlay of a cocoa plantation, a great d depends on the aspect of the land, and the facilities for irrigati and on the experience of the planter; as a well laid-out estate v cost much less to keep up, and will be more profitable, than planned by a planter of no experience.

In many places in Dutch Guyana coffee proved to be m or less of a failure, and planters then turned their attention cocoa cultivation. Most of these estates are now of a pay nature, although many of the original planters failed by their experience.

From what I have heard of Mr. Moir's cocoa plant in Mlanj am of the opinion that if the plant was carefully lifted with a b and planted on the lower part of his estate, especially on his irri tion stream, in about two years the plant would be in a condit to bear fruit for the extension of the industry in this country.

TEA AND THE CURRENCY.

Major E. F. Marriott writes in *Capital*—

I have just seen an article by "X" in reference to a letter mine on the above subject. "X" writes: "It is not a little amus to find your correspondent, Major E. F. Marriott, writing *Capital* of the 9th ultimo that 'no one interested has fully gras the fact that the currency legislation does act as a crushing tax the industries of India.'"

During the years I have been writing on the currency quest I have had some hard things said of me, but to be considered am ing on this dreary subject is the hardest cut of all. But wa really so funny?

To begin with, "X" has failed to notice that I was not a corr pondent of *Capital;* the letter in question was written some ti ago to the *Statist*, and the editor of *Capital* did me the honour reproduce it. I am considered amusing because at that time I never heard what Mr. Elliot and Mr. Wadia had said on the subj nor Mr. Acworth and Mr. Forbes-Mitchell, and "besides this have Major Marriott himself." When I wrote Messrs. Elliot a Wadia had not arisen as opponents of the legislation, it is o lately their letters have appeared in the leading Calcutta financ paper. Mr. Acworth's opinions I know well, having had man currency conversation with him at the time of the 1898 Commissi I have reason to think that he had not fully grasped what a cru ing tax the legislation was. Mr. Forbes-Mitchell wrote, i mistake not, some time before the rupee reached its present hi level, and could not have grasped a position which did not th exist. There remains myself; I have fully grasped the fact question, but then I am not interested in the tea industry.

I recognise that Mr. Elliot and Mr. Wadia have now grasped situation, but even so what are they among so many. Mr. Wadi letters seem to me to be full of good sense and to the point, whom have they convinced? "There are plenty of people gra ing the fact; but unfortunately there are other facts to be gras too," writes "X." I deny both statements. That practically of those interested fail to grasp the situation is evidenced by fact that the Associations cite over-production, want of combinati lack of enterprise, etc., to account for the failing industry; and they do touch on the legislation at all, it is only to shy off ag in alarm at having raised this dreadful problem. And there no other facts that need be grasped. If the legislation were rep ed the industry would flourish, and there would then be no talk over-production. To treat this sick industry for over-product

nd to ignore the over-taxation is on a par with treating a man vith a broken leg, and consequent high temperature, for fever, nd to ignore the broken leg, leaving it unset.

The tea industry is suffering from over-taxation; a cent per ent. *ad valorem* duty in England, and a 25 per cent. export duty in ndia. The import duty is of small importance; people will have ea whatever the duty is, and the consumer bears the tax, for all ea-producing conntries suffer equally. But the export tax falls on he Indian industry, other countries being free from it. Practically ll the symptoms of disease in the tea industry are due to the ex- ort tax; set this broken leg and the industry will recover. When his is generally understood the currency legislation, if it has not a the meanwhile died a natural death through the fall in the alue of gold, will be swept away.

I do not now attack the legislation on the ground of its general norality, I take the far higher ground that it does not and cannot ay, for history has taught us so much. I propse to close with an xtract as a text for a sermon by "X," for I recognise that, if he ould, he could be a very vigorous opponent of the legislation. he extract is from the article on "Money" in the Encyclopædia ritannica (the Italics are mine).

"It is proper to observe that coins may be debased in three ifferent ways: (1) by diminishing the quantity or weight of the etal; (2) by raising the nominal value of coins of a given weight; 3) by lowering the standard or fineness of the metal." The overnment of India has debased its coin in the second way.

"Until coinage became a state function a continued debasement as impossible.....When, however, coinage became a function of overnment strong motives for debasement soon presented them- elves. ..... The position of most Governments was hat of debtors, and as a debasement favoured all debtors at the xpense of all creditors it was only natural that rulers, ignorant of he ultimately ruinous effects of a series of debasements, should eek to relieve themselves *without exciting the odium incurred by he levy of heavy taxes.* ..... Whatever may be the inducements to enter on the perilous course f tampering with the monetary standard, *a long experience has ncontestably proved its disastrous effects.* ..... So anifest are the evils that result from debasement that it may be easonably hoped that all civilised Governments have abandoned he practice for ever."

What would be said in England if the Government were to egislate so as to make the sale of sovereigns a monopoly, and were o charge, say, twenty-five shillings for every sovereign, such egislation is inconceivable in England; and it only took place in ndia because in some way a general superstition held men's inds that the rupee itself was falling in value, and a general elief arose that making a monopoly of coinage was the only way o prevent a further fall in value. This superstition has led nglishmen into passing, with the best possible intentions, legisla- ion in India, the adoption of which in their own country is practi- lly inconceivable.

THE COFFEE TRADE IN THE U. S.

THE COFFEE FOR NEW YORKERS.

The consumers of New York, says an experienced coffee distri- uter, demand a high-grade bean. Efforts, strong and persistent, ave within two or three years, been made to inject into the public tomach a low grade of the inspiring drink. Expansion, to some xtent, of the demand, or, rather, the sale, of the inferior article ucceeded the struggle.

Recently there are strong indications that the demand for the etter grades is regaining its supremacy. We hope so. Good oods have much to do with human happiness. The stomach will tand much abuse, yet it is quick to respond blessedly to genuinely ood food and drink, properly prepared for a passage down the uman throat. The horse that eats straw when he could have oats a near relative to a man or woman who drinks "screening" coffee hen he or she might have the best.

The best thing in coffee is wanted for the best thing in humanity. he best thing in humanity is the stomach. Give it the right kind f treatment, and it gives the giver the right kind of a treat elight it with good coffee, and the coffee will be a great delight.

The delightsome bean, where its flavour is more than skin-deep, ay be found in many a New York house.—*American Grocer.*

THE DISTRIBUTION OF FUNGI SPORES.

The following extract from the *Ceylon Observer* refers to a very interesting experiment that is being tried in that island :—

The following schedule of observations to be taken by the co-observers in the tabernacle experiments, planned to gain information as to the distribution by wind, insects and other agencies of spores of parasitic fungi, has been issued from the Scientific Department at Peradeniya Gardens :—

The mycologist, while wishing to reduce the amount of trouble taken by each observer, will be glad to receive as complete answers as possible. If the terms suggested in the footnotes only are used the comparisons of the observations at the different stations will be simplified. When convenient the returns should be sent to Peradeniya next day, so that the diseased leaves can be examined with little delay. All the diseased leaves should be sent unless too bulky, when they should be weighed and the weight sent, with as many of the leaves as possible. The tabernacle should be kept closed and only the kangany or cooly who is to pluck the bushes admitted.

Name of Estate; Date of Plucking; Weather Conditions (very wet, rainy, no rain, no sun, sunny, hot sun); Wind (no wind, little wind, variable, constant wind, strong wind); Weight of leaf plucked from enclosed bushes (green); Approximate number of bushes from which the diseased leaves came; Conditions of nearest bushes on north side of tabernacle; Condition of nearest bushes on south side of tabernacle; Does the flush on enclosed bushes fairly agree with the rest of the field? Remarks or Observations.

[The tabernacles are all erected or will be by the end of September. They are at various heights from 50 to 5,000 feet above sea-level and in various districts in which the areas over which the wind has passed is different. Nothing has been done to solve some of the knotty questions as to spore distribution by wind, heretofore, and as this has a most important bearing on the spread of diseases caused by parasitic fungi, all knowledge gained by these experimental screens will be valuable.—Ed.—*C.O.*]

INDIAN TEA ASSOCIATION.

British Import Duty upon Tea.

In answer to the memorial of the Indian Tea Association on this subject, the Secretary of State has, through the Government of India, forwarded the following extract from a report by the Commissioners of Customs :—

"The extra tax has in no way diminished the consumption of tea, or its importation from India and Ceylon. Every evidence of ability to bear its burden of taxation that a customable article can give, is given by tea now. Tea never was cheaper or more plentiful in the London market, notwithstanding the tax. The trouble in which the Indian and Cingalese tea trade is in does not arise in any degree from high taxation, but from over-production, and careless cultivation, preparing, and packing. The Local Governments must interfere to check the suicidal policy of planters, by establishing a control over the area of cultivation, and the character of the ground devoted to cultivation, and an inspection over the tea before it is packed and exported. This will necessarily increase the cost of production; and, of course, it is desired to obtain a set-off in a reduction of taxation, which would be tantamount to a grant from the Exchequer. Is a mistake to suppose that tea is more highly taxed than coffee and cocoa, if allowance be made for the larger number of cups that can be produced from a pound of tea at 6d. than from a pound of coffee or cocoa at 2d. When tea was reduced from 6d. to 4d. a pound in 1890, coffee and cocoa remained unchanged at 2d., therefore when tea was restored to 6d. in 1900, there was no reason for increasing the duty on the two other articles."

To this the Indian Tea Association reply :—"Judging from the terms of Sir E. Hamilton's letter, the report by the Commissioners of Customs is in the nature of a reply to the representatious which were made to Government by this Association in the early part of the current year. It therefore reflects, presumably with accuracy, the views held by the advisers of His Majesty's Ministers in regard to the enhancement of the duty. For this reason the statements and opinions set forth in the extract have justly claimed the attentive

consideration of the General Committee. It will be within the recollection of Government that it was contended by the Association, in the representations in question, that the burden of the higher duty fell primarily upon the producer rather than upon the consumer of tea It was also held that the enhancement would tend to reduce consumption or at least to check any further development. The Commissioners of Customs state that the extra tax has in no way diminished the consumption of tea;" but they advanced no satistics in support of this statement. They go on to remark that "every evidence of ability to bear its burden of taxation that a customable article can give is given by tea now. Tea never was cheaper or more plentiful in the London market, notwithstanding the tax." That is to say, that the consumer pays no more now for his tea than he did when the duty stood at 4d. But clearly the additional 2d. must be paid by somebody; and as it is not paid by the consumer, it must be by the producer. This is precisely the point which the Committee endeavoured to make in their representations to Government; and they are glad to observe that it is admitted by His Majesty's Commissioners. But they scarcely understand how it can be regarded—as it seemingly is—as a reply to their representations.

In the second paragraph of the extract, there appears a statement to the effect that the difficulties of the industry do "not arise in any degree from high taxation but from over-production, and careless cultivation, preparing, and packing" This statement hardly seems to be consistent with that in the first paragraph. For if the producer has to bear—as the Commissioners really admit he does have to bear—the burden of the present exceptionally heavy tax, it cannot be maintained that his difficulties are not thereby increased. With regard to the latter part of the quotation, the Committee do not deny that the quantity of Indian and Ceylon tea supplied to the British market is in excess of the demand. But they fail to see how the difficulties of the industry can be due to "careless cultivation, preparing, and packing." And they are not clear as to the meaning of this assertion. The statements already alluded to appear to need some elucidation But it is to the third paragraph of the extract that the Committee desire to draw the particular attention of the Government of India. It is there stated that the Local Governments must introduce a control over the operations of cultivation, manufacture, packing, and exporting; that this will necessarily increase the cost of production; and that "of course it is desired to obtain a set-off in a reduction of taxation." The Committee are entirely at a loss to understand what is intended by the concluding portion of this statement. To their knowledge it has never before been suggested by anyone that the Local Governments should establish such a system of control. It cannot therefore be said that a reduction of taxation is asked for as a set-off against expenditure which has not been incurred, and which probably never will be incurred. The only measure of State assistance which has been suggested by the Association is the collection by Government of an Indian export tax, the proceeds of which would be devoted to the work of developing new markets. And the General Committee venture to hope that when the time comes—as they trust it shortly will—for them, in behalf of the industry, to ask the Government of India to adopt this very moderate measure of State intervention, His Excellency the Viceroy will see his way to consent to do so. They do not desire, and do not for a moment anticipate, that Government will propose any system of control over the methods of cultivation, manufacture and exportation; as such a control would be alike uncalled for and unnecessary. But they are distinctly of opinion that if the consumption of Indian tea in foreign countries is to be properly fostered, a permanent source of revenue (such as an export tax can alone provide) is absolutely indispensable.

Lastly, the Committee desire to remark upon the final paragraph of the extract, in which a somewhat novel basis of taxation is suggested. The argument is that "it is a mistake to suppose that tea is more highly taxed than coffee and cocoa, if allowance be made for the far larger number of cups that can be produced from a pound of tea at 6d. than from a pound of coffee or cocoa at 2d." This is really a contention in favour of an *ad valorem* duty on tea tea. For if a pound of coffee or cocoa ought to be taxed on a lower scale than a pound of tea because it produces fewer cups, then it clearly follows that because a pound of tea which costs 4d. produces fewer cups than a pound of tea which costs 1s., it ought likewise to pay less duty. But the argument does not appear to the Committee to be sound; and they notice that the Chancellor the Exchequer did not allude to it. He plainly admitted that duty was maintained for 'financial reasons' "I confess," he sa "that although I sympathise with the great industry of India a Ceylon, yet I think in dealing with this question we must fi consider the interests of our own tax-payers. If I could reduce tea duty, I should be glad to do so, but to talk of a reduction t year is to my mind simply impossible" Clearly therefore the d was enhanced, and is maintained, for the sole purpose of augme ing the national revenues. And if that were a sufficient reason the case of tea, it ought to have been an equallly sufficient rea in the case of coffee and cocoa. It will be understood from foregoing comments that the Committee do not regard the extr in question as a conclusive answer to the arguments adduced the representations made by the Association. And they wo venture to ask that this expression of their views may be tra mitted to the Secretary of State for submission to the Comm sioners of Customs.

INDIAN TEA FOR RUSSIA.

Apropos of the Hon'ble Mr. G. L. Acworth's remarks the Annual Meeting of the U. P. A. S. I. regarding t expediency of capturing the Russian market for Indian t we take the following from the *Pioneer* :—

The cost of conveying one pound of tea from the factory in Ch to Nijni Novgorod is 1s. 4⅞d. The cost of the same quantity water carriage *viâ* the Suez Canal and Odessa, and thence by to the same market, is only 4⅓d. The great commerce thefore Kiakhta is purely artificial, owing to the enormous difference tween the customs house duties at Odessa and those at Irku At the former the duty is 1s. 8d per pound; at Kiakhta the d on leaf tea is 1s. 1⅓d. per pound, and on brick tea, 1⅔d. The hig tax at Odessa forces the bulk of the tea trade through Siberia. greatly increases in value as it advances from Irkutsk. Fr calculations made, it is stated that tea, costing ten roubles whe grew and was first purchased, increases in value nearly five ti ere it reaches its market. The total amount of customs duty p at Irkutsk in 1896 exceeded one million pounds sterling. Th facts and figures plainly demonstrate Russia's methods of cont ling trade. Notwithstanding the length of the journey, the en mous physical difficulties to be overcome, and the increasing va of every pound of tea as it passes over each mile of the route, Russian Government, by the simple device of counterbalanc tariffs, is enabled to force the bulk of the tea trade from its natu route over the seas to one across which nature has thrown most stupendous difficulties. Three years hence these difficult will have vanished. From Hankow *viâ* Pekin to Newchang then across the Manchurian Province to Irkutsk, over the U Mountains, China tea will travel without transhipment once breaking bulk at any point before it reaches the Nijni Novgo fair. The year taken up by the present journey across deserts frozen mountains will be reduced to one-twelfth of that peri The cost of transport will be lessened in an equal degree. The c of tea to the Russian consumer will be reduced to a very appr able extent, and, in the same proportion, the consumption wil increased.

The tea supplied to the Central Asian markets, including Per is at present conveyed by sea as far as Batoum in the Black Sea thence forwarded by rail across the Caucasus, transhipped acr the Caspian, and again railed to Bokhara, and other depôts, by Trans-Caspian Railway along the northern frontiers of R sia. This roundabout route also will cease to exist three ye hence. Before the Trans-Siberian Railway come into existe a scheme was formulated for joining Bokhara to Europ Russia by a connecting link, 1,200 miles in length, tween that city and Orenburg. This scheme has been dela by the larger undertaking now in hand. The political imp tance of this missing link, however, is so great, that it may taken for granted its completion will be contemporary with opening of through communication across Siberia. When th projects are accomplished facts, it will be seen, among ot developments, that Russia will have absolutely at her command the markets of Central Asia for tea as well as for other comm ties. By way of Irbit, or even *viâ* Nijni Novgorod, tea will the sent from the Chinese emporium on the Yangtsze to every mar

Persia and the Khanates without interruption at any point and thout a mile of water carriage over all the distance.

The tea planters of India, through their Associations, are at the esent moment using every endeavour to push their teas in urope. The outlook in that quarter, in the light of coming ents, is not reassuring. When Russia has her long-distance ilway communications in good working order, her enterprising aders will certainly spread China tea over the European Conti-nt. Even now most of the tea drunk in Germany and European ssia, is probably China tea, supplied by Russia, though India nt 5½ million pounds there last year; but with the greater facili-s that the Trans-Siberian Railway will offer, the Russian trade ll become more firmly established than ever. Chinese cheap bour, machinery in the Chinese factories, continuous railway nsport to all the markets in Europe and Asia, will produce a mbination hard to beat Official Russian enterprise, though not, course, for trading purposes only, has supplied the railway. hen Russia's political projects in China have been forced to fru-on and her aggressive designs in that direction are satisfied, ssian capital (the new phrase for French money) will be forth-ming for commercial enterprises on an enormous scale, and the gantic tea industries of the Flowery Land will be taken in hand d organised. All this ought to be realised and considered betimes the Indian planter. It is doubtful, in view of the enormous vantages which China tea will enjoy when imported *viâ* the berian Railway, whether the Indian leaf will be able to compete Russia and Northren Europe: and perhaps the planters would well to concentrate their efforts on the fields where Russian aders cannot be their rivals.

CEYLON TEA IN AMERICA.

The Secretary of the Planters' Associon of Ceylon has sent the Press the following article extracted from the *Journal Commerce and Commercial Bulletin of New York.*

TEA PROBLEMS REQUIRE NATIONAL ACTION.

NO IMPROVEMENT IN GENERAL BUYING OF TEA EXPECTED UNTIL THE DUTY QUESTION HAS BEEN SETTLED—TRADE SENTIMENT SEEMS TO FAVOUR THE REMOVAL OF THE DUTY—VIEWS IN NEW YORK.

It is an acknowledged fact that the tea trade of the country has years been in a particularly unsatisfactory condition. Various ore or less concerted but to a large extent local efforts have been ade to secure relief; but the situation to-day is as bad as ever, ot worse than ever, and the trade, importer, jobber, and retailer, ems to be getting into a position where it will be inclined to cast de jealousies and unite upon measures that shall have at heart t the amelioration of conditions particularly affecting the importer r particularly affecting the jobber, but the well-being of the tire trade.

The recent efforts that have been made to secure improvement ve been, first, the enactment of the law establishing tea standards epared by a board of tea experts; and, second, the imposition of luty on tea. Both of these measures were advocated as a means keeping out unwholesome teas, the first because such teas could t pass the "standards," and the second because it would not be ofitable to pay duties on unwholesome teas. So far as excluding e importation of low-grade teas is concerned both measures have doubtedly had the effect that was desired. But in the meantime lders of teas which were virtually unsaleable before either law nt into operation have benefited. They have been able to meet e demand for the low-grades and have had the benefit not only of e duty but of the absence of competition for low grades, and have us been able to market teas they had previously been carrying years. This class of dealers has undoubtedly benefited, but e trade at large has not, and the trade at large seems now in a sition where it can be expected to unite on the question of secur-g a repeal of the duty. There has already been a petition by embers of the local tea trade to the District Supreme Court at ashington for a writ of certiorari against the Treasury Depart-ent, and the Board of Tea Experts, asking for a more liberal and oader-minded interpretation of the Tea Act.

As the New York tea import trade were so urgent in securing e imposition of the duty they feel much diffidence in initiating a movement for its repeal; and they feel, moreover, that any such advocacy by them would be detrimental if not fatal to such repeal. This is a condition of affairs seeming to promise the hearty support of the New York importers, as an influential element of the country's tea trade, in the plan which has recently been receiving discussion in the trade for the formation of a national tea importers' and dealers' association. With such an organization, in which it is expected the wholesale grocers of the country would participate through their various State associations, the demand for a repeal of the duty could be shown to be widespread; and, furthermore, the tea trade of the country would than have an organization through which broad-minded action could be promptly taken on the important problems that from time to time confront the trade. . . . .

Extract from letter by Mr. John B. Brown, tea importer of New York :—

"There is no reasonable form of a protective policy in maintaining a duty on tea, as the South Carolina industry is of small proportion, and by reason of soil and climate cannot satisfy the demand for varied kinds of tea. A duty on tea is simply tariff for revenue only, and with the Treasury surplus so enormous what is to be gained by any political party in keeping the duty in force, depriving some two hundred thousand retailers and the millions of consumers from the benefit of reduced prices? It does not seem possible that any industry can for ever be taxed beyond all reason, showing to so many a loss.

"The day for class legislation has gone by. It will exist for a time, but will never be silently submitted to, and the movement of any individual or association to rule for their sole benefit to the exclusion of the great majority will, in time, prove reactionary. The few whose interests the duty temporarily benefits should look ahead and foresee the narrow and still narrower market which will be the result of a continued duty. All elasticity gone, the market a stagnant, 'in-bond' condition and a brokers' market a thing of the past. If duty is continued in force importers will be compelled to carry even smaller stocks at a convenient point in the West, where storage rates will be one-half at present existing in Chicago and Eastern points, and as teas will be needed, with the newly-proposed freight advantages, they will be shipped East to fill requirement.

"It did not seem possible Congress would ever adopt a duty on tea, otherwise considerable opposition would have been offered to prove it unjust. As one always opposed to duty you may add my name to any petition if circulated, asking for its removal."

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

The Course of Exchange.—Referring to the reaction in Brazilian Bonds, the *Moniteur des Interéts Materiels*, of Brussels, of the 26th May, writes as follows:—

"Following exchange, which has fallen to 12d. Brazilian 4 per cents have weakened again. This reaction of exchange is a regular thing at Rio. Unless influenced by special causes such as Treasury operations, speculation or politics, exchange should always fall about May, rise again in June to attain its maximum in August and fall again in the Autumn in sympathy with coffee shipments. This year, exchange starting from 10d. in January was pushed rapidly up to 12d by the end of March and $13\frac{7}{16}$ on 1st May. Since then it has commenced to fall again, coffe shippers, doubtless, wishing by forced sales to ensure favourable exchange (*sic*). If however shipments continue there will be a new rise next month. In 190 , on the contrary, the state of the market was less normal; from January to the end of May maximum monthly rates leaped from $7\frac{7}{8}$ to $9\frac{1}{4}$ and at the end of June or beginning of July were pushed to $14\frac{3}{8}$ falling afterwards to 10d. in December. Evidently rates were vitiated in 1900 by the speculation of June, the whole truth of which was never known. This year the course has been more regular, and that is why we maintain that up to the present there is nothing to be alarmed at, rather the contrary."

Note of Ed of "The Brazilian Review."—The *Moniteur* is certainly the most intelligent of all the foreign critics of Brazilian Exchange, and has already evolved a theory that, if too rigid to

account for variations such as we are now experiencing, is at least intelligible. As we pointed out some time ago, the tendency of exchange has altered of late and instead of a single great swing of the pendulum up and down, such as the *Moniteur* describes, the natural course is towards a rise in January to March, accompanying the culmination of the rubber movement, with a reaction from March to June, when both the rubber and coffee seasons are over and bills are scarcest. This of course may be modified by speculative selling, as it was this year and last, and not only counteract the reaction that should arrive in March or April, but even drive rates continuously upwards; but if, as is certain to be the case, the market oversells itself, the final reaction will then be all the more violent and prolonged when it arrive. That is precisely what is now occurring; an unusual accession of rubber and coffee bills in March raised exports to the unusual figure of £4,000,000 and so stimulated speculation that by the end of May the markets were already £2½ millions oversold. In April the supply of bills fell off to only £2,800,000 and in May and June were still less, and insufficient to simultaneously furnish the current requirements of the markets and cover for speculative sales. Had coffee been sold heavily ahead, as it usually is about this time, the cover would have been forthcoming and the rise perhaps, have been carried over to July or August without relapse. As it is, the low prices ruling abroad for coffee are not sufficiently encouraging and the market has to get along as best as it can with the few ready bills there are. Naturally, as the Banks are the only sources where cover can be got for the present, they are masters of the situation and can squeeze the "bulls" as they choose. As soon, however, as coffee is shipped in large quantities, which will be about July, bills will be plentiful once more and rates commence to improve. It is probable that, as soon as the present oversale based on the surplus of exports about March is liquidated in August or September, another "bull" movement will commence and that the market will again oversell itself, driving rates up in October or November, to fall again in December or January, when the oversale has to be liquidated, thus completing the double swing of the exchange pendulum, the motive power of which is derived from Rubber and Coffee respectively.

Exchange, 22*nd June,* 1901.—Ninety days' Bank rate on London opened on the 17th at 11 7/16d. and closed this evening at 11 1/8d. There is little to add to what we wrote last week. The liquidation is following its inevitable course and in the absence of sufficient ready bills to supply the day-to-day requirements of the markets and cover for "bull" operations, in spite of every effort to maintain it, the rate gets weaker and weaker. Nor with a large account yet uncovered does there appear to be much hope of improvement until coffee bills begin again to flood the market and allow speculators to liquidate. Up to the present little real liquidation has been done, but the "bull" account not only disinclines Banks to be ventursome but inclines them to force on outstanding liquidations. The persistent fall of coffee prices is likewise a feature that if utilized to "bear" exchange methodically, might be extremely dangerous and perhaps irresistible.

The value of coffee shipments during the past week was ag small £276,000 as against £291,000 the previous week and £90 last year. Declared sales were also smaller, 123,000 as aga 131,000 the previous week, indicating smaller shipments ag during the current week.

Rubber shipments at Pará and Manaos were somewhat n active, giving a value of about £148,000 as compared with £49 the previous week. But at present it seems likely that the v of imports reaches, if it do not exceed that of exports, leav little or nothing for Government or private remittances.

The tendency of exchange for the present and immediate fu is, in our opinion, weak if not deliberately downwards. In s of unfavourable appearances however, we maintain our opinio regards an improvement later on, should the natural cours exchange not be perturbed by political or other extraneous influe

Coffee.—Entries during the week ended June 21 show increase of 11,:87 bags compared with the previous week an 49,193 or 53.4% compared with the corresponding week last y This increase is chiefly in Rio arrivals, those at Santos being very slightly over the previous week's. Since the 1st July the t entries at Rio and Santos amounted on 21st instant to 10,822 bags as against 8,838,935 last year.

Shipments (*embarques*) at the, two ports were slightly under previous weeks, being 184,154 as against 195,151 and 69,085 for corresponding week last year. Stocks, however, are smaller ag being 581,012 at the two ports as against 624,349 the previous w and 392,189 on the corresponding date last year.

Entries in this market comprise about 30% new season co quality being still below average, whilst the old coffee now com in is very badly dried and almost unmarketable.

The weather is now all that could be desired, sharp and and the trees look strong and well, promising a good crop for 1 1903. Planters, especially in S. Paulo, are experiencing g difficulties in meeting their engagements to there men and the a general feeling that, unless prices improve shortly, however he the coming crop may be on the trees a great deal of it will re unpicked and never come to market.

Prices during the week ruled somewhat firmer, the firm of I isohn being said to be in the market again. We quote 7$100 "regular" and 7$300 for colory coffees, washed being practic without premium; and c. f. and com. for No. 7. New York typ 28s. 9d. to 29s.

At Santos the market was steady with fairly large business d during the week, but was easier at the close, as neither Europe the States maintained the advance. Dealers met buyers freel the higher quotations. "We quote:— 4$500 to 4$700 for "superi "goods" 4$200 to 4$400, "regular" 3$900 to 4$200 and "prim 4$800 to 5$500; these prices indicate a special demand for fine qu ties, 6$200 to 6$500 having been paid for exceptionally fancy go

Lower grades like Nos. 8 and 9 are neglected by the St buyers, but Europe has taken a fair amount of these quali "Peaberries" met also with a little demand. Whatever new coffee is offered, although better than last week, is not very att

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

CROSSE & BLACKWELL'S, LTD.

By Special Warrant Purveyors to The Queen AND Empress of India.

CELEBRATED OILMAN'S STORES.

[w. 1-10-98—t.f.c.]

ve, apart from the washed coffees, which show good colour and are ow freer from imperfections, but are unfortunately difficult to ove, as importers still fight shy of them.

European demand was mostly for "superior" at 28s. 6d. to 30s.; good average" 27s. 6d. to 29s.; at the first mentioned price hardly ny orders can have been executed, but we have heard of sales 29s. for "superior". The States sent large orders for Nos. 3 and at $6\frac{9}{16}$c. to $6\frac{5}{8}$c. and No. 5 at $6\frac{1}{4}$c. which are much below prices. urope is still willing to pay. We, therefore, think that little or business has been done. The quality of receipts is improving nd the weather is fine but cold at nights; frost has fallen in some istricts but without doing harm.

Labour Laws.—Dr. Bernardino de Campos introduced a bill in he Senate intended to give greater security to planters' labourers r their wages and earnings, the clauses of which are as follows:—) All debts due for plantation wages shall have a preferential right payment from the proceeds of respective crop. (2) The preference hall embrace the whole of the debt shown to be due for wages by the uplicate entry to each labourer's account current, one of which, ly initialled and entered by the planter, shall be delivered to the bourer. In case of divergencies, other proofs may be admitted.) For recovery of such debts labourers will have the right of mmary action and embargo or of preventative arrest.

In the Senate a bill was introduced to regulate the payment of bourers' wages and that to tax deposits in exchange banks post-oned *sine die*.

Railway Freights. The Secretary of Agriculture has ordered he district Inspector to report whether the financial conditions of he Itatibense line are such as to admit of a reduction of coffee tes.

Riots.—Riots are reported at Casa Branca in consequence of non-yment of wages by planters. These incidents are getting sagreeably common and something must soon give way, either ffee prices, exchange or wages; probably exchange.

THE "SHOT-HOLE" BORER.

At a recent meeting of the Pussellawa Planters' Association, r. E. Ernest Green, the Government Entomologist, attended and ve the members some valuable information regarding the "shot-le" borer, a beetle which does damage to tea plants.

The Chairman (Mr. G. C. Bliss) said Mr. Green had been making tensive enquiries regarding the "shot-hole" borer, and his in-rmation would be valuable to planters. The pest was undoubtedly e of the most serious that attacked the tea plant, and he had fered Mr. Green opportunities of studying it on the Atgalla estate. Mr. Green said the insect was a minute beetle known to scientists the name of *xyleborus fornicatus*, and belonged to the family of olytidæ. It was popularly known as the "shot-hole" borer. He d known the pest in question for about twelve years in the walapitiya district, and probably all those present were well quainted with it. They would see from the specimens of tea ees that were on the table that the beetle bored holes in the wood, hich very much resembled a single shot. It seemed to affect the ee from the top to the bottom practically. Its *modus operandi* s to commence from the base and go on to one of the branches; almost went through the branch, and then took a spiral turn und which girdled the branch, just above where it went in. It en went back and made another girdle below the original circle. e object of the beetle was to choke the flow of sap and enable it go on breeding without having too much moisture. The way t it had affected whole fields showed that it had been going on a very large number of years. It was very difficult to do ything with it when it had got to that stage. If it was noticed the beginning, the way to treat it was by cutting and burning e prunings. Where the beetle had affected the whole field, of urse, to prune would not be worth while, as it would be necessary practically hack the bush away; he thought the best thing to be ne under such circumstances was to leave as much bearing ight as possible and to stimulate the tree by manuring, produc-g more sap to counteract the effect of the beetle. In fields where e beetle had only just appeared it certainly should be possible to ntrol it by cutting down below the place wherever the beetle had en, and carefully collecting and burning the clippings. It would a great pity in young clearings to let the thing get a hold from the commencement. It was absolutely necessary to burn the clippings. Their Chairman had very kindly consented to undertake any experiments that he (Mr Green) might suggest; it was, however, more or less working in the dark, excepting that they would have to try all sorts of things, likely and unlikely. Probably they would have to try and find some deterrent which would render the bushes more or less obnoxious if attacked after pruning, and he proposed experimenting in that way. He would put the result of what would be done in black and white for the benefit of the planters, and he hoped to be able to himself find the time to supervise the experiments and see how they were going on. His main object at present was to point out the gravity of the pest. When it had got to the stage in which it was at present on many fields they never knew where it would stop. After pruning, they would find that a certain number of the branches did not throw out any shoots, or at any rate they were very much retarded and might appear a month or six weeks after the main part of the bush. That was because of the beetle, and they could easily see that there was no limit to its ravages. It had thoroughly infected the estates around Nawalapitiya and Gampola, and it had also appeared sporadically on one or two estates up-country. Many people had an idea that it had got into the estates from the grevillea trees; he (Mr Green) had examined those trees and came to the conclusion that it was much more probable that it had got into the grevillea trees from the tea. With the assistance their Chairman had been good enough to offer, he hoped to be able to do something. (Hear, hear.)

Mr. Green produced specimens of the male and female beetles, which were examined with interest. The beetle was allied to the true weevil, but it had not the long snout. The weevils were very dangerous, but, as a rule, they preferred dead wood to any other. The shot-hole borer unfortunately, preferred the half-living wood, for as soon as the branch was absolutely dead, it seemed to desert it, or at all events did not continue to breed in the dead wood.

Mr. Christie enquired whether the beetle was able to fly and whether it did fly.

Mr. Green said the female insect flew about, but the male insect had no wings. The male insect was very much smaller than the female.

Mr. Christie asked whether Mr. Green would recommend the prunings to be burned green, or would it be sufficient to burn them afterwards, as there was, of course, a difficulty in burning the green prunings.

Mr Green said it was most important that the prunings should be burned as soon after being cut as possible. It would be a great mistake to let the branches dry, and if the branches were only scorched when green and not entirely consumed, it might be enough. He had made experiments to try and attract the beetle by light and also with a preparation of alcohol, but the only result was the inebriation of ants. (Laughter.) It was a very bad night for the experiment, as there was a very bright moon and few insects were flying about, and as he did not consider it by any means conclusive, he meant trying again under more favourable circumstances.

The Chairman thanked Mr Green for the information he had given the meeting. There was no doubt that the shot-hole borer was a very serious pest; he would say the most serious pest that they had. The best return they could make to Mr Green for his kindness in attending the meeting and giving them information as he had done, was to thoroughly try every suggestion that he made, and thus co-operate in the attempt to exterminate the pest. —*Times of Ceylon.*

MARKET REPORT.

[*Per Mail advices of 19th July* 1901.]

COFFEE.

The London Commercial Record says:—There has been practically no change in this market, the tone continuing very quiet, while the auctions drag considerably. Supplies have been fairly large and chiefly of undesirable qualities, but there has been no material change in values, although the tendency is to rather easier rates. The small proportion of fine grades realised fancy prices. A parcel of East India, Ceylon cured, received low bids and was mostly bought in. East India has been extremely dull, and for the A sizes there has been scarcely any bidding. The continued very large receipts in Brazil and a decline of $\frac{5}{32}$d in the Brazilian exchange have combined to further depress the market for futures, and

at the close September Santos shows a decline of 9d for the week; yesterday September sold at 27s 6d, December at 28s 1½d to 28s, and March 27s 7½d to 27s 6d per cwt. We quote:—

London	Santos ...	Sept. delivery	... 27s 6d.
New York ...	No. 7 Rio...	,,	... 4·90 cents.
Hamburg	Santos ...	,,	... 27¾ pf.
Havre	Santos ...	,,	... 34 francs.

Auction supplies to-day consisted of 7 tierces 6 barrels 2 bags Plantation Ceylon, 412 bags East India, 38 bags Nyassaland, 50 barrels Jamaica, 2,804 bags Guatemala, 263 bags Colombian, 335 bags Salvador, 400 Nicaragua, 433 bags Ecuador, 350 bags Mexican, 813 bags Costa Rica, 152 bags Coban, 135 bags Vera Paz, and 53 bags New Granada. The sales went off quietly and a good deal bought in. Common qualities were much neglected, but the better grades brought former prices.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	22,121	19,622	34,678	26,486
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	11,645	9,774	15,647	11,831

The preceding figures exhibit— Tons.

In the Imports an increase this year of	7,192
Home Consumption an increase of	1,871
Export an increase of	3,816
Stock an increase of	2,499

Auctions this week have passed off as under:—

Ceylon.—*Plantation.* 13 casks 3 tierces 1 barrel 1 bag offered but only 1 cask peaberry sold at 110s.

East India *cured in Ceylon.*— 33 casks 9 tierces 10 barrels 2 bags offered and partly sold—boldish to bold 50s to 70s, peaberry 50s to 52s.

East India.—2,153 bags partly sold as follows: *Coorg*, peaberry 42s; *Neilgherry*, smalls 31s to 38s 6d, low middling to middling 37s to 45s, bold 50s to 55s, peaberry 42s to 49s; *Wynaad*, find ordinary 37s 6d, peaberry 46s.

African.—13 bags *Liberian* partly sold at 20s for country damaged.

Nyassaland.—68 bags sold—smalls 25s, medium to bold 32s 6d to 36s 6d, peaberry 35s.

Jamaica.—165 barrels 1 tierce 5 bags offered and 2 packages peaberry sold at 44s.

Costa Rica.—Of 3,910 bags catalogued about 2,350 bags sold—smalls 24s 6d to 37s, ordinary to fine ordinary 32s 6d to 38s, low middling to middling 40s to 47s 6d, good middling 50s 6d to 51s 6d, bold 58s to 67s, peaberry 41s to 59s.

Guatemala.—2,148 bags offered and 750 bags sold—smalls 34s to 35s, good to fine ordinary 37s 6d to 39s, low middling 40s, middling 46s to 47s 6d, bold 54s to 70s 6d, peaberry 44s 6d to 50s.

Vera Paz.—104 bags partly sold, smalls 39s.

Salvador.—Of 1,562 bags catalogued about 500 bags sold—smalls 30s 6d, good to fine ordinary 36s 6d to 38s 6d, peaberry 36s to 51s.

Nicaragua.—767 bags partly sold—smalls 30s 6d to 33s 6d, good to fine ordinary 32s to 38s, low middling to middling 39s to 43s, good middling 48s, peaberry 34s to 51s.

Colombian.—Of 3,123 bags partly damaged offered 1,950 bags sold—smalls 24s to 30s, good to fine ordinary 34s 6d to 38s, low middling 38s 6d to 40s, bold 40s to 46s, peaberry 34s to 42s.

Mexican.—Of 811 bags offered 590 bags sold—smalls 29s 6d to 33s 6d, good ordinary to low middling 37s to 39s 6d, middling 44s 6d, bold 53s 6d, peaberry 37s 6d to 45s.

Brazil.—554 bags Santos partly sold—bold pale 36s 6d to 37s quay terms.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99. Bags.
Rio ...	279,000	102,000	163,000	163,000
Santos ...	374,000	268,000	313,000	264,000
Total...	653,000	370,000	476,000	427,000
Crop...	—	10,900,000	8,971,000	8,772,000

Rio Exchange 10¾d, previous day 10⅞d.

Havre, *July* 18.—Good average Santos July opened quie 33¾f. and closed quiet at 33¾f., September opened at 34f. closed at 34f., December opened at 34½f. and closed at 3 March opened at 35¼f. and closed at 35¼f., May opened at 35 and closed at 35¾pf

Hamburg, *July* 18.—Good average Santos July opened quie 27½pf. and closed quiet at 27½pf., September opened at 27¾pf. closed at 27¾pf., December opened at 28½pf. and closed at 28 March opened at 29¼pf., and closed at 29¼pf., May opened at 29 and closed at 29¼pf.

New York, *July* 18.—Closing prices of No. 7 Rio were as follo

	July.	Aug.	Sept.	Oct.
July 18...	4·85	4·90	4·95	5·00
July 17...	4·85	4·90	4·95	5·00

TEA.

Indian.—Catalogues comprised 6,200 packages, of which 1 packages were New Season's, contrasted with 7,500 packs (2,800 New Season's) on the 8th instant and 2,400 packages (1 New Season's) at this time last year, when labour troubles at Docks interfered with the working of arrivals.

All useful and good liquoring teas were to strong demand an the majority of cases sold in favour of importers, among th offered being several invoices just to hand from Assam, of wh 104 packages from the Taluq Estate (A.F.T.Co.) brought 1¼d per lb. There was also more enquiry for common leafy gra which hardened fully ¼d per lb.

Ceylon.—Supplies were heavier, totalling 31,000 package 19,600 packages on Tuesday and 11,400 packages on Thursda compared with 15,500 packages in the previous week, and 20 packages in the foregoing year.

Much irregularity was again noticeable in the bidding, an considerable quantity was withdrawn, though the greater part disposed of privately afterwards. Where sales ware effected, p quotations were maintained for medium and fine descripti except when flavour was inferior, while common Pekoe Soucho and Pekoes were wanted and often ¼d per lb. dearer, closing stro The few finest lines available went off fairly well, without mate change.

The average is barely 6½d per lb. On the 11th instant it 6½d per lb., and 7⅛d per lb. on the 19th July, 1900.

Java.—Nearly 900 packages of direct import passed the hamı former values being quite upheld.

Deliveries.—The clearances of all tea (on which duty has b paid) from the London warehouses, as per official returns are, *viz*

From 1st to 16th July, 1901	8,296,552 lb	
Do. do. 1900	8,255,806	,

During the week the following have been printed for sale public auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offe Pkgs
India	5,527	628	6,15
Ceylon	23,917	7,127	31,04
Java	820	68	88
Total ...	30,264	7,823	38,087

Also 1,821 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Ja Tea Report, dated July 19th, 1901, says:—

Quantity brought to Auction in London from 1st June to da

	Indian. Pkgs.	Ceylon. Pkgs.	J P
1901-1902	67,045	186,659	9,
1900-1901	33,756	163,732	5,

7,683 *pkgs.* Indian
31,749 ,, Ceylon
888 ,, Java
} Total 40,320 packages were offered in public auc this week.

The use of China Tea in this country is now so small that it i little importance in dealing with figures relating to consump and producing of Tea. However, now that British grown Te finding a firm footing in markets in other parts of the world, th is some interest in watching the shipments of China Tea countries outside the United Kingdom. The latest advices p to a considerable falling off in the amount of China Tea avail for export, and although it is as yet early to hazard a figur

ay be safely said that the coming season's exports of Tea from ina will be 10 to 15 million pounds short of last year. This ortage we understand is brought about by the unremunerative ices which have been offered to the Chinese merchants. The ason's crop is also reported to show exceptionally poor quality. is therefore probable that the foreign markets will require larger pplies of Teas from India and Ceylon, and if such should prove be the case, the home market may feel relief sooner than had en anticipated.

INDIAN.—New Season's Teas were again in limited supply, and r any parcels which possessed strong and useful liquors an vance of ½d. to 1d. per lb. was freely paid. Low priced descrip-ons were also beneficially affected by the improved market to the tent of ¼d. to ½d. per lb.

The official wire gives exports to United Kingdom for the first lf of July as 7,780,000 lbs, against 6,920,000 lbs. last year; aking the total from 1st April to 15th inst., 15,898,000 lbs., against ,530,000 lbs. same period 1900.

Week's average of New Season's Tea sold on Garden Account 1901, 293 pkgs., av. 7·33d. 1900, 861 pkgs., av. 6·89d.

New Season's Tea sold on Garden Account 1st June to date 1901, ,000 pkgs., av. 6·81d. 1900, 16,578 pkgs., av. 6·83d.

CEYLON.—Of the total supplies 20,000 packages were offered in e Public auction on Tuesday, and 11,000 at the Trade auction sterday. There was much irregularity in prices at the former these sales, not due to any inherent weakness in the market, but the fact some buyers were not operating. On Thursday the rade operated freely at prices well up to valuations. During the st few weeks the market has been a hardening one, and useful edium Tea can now be quoted ½d. to 1d. per lb. dearer than a onth ago, whilst low priced Tea shows an advance of from ¼d. to . per lb. in the same period.

The official telegram from Colombo gives shipments to United ingdom for first half of July as 5,000,000 lbs., against 5,500,000 s. same period last year; and estimates the quantity available r the month at 9,750,000 lbs., against 8,750,000 lbs. actual ship-ents in July, 1900.

Average for week 6·23d., against 7·10d. same week, 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 687,071 pkgs., . 6·57d. 1900, 692,005 pkgs., av. 7·24d.

JAVA.—The Teas were all on garden account and sold with fair mpetition.

Bank Rate 3 per cent. Exchange on London three months' sight:—lcutta 1/4 1/16. Colombo 1/4 3/32.

COCOA.

At a fire in the West India Docks on Friday last some 12,000 gs stored there were nearly all destroyed, only obout 1,500 bags ing saved, and these were all more or less damaged. Strange say this had not the slightest effect on the market.

Tuesday's auctions offered only 4,015 bags, for which there was rdly any demand, barely 350 bags selling. Of 1758 bags Trinidad talogued 150 bags sold at 69s 6d to 71s for good to fine red, ing 1s easier. Of 243 bags colombian 70 bags were placed at 71s r good bold. Of 938 bags Guayaquil 35 bags sold at 58s to 60s r Esmeraldas. 90 bags Ceylon sold, out of 165 bags brought rward, at 60s per cwt. for good collected. All the following ere bought in:—291 bags Jamaica, 3 bags St. Vincent, 100 bags orto Plata, 5 bags Bahia, 435 bags Haiti, and 80 bags African. rivate sales include 500 bags Trinidad at 68s to 71s, and 50 bags ir to good fermented Jamaica at 62s 6d to 64s per cwt.

PEPPER.

BLACK.—The market is dull and values lower. Singapore on the ot has been sold as 6d for fair, near at hand at 6d down to 5 31/32d, d July-September shipment 6d; about 50 tons reported sold.

Nothing was offered at Wednesday's auctions.

The shipments of Black Pepper for the first half of July mpare as follows:—

	1901.		1900.	
. K.—Singapore	150	170	150	150
„ Penang	20		*nil*	
ntinent		190		*nil*
. S.		220		*nil*
Total tons ...		580		150

Black quiet to-day Singapore September-November shipment 6d minal.

WHITE is dull of sale; fair Singapore on the spot has changed hands at 9¼d, and fair Penang at 8⅝d. For arrival no sales mentioned.

Offerings at public sale on the 17th instant were confined to 83 bags Singapore, which retired at 9⅜d per lb.

The shipments of White Pepper for the first half of July compare as follows:—

	1901.		1900.	
U. K.—Singapore	90	130	60	90
„ Penang	40		30	
Continent		10		*nil*
Total tons ...		140		90

GINGER.

COCHIN.—Is a very unsatisfactory market. There is really no demand, but holders will not give way further to induce operations. Catalogues embraced 60 cases 580 bags, but the only lots that sold were 13 bags see-damaged washed rough which brought 33s. A bid of 83s was made for bold and medium roughly cut and scraped, slightly limed, for which the buying in price was 95s, less perferable passing the hammer at 92s, medium cut at 60s to 68s, small at 50s, small to bold branchy rough at 47s 6d, and washed rough at 38s to 40s per cwt.

JAPAN.—12 bags dull plump limed sold at 32s per cwt.

JAMAICA.—Was in fair request, 185 barrels selling out of 295 barrels catalogued, and here and there holders had the advantage. Good bright washed realised 51s to 57s, low middling to middling 39s 6d to 44s 6d, and ordinary to good ordinary 37s to 38s per cwt.

CINCHONA.

The shipments from Java for the first half of July amount to 691,000 Amsterdam lbs. against 180,000 at the same time last year.

The exports from British India during the twelve months ended March amounted to:—

	1900-01.	1899-00.	1898-99.
Lbs.	2,753,858	3,290,236	1,361,539

The Exports from Maracaibo during 1900 amounted to 95 packages, weighing 4,099 kilos., against 250 packages, weighing 10,241 kilos., in 1899.

In auction 4 bales of hard, flat, yellow bark sold at 9½d to 10d per lb. for damaged, and for 5 bales of fair broken Lima bark 2d was refused.

The Amsterdam correspondent of the *Chemist and Druggist* cabled on 18th ultimo: The auctions of cinchona held here to-day consisted of 4,715 bales and 259 cases, weighing together 450,752 kilos. and containing 24,508 kilos. (857,780 oz.) quinine sulphate. The manufacturing-bark contained a percentage of 5·91 per cent. quinine sulphate, against 5·55 per cent. in the previous auction, and an average of 5·26 per cent. for the previous ten auctions of 1900. Of the above 4,974 packages, 4,584 packages sold, at an average unit of 9c. per half-kilo., against 10-45c. per half-kilo. paid at the auction on June 13. The following were the proximate quantities of quinine purchased by the principal buyers:—English and American factories, who purchased the equivalent of 9,314 kilos.; the Brunswick factory, 3,648 kilos.; the Mannheim and Amsterdam factories, 3,958 kilos; the Frankfort-on-Main and Stuttgart factories, 3,039 kilos.; and various buyers, 2,360 kilos. The prices paid for the manufacturing-bark ranged from 13½c. to 77¾c. per half-kilo., and druggists' bark from 13¼c. to 68c.

QUININE.

A very quiet tone has again prevailed in this market, and prices have declined still further. The small business done has been principally for October delivery at from 1s 1¾d to 1s 2d per oz. The spot price for the leading German brands is now 1s 1¾d, and August delivery has been sold at 1s 2d. Buyers to-day are awaiting the result of the Amsterdam bark-auctions.

CARDAMOMS.

Cardamoms appear to be coming in abundantly, owing, it is said, to the lessened consumption in India due to the plague. Consequently there has been a succession of declines in value, and at to-day's auction, another drop of 1d to 2d had to be recorded, although only a small business was done. The following were the sales:—Ceylon Mysore, medium and bold pale 3s 2d; medium long pale 2s to 2s 2d; small and medium ditto 1s 7d to 1s 9d, small

pale 1s 6d; medium splits 1s 5d, very small pale 1s 4d, ordinary brown splits and pickings 1s 4d to 1s 5d. Native wild 3d to 6d.

Bold palish Ceylon-Malabars were bought at 2s 6d per lb Seeds sold at from 1s 11d to 2s 1d per lb.

INDIA-RUBBER.

The market has further declined owing to cheap offers of forward delivery, particularly of soft fine Pará. Business has been done in hard cure fine, July-August 3s 8½d to 3s 8d, ditto ditto Aug September down to 3s 8¼d, ditto entrefine at 3s 7d to 3s 6¾d; cure, fine down to 3s 7d, closing with sellers at this. There sellers of scrappy Negroheads at 2s 7½d. Peruvian. There been small sales of fair ball at 2s 4½d, and slab at 1s 10½d pre wheighing. Mollendo.—Sales privately of fine at 3s 7¼d, entrefine at 3s 6½d.

There were no auctions to-day.

(AVERAGE FOR ALL INDIA 6·50d., JULY 19TH.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, D and Variot	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Pr
Neilgherry ...														
Thiashola ...	48½c	5¼	12½c	6¼	36½c	4¾ 5¼	...	...	...	...	...	...	...	
Travancore ...	**1696**	**5·96**												
Balamore ...	200½c	4¾	...	...	137½c	4¼ 4¾	53½c	5½	...	...	7½c	2¾	3½c	2
Corrimony ...	150½c	5¼	...	...	50½c	4¾	58½c	6½	39½c	4¼	...	...	3½c	3
Ellangy ...	80	4½	...		40	4½	20	5¼	20	4	...	...	...	
Fairfield ...	109	6¼	23	7¼	41	5¼	25	8	20	4¾	...	...	...	
Glenmary ...	129	6¾	50	7	...	...	35	7¾	29	5½	...	...	15	6
„ ...	137	6½	65	6½	...	...	33	7¾	15	5	...	...	24	6
Invercauld ...	46 p	5¼	9	6½	17	5¼	8½c	5¾	12	4½	...	...	...	
Isfield T Co Isfield...	95	5	...	...	44	4¾ 5	21	6¼	22	4 4¼	...	...	8	2¾
Kan Dev H Co. M	160 p	7	16	8½	46	7¾	21	9¾	70	5½ 5¾	...	...	7½c	6
„ Sevenmally ...	113	7¼	25	8¼	29	7¼	24	8¼	31	5½	...	...	...	
Seafield ...	170½c	5½	...	...	111½c	4¾ 5	56½c	6½	2½c	3	1½c	2¾	...	
Trav T Est Co B A	248	6	54	6¾ 7½	114	5¼ 5½	80	5¾ 6	...	...	...	...	...	
„ Munja Malai ...	34	5	10	5½ 5¾	24	4¾	...	...	...	...	..	..	...	
„ „ „	25	5	14	5 5¼	11	4½	...	...	...	...	...	...	...	
Wynaad ...														
Kanambyle & Cher	21	11½	21	11½	...	...	...	...	...	...	...	...	...	

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PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

VOL. VI.] MADRAS, SATURDAY, AUGUST 17, 1901. [No. 33.

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DOMESTIC OCCURRENCE.—The fee for inserting a domestic occurrence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 23rd instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad. *August 12th.*—*Weather*—Last week there was rain every day, the showers however were light, and very favourable for the supplies. *Works*—Handling, borer, supplying and weeding. *Plant disease*—Coffee remarkably healthy. *Health*—Good. *Labour*—Abundant.

Coorg. Polli Betta, *14th August.*—*Weather*—Average about 20 cents *per diem* last week. It is gloomy and rains at times; and at intervals there is fine bright sunshine. Borer campaign coming to a close. Coffee looking well. All seasonable works show good progress. Coolies beginning to come in from Mysore. *Labour*—Ample. *Health*—Fair. Rumours that one case of imported plague occurred on one estate.

PLANTERS AND MARKETS.

In giving adhesion to the scheme for pushing sales of tea in India through Messrs. Andrew Yule & Co., of Calcutta, South Indian planters have manifested their desire to stand in line with their brethren farther North. The business to be run by Messrs. Yule is, by the way, to be known as the "Indian Tea Markets' Expansion Commission," and Messrs. Andrew Yule & Co are to be the "Commissioners" although it should be noted that they are not to draw any commission. The scheme has the warm approval of the Viceroy, and this will probably be even warmer if Messrs. Yule can see their way to pushing the sale of Indian coffee as well as Indian tea. An inquiry about this has been addressed to them by the U. P. A. S. I. Referring to this Association, our sprightly contemporary, the *I. P. G.* displays some little doubt lest there should be *trop de zéle* among South Indian planters. On this point the sporting-planting organ of India may be

re-assured. We are very pleased to read in his columns :— "The reported speeches and discussions at the Annual Meeting of the United Planters' Association of Southern India clearly indicate that the Southern Indian planters are a very go-ahead, energetic body of men, and are fully alive to their own interests —if anything, they are, perhaps, a trifle too over-zealous. They certainly compare most favourably with their Ceylon brethren, on whom they are keeping an eye." When the *I. P. G.* proceeds to refer to the Indian Tea Association, however, it is not so just. It remarks that South Indian planters "complain of 'slackness' on the part of our Indian Tea Association, but if they lived in the sweltering muggy, super-heated atmosphere of Calcutta, they would themselves feel pretty limp, and not much inclined for long-winded, heated debates in the Committee room. In this part of the world we move slow, it is the custom, and the rule of *dustoor* cannot be broken through." Now, in the first place, the complaint referred to was not a general one, as the above remarks would imply, nor is there ground for the second implication that the South Indian planters treat themselves and his friends to long-winded, heated debates either in the Committee room or elsewhere.

Other remarks that reach us from Calcutta are deserving of the most careful study down South. They proceed from the lips of Mr. DAVID YULE, who is in chief charge of the business of Messrs. ANDREW YULE & Co., and whose opinions are of great interest not merely because of his firm's connection with the Indian Tea for Indians scheme, but because he has established a high reputation as a shrewd, sound and go-ahead man of business, and one whose touch has a marvellous way of turning things into gold. Speaking as Chairman of the Bank of Calcutta, at the Annual Meeting of shareholders, Mr. DAVID YULE referred to Indian tea gardens as still under a cloud, and said that the large capital locked up in the tea industry in this country gives hardly any return on the average. He thinks, however, that the cloud is breaking up, for buyers of tea are willing to pay good prices for quality, although they decline to give anything like covering rates for common descriptions. It has often been pointed out that Indian gardens should endeavour to make their manufacture distinct from the coarse and badly made teas which are produced by Ceylon and China. This is far and away a better policy than throwing a percentage of the bushes out of cultivation. Nature this year has come to their assistance in reducing outturn and the gardens are fully 20 per cent. behind last year. By the 15th of this month gardens would have made half their crop, but "as we are now having September weather in August, there is not much hope of the deficit being made up, an early cold weather being expected." Such being the prospects of the crop, Mr. YULE considers present prices too low, and says that unless garden proprietors bestir themselves to get some advance in values, they will find the balance of their Profit and Loss Accounts on the wrong side at the close of the season. Referring to the new scheme for pushing sales in India, he uses these words :—"I am glad to say that at last there is some prospect of planters working up a demand for their produce among the millions of Indian people, who so far have not enjoyed the taste or the health-giving properties of the fragrant cup. I say fragrant cup, for recently I have made it my business to get samples of tea sent to me from the bazaars in Calcutta and other towns in India. The stuff our native friends know as tea would, I think, be called by you slow death. The majority of the samples showed decayed leaf, mix with mud and other matter. Some samples held a visi percentage of shellac and mica sweepings, and others w doctored with some pungent scent apparently for the use "high life." The commission which has now been form is the outcome of a suggestion made by His Excelleney t Viceroy in the debate on the Assam Labour Bill, and . . the practical effort now being made has his greatest sympath This should be sufficient to induce every well-wisher of struggling Indian industry to say a good word for tea to t people they are in touch with. I am quite sure the Indi people will become a hardier and more thoughtful nation instead of drinking the fiery juice of the palm and unboi tank water, they drink pure Indian tea direct from t gardens. The tea industry of India employs many thousa Indian people, as well as hundreds of our own countryme this is only one reason why it deserves the sympathy a help of every thoughtful person in the Empire." Our exce is somewhat long, but the importance of the subject justif this.

Various reports from the United States and Canada go show that efforts made to develop demand for Indian bla teas in those markets have been very successful. It n remains not merely to hold the ground occupied, but extend it, and also to enter into active competition with Chi and Japan in regard to the America and Canadian dema for Green Teas. It will never to do to relax efforts just no when Japan dealers are pushing energetically. Nor shou it be overlooked that although China teas have largely l their hold in Europe they have greatly increased it in t United States and Canada. The following figures showi the destination of China teas during the last ten years spe for themselves :—

Destination.	1890. Pounds.	1900. Pounds.
Europe	25,661,017	11,299,703
Australia	15,250,730	6,514,722
United States and Canada ...	3,404,957	11,855,217
South Africa	1,543,652	1,378,864
North China	8,884,480	5,033,569
South China	4,713,889	4,260,213
Total ...	59,458,739	40,342,288

From 1899 to 1900 the shipments to Europe fell 5,000,000 pounds from that of the previous year, while th to Australia increased about 1,000,000 pounds. The read made Russian tea market undoubtedly deserves the earn attention of Indian planters, so does the undeveloped field India itself. But the above figures prove to demonstrati the need for bestowing continuous care also upon the mark of the United States, Canada, and Australia.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S.

Trade with Persia.

The Bengal Chamber of Commerce has issued the followi Circular, dated 9th instant, for the information of members the Chamber and of the Indian Tea Association :—

No. 838, *dated* Quetta, 1*st August*, 1901.

From

Captain J. Webb Ware, I.S.C., Political Assistant, Charg

To

The Secretary, Bengal Chamber of Commerce.

I beg to forward, attached, a notice which has been issued by Traffic Superintendent, N.-W. Railway, on the subject of the reba

ranted on the carriage of goods exported, etc., to Persia, through uetta and Nushki, with a request that you will favour me by cir-ılating its contents as widely as possible.

North-Western Railway.

NOTICE.

Rebate on Goods booked to or from Quetta for traffic to or from Persia *viâ* Seistan.

A rebate equal to $\frac{1}{3}$rd of the actual freight paid (N.-W. Ry. pro-ortion only) will be allowed on all goods booked and carried *from* urrachee City or Kiamari to Quetta for export *to* Persia or eceived at Quetta *from* Persia by the Seistan route, and despatched ience *to* Kurrachee City or Kiamari or *to* N.-W. Railway stations the Punjab and N -W. P. or stations on connected lines, under a rtificate from the Agency office at Quetta that the goods in uestion have actually been booked to Persia or have come from ersia *viâ* Seistan.

2. A similar rebate will be granted on the goods specified below hen booked and carried *from* the stations named *to* Quetta for port *to* Persia by the Seistan route, *viz.*:—

Commodities.	Station from	Station to	Ordinary tariff rates per maund to be charged in the first instance.
			RS. A. P.
ea at R. R. ...	Shikarpur ...	Quetta ..	0 9 4
ea in bags or boxes at O. R...	Pathankot and *viâ* Panthankot for traffic from Out-agencies ...	Do. ...	1 2 2
Do. do. ...	Saharanpur and *viâ* ...	Do. ...	1 2 6
Do. do. ...	*Viâ* Delhi ...	Do. ...	1 2 8
Do. do. ...	Mooltan Cantt. ...	Do. ...	1 2 2
ndigo	Mooltan City ...	Do. ...	O R 1 13 5 R R 2 4 8
Do.	Do. Cantt. ...	Do. ...	O R 1 13 4 R R 2 4 7
Do.	Sukkur Bandar ...	Do. ...	O R 0 13 9 R R 1 1 0
eather, manufactured ...	Amritsar ...	Do. ...	2 10 8
	Lahore ...		2 8 11
	Hyderabad (Sind)		1 8 2
	Viâ Delhi ...		2 15 6
	Gujranwala ...		2 11 3
	Sialkot ...		2 11 9
	Mooltan City ...		1 13 5
	Sambarial ...		2 11 1
hillies	Amritsar ...	Do. ...	1 5 4

OTE.—In through booking with Foreign Lines the above arrangement will have effect from 1st June, 1901.

3. In case of goods received *from* Persia, the consignor will declare on the consignment-note, and produce at the time of book-ng a certificate of the Agency office at Quetta to the effect that the goods tendered have actually been received there *from* Persia *viâ* Seistan for despatch *to* Kurrachee or Kiamari or to stations in the Punjab, N-W. P. and stations on Foreign Lines. The Station Master at Quetta will make a similar note on the original invoice and Railway receipt, and will also forward the original certificate of the Agency office tendered by the consignor to Station Master at destination, where the rebate referred to above will be granted by the District Traffic Superintendent concerned as early as possible. But in the case of goods booked *to* Quetta *for* Persia, the consignor will declare on the consignment-note that the goods tendered are for export *to* Persia *viâ* Seistan, and subsequently, on production of a certificate issued by the Agency office at Quetta that the goods have *actually* been despatched to Persia *viâ* Seistan. the rebate referred to above will be granted as early as possible by the District Traffic Superintendent, Quetta.

By Order,
C. J. KEENE,
Offg. Traffic Superintendent.

TRAFFIC SUPDT.'S OFFICE,
Lahore, dated 20th May, 1901.

RAINFALL.

The Deputy Director of Agriculture has issued supplementary tables showing The Normal Distribution of the Rainfall of the Madras Presidency, showing, generally speaking, the averages for 30 years ending 1899, but in some cases the averages during shorter periods. We give the following extracts, relating to various planting centres and a few stations on the plains :—

Years.	District.	Station.	Average Rainfall. January to March.	April and May.	June to September.	October to December.	Total.	Maximum. Year.	Maximum. Amount.	Minimum. Year.	Minimum. Amount.
		Over 100 *inches annually.*									
30	Malabar ..	Vayittiri ..	2·0	11·0	136·0	15·8	164·8	1882	290·7	1893	111·8
29	Nilgiris ..	Dévála ..	1·1	10·0	123·8	17·6	152·5	1889	198·3	1899	93·6
14	Malabar ..	Kóttayam ..	0·8	12·8	99·7	10·4	123·7	1878	167·0	1881	83·0
30		Tellicherry ..	0·8	13·3	105·8	12·2	132·1	1892	208·0	1881	79·4
30		Badagara ..	1·3	11·6	96·4	12·3	121·6	1892	175·6	1881	79·0
30		Manantoddy ..	1·7	7·8	84·2	8·6	102·3	1882	175·6	1890	77·7
30		Calicut ..	1·1	13·6	88·2	15·0	117·9	1878	165·8	1881	74·3
30		Cochin ..	3·8	17·8	72·6	21·2	115·4	1882	161·6	1890	84·5
29		Nilambúr ..	0·8	8·6	82·3	13·6	105·3	1874	173·7	1875	60·6
		Over 50 *inches annually.*									
23	Nilgiris ..	Gúdalúr ..	1·3	8·9	63·6	10·2	84·0	1882	148·5	1899	47·4
17		Pykara ..	1·1	9·3	47·6	14·9	72·9	1882	130·1	1899	48·9
18		Nedivattam ..	1·3	8·6	76·0	12·6	98·5	1882	189·3	1899	52·2
30	Malabar ..	Palghat ..	1·2	8·3	54·3	11·9	75·7	1897	105·3	1870	48·4
28	Nilgiris ..	Kilkundahs ..	4·1	7·7	21·7	22·7	56·2	1886	105·9	1892	36·7
29		Wellington ..	4·5	7·9	16·1	21·6	50·1	1891	78·9	1899	39·3
28		Coonoor ..	6·6	9·0	15·1	30·8	61·5	1891	103·5	1895	41·7
30		Kóttagiri ..	4·7	9·1	17·5	26·6	57·9	1893	85·0	1882	45·5
27		Kodanad ..	3·4	10·0	18·6	24·4	56·4	1893	78·4	1876	35·4
30	Shevaroys..	Erkad ..	1·7	8·8	32·0	20·3	62·8	1872	90·5	1876	34·6
26	Palnis ..	Kodaikánal ..	6·4	11·7	20·5	26·6	65·2	1877	110·2	1892	44·7
		Over 40 *inches annually.*									
30	Nilgiris ..	Ootacamund ..	1·8	9·1	21·5	14·6	47·0	1882	74·4	1876	25·2
28		Kaity ..	3·1	8·2	19·9	16·3	47·5	1877	73·3	1876	33·5
85	Madras ..	Madras ..	2·6	15·4	29·5	1·5	49·0	1827	88·7	1832	18·5
		Over 30 *inches annually.*									
30	Salem ..	Atur ..	1·4	5·1	14·7	14·7	35·9	1895	52·2	1886	21·3
30		Salem ..	1·2	6·9	19·7	11·4	39·2	1882	60·1	1891	20 8
		Over 25 *inches annually.*									
17	Coimbature	Méttupálaiyam	2·2	6·0	6·3	15·5	30·0	1883	43·8	1894	17·4
30	Madura ..	Palni ..	1·4	4·7	4·7	14·7	25·5	1871	40·0	1876	10·0
30		Dindigul ..	1·4	5·0	9·5	14·0	29·9	1896	52·1	1876	17·4
12		Nilakkóttai ..	1·1	5·3	7·8	14·8	29·0	1888	38·6	1892	19·8
30		Periyakulam ..	3·4	5·3	6·2	13·9	28·8	1877	54·7	1876	16·1
		Over 20 *inches annually.*									
30	Coimbatore	Coimbatore ..	1·1	4·0	5·5	10·5	21·1	1880	29·0	1892	13·7
		Under 20 *inches annually.*									
30	Bellary ..	Bellary ..	0·3	2·6	10·1	6·0	19·0	1885	31·4	1876	7·2

THE HAMBURG COFFEE MARKET.

According to a report by Consul-General Sir W. Ward, the Hamburg coffee market in 1900 was subject to considerable fluctuations, and the hopes entertained at the close of the preceding year as to an improvement of the market were not realised. Though during the first six months of 1900 business was fairly satisfactory and prices advanced, reaching their highest point about the middle of July, the latter part of the year was marked by a decline in prices owing to the arrival of very large cargoes from Brazil and consequent over-stocking of this and other markets. Quotations at the end of the year were lower than at its opening, in fact, almost as low as the minimum reached in 1899. The total im-

portations of coffee to Hamburg, in 1900 were 379,900,000 lbs., as against 318,500,000 lbs. in 1899; the total sales, 355,000,000 lbs., as against 337,000,000 lbs. The respective quantities of the various kinds of coffee imported here last year were as follows, *viz.*:—

SORTS.	QUANTITY.
	Lbs.
Santos	154,800,000
Rio	17,800,000
Bahia	1,900,000
La Guayra	11,600,000
Domingo	7,400,000
Maracaibo	3,800,000
Central America	80,100,000
Porto Rico	800,000
East Indies	1,000,000
Africa	5,800,000
Various	33,900,000

Here we have a nation of Coffee drinkers needing to be "educated" according to Mr. Robert Gompertz' curriculum. The heavy consumption of Brazil Coffee shows that there is room for the schoolmaster; but, on the other hand, the figures for Central America would seem to denote that there is already a very large demand in Hamburg for "mild" coffees. This should make the work of conversion to a taste and preference for the East India berry so much the easier. The chief enemy to be conquered is, in fact, vested interests. Throughout the continent of South America and in all the chief towns in Central America German mercantile firms abound, and it is but natural that they should lean towards shipments of produce to the Vaterland, rather than to other consuming markets.

NOTES.

The Indian Tea Crop. The Indian tea crop is estimated to be about nine millions short of last year's crop.

Brazilian Coffee. It is estimated that 1,000,000 bags of coffee will come into sight at Rio and Santos in July.

Coffee in the U. S. The June deliveries were 543,058 bags; total for year 5,843,883 bags, against 6,035,623 the previous year.

A Consumers' Millennium. The *American Grocer* remarks:—"It is a great thing for consumers to have low cost sugar, coffee, flour, and fruits. It is in reality a consumers' millennium." Truly what is one man's meat is another man's poison!

A Correction. "An Enquirer" writes:—In my letter signed in "Enquirer" in your issue of the 3rd, I see a number of printer's errors, *viz.*, on p. 511, line three *mesh* should read *burst*. Line nine *scab* should read *scale*. This error occurs twice again. Line 27, *applies* should read *aphis*.

Tea in the U. S. Imports at all ports in May were 1,251,515 pounds, against 980,662 pounds in May, 1900; for eleven months ending May 31, 85,783,647 pounds, against 80,967,542 pounds for same t in 1900, and 70,720,415 pounds in 1900. Exports in M 146,893 pounds; for eleven months ending May 31, 1,176, pounds.

Java Quinine in 1900. Mr. Vice-Consul Dowie rep that the quantity of sulphate of quin produced by the Bandong Manufactory, and sold at auct at Batavia during 1900 was 1,040,800 ounces. The aver price paid was equivalent to 1⅞d. per unit. The bulk of quinine found its way to London and the United Sta Small consignments of the article were made to Austra British India, Japan, China, and the Straits Settlements.

Amsterdam Bark Market. Further particulars of the b auctions which were held in Ams dam last week have come to hand, says the *British Colonial Druggist*, and show that the bark was divided follows: *Succirubra*, 63,406 kilos.; *Ledgeriana*, 331, kilos.; *Officinalis*, 1,443 kilos.; *Calisaya*, 2,290 kilos.; Hyb and other kinds, 39,015 kilos. Of the total thus formed r bark formed 29,231 kilos.

Indian Green Teas. A Sub-Committee of the Ind Tea Association has been appoin to consider and report on the feasibility of inducing grow to manufacture green teas resembling Japans, without a mineral facing, and to make arrangements for such be bulked in Calcutta to ensure greater uniformity and to ena orders to be duplicated. It seems to us that Mr. H. Dru mond Deane has, singly, answered the very question that t Sub-Committee is to consider!

Tea Crop Prospects. From the telegraphic weather rainfall report for week ended August 1900, we gather that crop prospects are not satisf tory in Hailakandi (Cachar), satisfactory in Kathicher favourable in Kumbhis, and good in Barkola. Assam repo say:—Chawa, and Diburgarh moderately favourable; Pana hat Nelli and slightly improved, Bindukuri, considera improved. In parts of Sylhet more rain is wanted. Leaf Darjeeling is coming on better and crop prospects are grea improved in the Dooars.

Calcutta Tea Sales. At the auctions on Friday 16,400 packages were offered. Th was a representative lot of invoices from the Dooars a Terais, quality being good, and in most cases much improv Cachars and Sylhets are hardly up to previous offerin though still good for the time of year, and much better th the last two seasons. Darjeelings still retain rather r flavour, but are going off. Assams were conspicuous by th absence, only 700 packages in all being catalogued. Th was little change to note in prices, common kinds genera being a point or two dearer. Bombay and Gulf buyers w more inclined to operate. Statistically the position of industry is sound and the outlook more encouraging than many months past.

Coffee in London. Supplies have again been brou forward in larger quantities than warranted by the demand, and, in consequence, says *Produce Markets' Review* of July 20, 1901, the t has continued quiet, and in many cases, to effect sa

me reduction has had to be accepted. As is usual uring the hot season, business in the country is very trifling, ut the Continental demand, though not large, is quite equal the average trade at this time of year, and the remarkably w prices for good medium Guatemala and Colombian have tracted orders. There has also been some inquiry for fine osta Rica, resulting in resales of several parcels out of auction o months ago at higher prices than were then obtained. the terminal market the heavy receipts and a further ecline in the exchange have caused a very dull tone, and uotations have steadily given way a further 1s. 3d., which akes the price within 2s. of the previous lowest record.

rinkage of Supplies of Tea.

Messrs. W. S. Cresswell & Co., Calcutta report :—Up to the end of July the amount of tea made was to 12 million lbs. less than the same period of last year. eylon has shipped to the United Kingdom 6,906,000 lbs. d China 7 million lbs. less than last year. Calcutta Export gures do not show the actual shortage for the reason that as are coming down much quicker than last year. Competition between the River Services and the Assam-Bengal ailway affecting Assam, Cachar and Sylhet, and the non-anshipping are Jalpaiguri quickening despatch from the oars, teas from this district now being run over the new esta Bridge. Another thing in favour of the industry is e excellence of crop come forward caused by *finer and more reful plucking*, and we cannot too forcibly impress upon gents and Planters the great importance of continuing this ise policy. Ceylon telegraphs that only 69,360,000 lbs. ve been shipped to Great Britain to date against 76,266,000 s. to same date last year. Outturn for July poor.

dian Teas in London.

Rather more business has been done in this market, says the *Produce Markets' Review* of July 20, 1901, the medium grades articularly having been inquired for. At the public sales eld on Monday the amount brought forward was again very mited, only 7,683 packages being printed ; the majority of ese were well competed for and no good useful liquoring rades were allowed to pass the hammer except at full valuions. A few invoices of new season's Assams commanded ttention, and although last week's prices were firm, yet a istinct advance can be recorded, and in some cases attractive escriptions realised fully ½d. per lb. advance. Teas "for rice" and the lower grades were also in demand at full rates, nd now and then an occasional extra ¼d. was paid. New easons's Darjeelings remain about in the same position as st week, no improvement in quality or price being noticeble. At the last sale held in Calcutta we learn that the wer grades sold at firm rates, while good kinds generally emained unchanged.

offee cultivation in Reserved Forests.

We learn from the Administration Report of the Madras Forest Department, 1900, of the three blocks advertised for sale last year in South Coimbatore, two were sold for he upset price of Rs.5 per acre owing to absence of competition. The other block was sold at Rs.9-8-0 per acre but he sale had to be cancelled as the purchaser failed to pay the urchase money. Agreeably to the instructions of Government restricting the grant of any more blocks it was not again ut up to auction. The total number of coffee estates sold lready is twenty, covering an extent of 18,494 acres and the rent and cesses due on them up to end of March, 1900, are reported to have been collected. The owners of six of the estates have executed lease agreements, while in respect of three other estates the execution of the agreements are pending the payment of the stamp duty by the owners. The agreements in the case of the eleven remaining estates have been sent to the owners for execution. In Salem two lease deeds were issued during the year for two blocks of 74 and 110 acres respectively, the grant of which was decided in previous years, and the total number of lease deeds issued was twenty-nine ; the aggregate area covered by the leases was 3,389 acres and the annual demand Rs.2,946.

Cacao in Trinidad.

Several trees of *Theobroma bicolor* introduced from Nicaragua in 1893, have fruited successively during the past three years, and seed has been distributed to other West Indian Stations. The species may now be considered as fairly acclimatized, and there is little fear of its being lost to our flora. The produce is of no use as commercial Cacao, and is chiefly of botanical interest. Several trees of Theobroma pentagona introduced at the same time have also fruited, enabling us to raise a goodly number of plants for distribution. The permanent plot of this kind at the Experiment Station, has made good growth during 1900, and the Department will soon be in a position to offer in quantity both plants and seeds. The beans produced here are quite equal in size to those produced in Nicaragua, and are nearly double the size of high class Trinidad Cacao. They are white in colour in the interior, take little fermenting and of excellent flavour. Another strain brought from Nicaragua with the preceding kinds is what is known as "Nicaraguan Creole." The trees planted by us have not as yet borne fruit, but from trees distributed to planters, I lately received a pod which was quite true to the type. The pods are not large, but the beans are very large, and of superior colour and flavour.

Indian Tea for Persia.

Observer writes to the *Pioneer* :—Will you kindly allow me to correct a little misapprehension in the *Pioneer* of Saturday, the 3rd instant. It is there stated, "that the advice of Captain Webb Ware, Political Agent at Nushki," *viz.*, "That samples, merely, of tea and merchandise, should not be taken by any European agent exploiting the new market" but that "actual consignments ought to be sent" and the writer goes on to say "*but his advice was neglected and now it is seen too late in the day how sound it was.*" This, however, is *not* the fact. On the contrary, Captain Webb Ware's advice has been acted on and acted on *in its entirety!* The initiative was taken long before Mr. E. G. Foley ever thought of starting for Seistan with his 800 lbs. of samples (a fact, unfortunately, not known to the Indian Tea Association which sent him) and a Syndicate of planters now exists which has two active European agents established, the one in Persia, and the other at Quetta. Two large caravans of tea have already reached Birjand, another is about to start from Quetta, and others will follow in due course. You will thus see that Captain Webb Ware's excellent advice has been fully carried out, which has been recognised by the Indian Tea Association as may be noted from the resolution of that body, in response to "an application for the extension of the mission of Mr. Foley." This appeared in your issue of June 26th and was as follows :—"The Indian Tea Association consider that as two caravans

of Indian tea are shortly going through to Meshed it is not necessary that Mr. Foley's mission be extended."

Foreign Markets for Tea.

The following figures of exports to outside markets are interesting :—

Tea sold in Calcutta from 18th May 1901 to 8th August 1901	lbs. 10,025,300	
Tea sold in Calcutta from 18th May 1900 to 8th August 1900	10,915,200	
1901.	lbs.	
of which Australia has taken	1,740,077	= 17·37%
do. America do.	209.111	= 2·09%
do. Bombay do.	1,191,371	= 11·89%
do. Sundry Ports do.	1,718,878	= 17·15%
		48½%
against 1900.	lbs.	
of which Australia has taken	2,140,607	= 19·63%
do. America do.	952.424	= 8·74%
do. Bombay do.	476,695	= 4·38%
do. Sundry Ports do.	1,335,184	= 12·25%
		45%

Exchange—Closes at 1s. 4⅛d.

Exports of Indian Tea from 1st April to 9th instant.

	London.	Australia.	America.
1901	*31,714,157	1,740,877	209,111
1900	36,090,523	2,140,607	952,424

	Bombay.	Sundry Ports.	Total.
1901	1,191,371	1,718,878	35,291,214
1900	476,695	1,335,142	40,995,433

From the above it will seen that 150% more Tea has been shipped to Bombay this season, 28½% more to Sundry ports, while America shows a decrease of 78%, Australia 18½%, and London 12¼%.

* This includes 1,282,380 lbs. shipped *viâ* Chittagong.

LETTERS TO THE EDITOR.

THAT PEST.

Sir,—In your issue of August 3rd, I noticed a letter signed "Enquirer", dated Santaveri, July 28th. I should be glad if your correspondent would kindly send me a sample of the pest, or pests, he refers to. For, judging from his letter, I fear he speaks of three entirely different insects, one of which is harmless and two others injurious. Lately I have received a specimen of an insect attacking coffee trees in the Santaveri district which was identified by Mr. Lionel de Niceville, the lately appointed Entomologist to the Government of India, as "Green Bug." For this pest he recommends kerosene emulsion. This is prepared, as some of your readers may know, by dissolving ½ pound of good ordinary soap in one gallon of *rain* water, adding two gallons of kerosene oil and churning the entire mass to a good emulsion of the consistency of soft butter, or at *least* to that of thick cream. Another test is, that when cold, it must adhere to glass without oiliness. This emulsion is diluted just before using with nine to twelve times its volume of water and applied to the trees with a spray pump. But as I know, to my cost, this emulsion must be well made not to kill the trees as well ; but when properly made, it is quite harmless to the trees and very effective.

In conclusion, permit me to say that all forms of insect pests are easiest dealt with as soon as they appear, and that I c not urge too strongly that every one noticing any insect have it identified as soon as possible, by sending a speci to a competent person, and vigorously applying such re dies as may be recommended, even if they appear expens or difficult to apply. Neglecting to do so will only spr the pest, and what this may sometimes imply may be jud from the fact that the Massachusetts State Government sp Rs.50,00,000 to fight the Gypsy Mothing, which had spr over an area of only 200 square miles of this State, and t are not rid of this moth yet.

Bangalore, *August 14th*, 1901. } A. Lehmann, *Agricultural Chemist to the Govt. of My*

GENERAL ARTICLES.

NOTES ON THE VALUE OF THE INCIDENTA INCREMENT OF PLANT FOOD IN SOILS.

A Bulletin issued by the Trinidad Botanical Departm states :—

The value of the incidental increment of plant food in soils cov with certain crops, is hard to estimate. One difficulty has b that the cultivator who depended solely on analysis of the soil, guide to its fertility, has often found a certain amount of avail food in his land unaccounted for, *i e.*, the plant has obtained in some way which the analysis of the soil did not show It favourite maxim of the Agricultural Chemist since Liebig expoun his mineral theory of manures that there is so much avail plant food in the soil, and if a plant takes up and uses a cer amount of this, that there must be so much left. This has s been modified by Ville and others. While allowing that the b is one which necessarily must always be a guide to the cultiva it is known to the experienced that the theory is unsound, and plants uncultivated, or cultivated, as a rule, get more food t could possibly be afforded by the soil alone, the fertility of wh may have been determined by careful analysis. In tempe climates the incidental increment of plant food is not so larg in the tropics, where it is an element in cultivation which ha be taken into account by every planter. Soils, which on anal show themselves to be poor and barren and which would indeed poor and barren soils in a tempere climate where there is incidental increment, prove in the tropics to be soils on wh excellent crops can be grown, in fact, the soil appears merely to as a medium for the absorption of food by the roots, and not regular storehouse of nutriment from which the plant can at o take up the full of its requirements. I well remember an emi chemist remarking to me on the excessively barren characte the soils of the interior in certain parts of the mainland, as sh by analysis—and yet these same lands had grown large tract forest and the trees were giants. There can be no doubt whate that such growth is due, not to the natural or contained fertilit the soil, but to the incidental increment which is continously be added in the course of seasons by natural accumulations. T leaves and flowers have long been known as fertilizers of no m kind by practical men goes without saying, but the exact manne which nutriment is taken up and the exact quantity of plant f which is annually derived from this source, is yet to be fully de mined. In a recent paper on the flowers of the "Bois Immortel Erythrina sp. The large proportion of nitrogen which t contain was pointed out and an argument was based u it of the continued use for this tree for shading cacao pla tions. It has long been known, however, that the flowers of kinds of trees contain large amounts of nitrogen, and that it is q as probable that the flowers of any trees that might be substitute shade for cacao would contain as much nitrogen as the "Immor a matter which must form the subject of full enquiry before advantages of the "Immortel" are finally decided. The Nic guan cacao shade tree—Gliricidia maculata—is a prolific flo

bearer, and covers the ground with as great a profusion of flowers as the "Immortel." There can be no doubt whatever that this incidental increment is valuable, as are many others as yet undiscovered or unrecognised; especially so the amounts of nitrogen distributed by the crops of seed from leguminous trees, which fall and rot, for the most part upon the ground. The incidental increment deposited in the form of the excreta of birds, reptiles, and insects, any by the death and decay of their bodies is as yet an uncalculated item, and yet it will be found on examination that it is sufficient to account for the supply of certain plant food which would be otherwise absent. The lime and phosphates in the bones of an animal or reptile is comparatively small, but still their bodies give to the soil constituents, which it requires for nourishing certain kinds of plants. It is often argued that as so many thousand bushels or bags of cacao are sent out of Trinidad that the soil must in time become exhausted, and the argument follows this line when supply of nitrogen from the flowers of the "Immortel" is spoken of. We find however cacao plantations in full bearing which have been under cultivation 50 or 60 years and producing to-day as much as in the first instance, and without artificial manure. We might be told that the supply of plant food naturally existed in the ground and was made available as required. If we accept this, then it is clear we ought to be able to ascertain exactly by analysis how much food the soil contains and how long the supply will last. But this has as yet never been done, for there has always been the "incidental increment" which daily and hourly accumulates to upset this addition and subtraction theory, which is so neatly propounded in many cases in the teachings of non-practical men. We are told that so many tons of plant food is removed, but we seldom get the amount per tree, as the amount would appear too insignificant. In some cases merely a pinch. It is insignificant in a sense and is readily replaced by incidental increments hitherto much, but not wholly disregarded. In Johnson's "Agricultural Chemistry," p. 3, the author says:—

"It is extremely difficult, nay impossible, to estimate exactly what quantity of plant food is present in a soil in a condition available for the plant's immediate needs. This is really best ascertained by experimenting with the plant itself." Professor Johnson also states it to be "one of the objects of the farmer to test the opinions of theoretical men "for" it is only on a basis of often repeated, skilfully conducted, and faithfully recorded experiments, made by instructed persons, that true theories can ever be successfully built up, hence, (he says) the importance of experiments in practical Agriculture."

What the incidental or natural increment of plant food on an acre of land in Trinidad is we do not know, but it is quite evident that it exists, and has to be counted on by the Agriculturist in cropping his land. A large amount of incidental plant food is evidently conveyed by rain water. How much we don't know as no regular analysis of our rain waters is available. It appears probable also that the fertility given by the deposited excreta of small animals, birds, insects and worms and reptiles and the decay of their bodies, upon the ground, and also the decay of vegetable matter, dust deposited by wind, leaves, flowers, seeds, and branches, etc., is largely in excess of what has been previously estimated, and in fact is, of as much importance as food obtained from the reserves held by the soil itself. This must be known as the "Incidental increment" and must be taken into full account in all Agricultural operations.

THE PHYSICAL PROPERTIES OF SOILS.

Investigations into the physical properties of soils have been pursued in the United States with a persistence and a degree of success that can hardly be paralleled elsewhere, and a paper on this subject by Mr. Lyman J. Briggs is full of instruction. The soil, as it exists under field conditions, may be regarded as comprising (1) the soil proper, consisting of the soil grains of various sizes, grouped in different ways and made up of insoluble or difficultly soluble materials; (2) the soil moisture, covering the soil grains, and containing in solution a varying amount of the soluble soil constituents, and (3) the soil atmosphere, differing to some extent from ordinary air in composition, and usually saturated with water vapour. Soil moisture and soil temperature are capable of being closely measured, and the composition of the former ascertained. As illustrative of other physical properties the flocculation of clay particles has a direct bearing upon the tilth of a soil, as well as upon the rate of the capillary movement of water, and a knowledge of the conditions governing flocculation is consequently of direct economic importance. Carbonate of lime, gypsum (sulphate of lime), and certain other salts, especially the alums, are particularly active in flocculating the clay. This is one reason why the application of lime is beneficial to some heavy soils, since the aggregates formed possess many of the characteristics of a solid particle of the same diameter, and the soil in drying possesses a loose crumbly structure. Anmonia and carbonate of soda or "black alkali," on the other hand, break down any aggregates which have been formed, and thus have the effect of "pudding" the soil, which dries into a hard compact mass. Concentrated solutions of all salts, however, produce more or less flocculation. Apart from the action of salts little is known as to the conditions controlling flocculation, and the subject will repay fuller investigation.

BRITISH GREEN TEAS IN CANADA.

A Toronto broker thus describes to Mr. Wm. Mackenzie the uphill work he has when trying to sell Ceylon green teas:—

I think the discouragement your friends feel is entirely due to their not appreciating the difficult position of these teas in our market. They evidently believe that when a broker, say myself, sells a jobber a line of Ceylon green, it is simply because that jobber *wants the tea*, and is looking for it, whereas the fact is that I have, perhaps, talked Ceylon greens to that man for weeks and at last get him to try, say, 20 or 40 packages. He has then to "enthuse" his travellers on the goods, and out they go to sell them. The jobber then buys a few more and repeats this until the travellers having sold every customer whom they can induce to handle them, the demand in that quarter stops, and you cannot place another package with that man until these customers begin to buy again. When this will be, is very uncertain—the country retailer here is not a pushing character; the Ceylon green has been squeezed on to him, and he had often neither the brains nor the energy to get it off his hands, in the same manner as it came on to them. His customers are likely Japan tea drinkers; no one asks for Ceylon greens; and he is not going to argue with them as to the better value of the Ceylon, and it goes off very, very gradually.

This occurs in hundreds of cases. In the meantime there is a lull all round, and reports go abroad that the demand has stopped; this reaches the growers, prices drop a little and they stop making, and the whole business feels upset. There will be for some time to come periodical spurts and periodical lulls in the demand, but each spurt will be a little larger than the previous one, like rings from a stone thrown in the water. The growers have got to recognize the fact that they have entered the lists against Japans, which have been in use here for 30 or 40 years, and it must necessarily be a hard fight with many discouragements, to all that are engaged in it. But I confidently feel that if the Ceylon green tea is persistently pushed, it will come to be a great business with us.

COFFEE AND SPICE.

"M" writes in *Capital*:—

The probable loss, practically, of the second best market for Indian coffee, if France finally decides not to prolong beyond the 23rd February, 1892, the application of the minimum tariff to British Colonial produce, will necessarily prove disastrous to the coffee industry in this country, wholly dependent as it is on the foreign demand—unless a new and as profitable market can be found. Although the trade has been steadily declining for some years past,—the average yearly exports for the 10 years ending 1897-98 amounted in value to Rs.1,83,21,526, and that of the last 3 years (ending 1900-01) to Rs.1,48,76,628, a fall of 19 per cent.—it is still a valuable trade. Exports to France for the same period show a greater proportionate decline, *viz.*, from Rs.60,17,361 to Rs.39,67,108, or about 33 per cent. But the loss of a market that still

absorbs 30 per cent. of this production, and the difficulty of finding another outlet offer an awkward problem. Other satistics in connection with the industry, says Mr. J. E. O'Conor, are unreliable owing to the reticence of those connected with it; and there seems to be no doubt on this point. For example, according to the latest edition of the "Agricultural Satistics of British India," the production, including Mysore, Travancore, and Cochin, had fallen from 35 million pounds in 1885 to about 17½ million pounds in 1899; in in the previous year (1898) the production is recorded as roughly 23¾ million pounds. And with these figures it is impossible to reconcile the total exports given for 1899-1900, *viz.*, 31½ million pounds. It is sufficiently clear, however, that the impending blow would fall heavily on the industry.

As to the trade in spices, which also come within the purview of the proposed change in the French tariff, it is some satisfaction that this trade can scarcely be much affected. Within the last ten years exports to France rose as high as 19 lakhs, but since then they have rapidly declined and last year amounted to something under a lakh-and-a half. The total value of our export trade in these commodities, during the 10 years ending 1898-99, averaged about 49 lakhs, and in each of the two succeeding years it exceeded 54 lakhs. The most important of these commodities is pepper. The history of the trade in pepper, which was one of the earliest articles of Indo-European commerce, is of considerable interest. According to one writer "it formed the very symbol of the spice trade to which Venice, Genoa, and the commercial cities of Central Europe were indebted for a large part of their wealth." Tribute was levied in pepper; the ransom demanded from Rome in the year 408 from Alaric, King of the Goths, included 3,000 lbs. of the condiment. The earliest reference to a trade in the article in England is in the statutes of Ethelred (978-1016), wherein it was enacted that traders bringing their ships to Billingsgate should pay, at Christmas and Easter, with other tribute, 10 lbs. of pepper. "The Pepperers" formed a fraternity mentioned as existing in London during the reign of Henry II. which subsequently became incorporated as the existing "Grocers Company." In England in the 13th and 14th centuries, the price of pepper averaged 1s. per pound, but that coin in these days was equivalent to about 8 shillings of our present money. It was this handsome price, amongst other reasons, that induced Portugal to seek for a sea passage to India, after which the value fell considerably, and the cultivation was extended to the western islands of the Malay Archipelago. The trade thus filched from Central Europe was retained as a monopoly by Portugal up till the 18th century. In more recent times the Malabar coast monopoly became gradually destroyed; more and more pepper was cultivated in and exported from the Malay Archipelago and localities further east, till the dawn of the last century found the Indian trade reduced to dimensions much smaller in proportion than that of other places. Thus, it is stated in a work on "Oriental Commerce," that in 1829 the produce of Sumatra was estimated at 168,000 piculs, that of the islands at the mouth of the Straits at 12,000 piculs, the Malay Peninsula and the Island of Borneo each 20,000 piculs, the coast of the Gulf of Siam 60,000 piculs, and the west coast of I only 30,000 piculs. Since then, it appears, the relative imports of Indian pepper has further declined. Still, although the trad India, as a source of supply which was once the centre whence whole world drew its requirements, became supplanted t very great extent by the development of the Malayan trade, th has been a remarkable revival within the last quarter of a cent Exports during the five years 1875-76 to 1879-80 were 5,420,963 valued at Rs.9,77,924, and rose steadily to an average of 11,151,469 valued at Rs. 23,74,124 in the quinquennial period 189[illegible]-96 to 1 1900. Last year there was a falling off in quantity to 8,280,372 but a high relative increase in value, *viz.*, Rs.28,91,835.

Pepper (*piper nigrum*) was extensively cultivated on the west coast of Southern India, probably as far back as 1600, and, altho grown from remote times in Sumatra, the Straits, Siam and Malay Peninsula generally, the product of Malabar has always b considered the best. It is also grown in the Bombay Presider but only to any great extent in one district, Kanara. In Mad the method of cultivation followed is very simple. Cuttings put down before the setting in of the rains in June, in rich soil subject to excessive accumulations of moisture. The spots selec for planting are at the foot of trees clad with rough or pric bark, such as the jack fruit, the cashew nut, mango and oth of similar description. The pepper vines shoot up, and allowed, will attain a height of from 20 to 30 feet, but their gro is generally kept down by cutting and pruning. In three ye the vine begins to bear, producing long clusters of 20 to 50 ber abundantly from all its branches. From the third to the seve year the plant improves, after which it remains in good condit for 3 or 4 years, then deteriorates for about the same period till longer worth keeping. It is then cut down and new shoots plant The berries are gathered as soon as those at the base of the sp begin to change colour from green to red, since if allowed to ri fully, they become less pungent and easily fall off. The day a they are gathered, the berries are separated from the stalks hand rubbing, and picked clean. They are then dried by expos to the sun, or more frequently by the heat of a gentle fire. "Wh pepper" is prepared by divesting the ripe berries of their sk by maceration in water, after which they are rubbed, and fina bleached in the sun. Occasionally they are bleached still furt by means of chlorine. White pepper is twice as expensive black, and it is in little demand.

The foreign trade in ginger is also fairly important. In 189 seems to have received a considerable impetus, and between t year and 1897 exports averaged about 18½ lakhs per annum. the last two years, however, there has been a decline to about h that amount. During the middle ages, like pepper, ginger wa valuable item in European commerce with the East. It is cu vated in all warmer and moister parts of India, but requi much care and attention, and, contrary to the rule applied to m crops, manure is freely used.

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CELEBRATED OILMAN'S STORES.

[1-10-98—t.f.o.]

The only other item of consequence in the foreign spice trade are chillies. Exports during the last two years are valued at Rs.8,77,872 and Rs.12,07,349. This plant (*capsicum frutescens*), an annual supposed to have been introduced from South America in comparatively recent tmes, is freely cultivated all over India. In every bazaar throughout the country chillies are to be purchased, constituting an indispensable ingredient in native curries, and a relish which the poorest use with the humble chupatee or dish of pulse. Some authorities have asserted that it is this plant which affords the so-called cayenne pepper, others (including *The Kew Official Gazette*) that this distinction belongs to another variety of the same species.

The statistics relating to spices given in the foregoing do not include the foreign trade by land, which last year amounted to about 25 lakhs.

THE INDIAN TEA ASSOCIATION (LONDON).

EXTRACTS FROM THE ANNUAL REPORT.

GREEN TEA.

As mentioned in last year's report, a bonus of 1½ annas per lb. was offered to planters who were prepared to manufacture green tea for the American market, but the Committee regret to say that few applications were received for the same, and it is not, therefore, as yet definitely ascertained how far tea of this description can be made in India to take the place of the China and Japan greens, now so largely consumed in America. A misunderstanding also arose in Calcutta as to the terms on which the gardens applying for the bonus were entitled to receive it, and the proposed 200,000 lbs. were not made. The offer of a bonus at the same rate has been renewed for the present year, and it is hoped that in view of the great importance which attaches to the securing of this outlet for Indian teas, more advantage will be taken of the offer.

The terms of the Committee's resolution on the subject were as follows:—

"That 1½ annas per lb., up to a maximum of 200,000 lbs. to be manufactured this season, be allowed out of the funds of the levy on shipments of green tea to the American market sent there direct from India, such funds to be distributed as a bounty at the discretion of the Calcutta Committee, the definition of the term 'green tea' for the receipt of the bounty being taken to be tea made from the ordinary leaf plucked on the gardens such as would ordinarily be made into black tea, but which in its altered manufactured state would not compete with the sale of black tea in America or elsewhere. The bounty to be paid on the same quantity as before sanctioned, *viz.*, 200,000 lbs., until it is seen what success is attained in the manufacture of green tea.

"The Association in Calcutta to be requested to notify the Committee promptly if a larger quantity than 200,000 lbs. is likely to be specially prepared for shipment to America."

In a report furnished by Mr. William Mackenzie in connection with a recent visit to America, he says that of green teas and partly fermented Oolongs and Formosas the imports are about as follows:—

	lbs.
Green Japans	36,000,000
Green China	15,000,000
	51,000,000
Oolongs and Formosas	17,000,000
	68,000,000

"We have already got the market for 16,000,000 lbs. out of an average consumption of 28,000,000 lbs. of black teas. Not the taste of the consumer, but his indifference to quality of tea and the vested interests in the East of the old established importers prevent us from rapidly acquiring the greater part of the remaining 12,000,000 lbs.

"Now, as to green teas and partly fermented teas, where the field is 68,000,000 lbs. as against 28,000,000 lbs. of blacks, I am more confident to-day of the ultimate success of Ceylon and Indian greens than I have ever been.

"I have had numerous mentions of its quality and merits from dealers able to judge. Of course there are very strong obstacles —the strongest being the vested interests in China and Japan teas —of those who control the grocers as brewers do 'tied houses.'

"In New York I will only say that I was surprised by the favourable reception our green teas were receiving about the end of March, and I have had most encouraging news since I returned."

To attain success, however, Mr. Mackenzie recommends a Syndicate being formed in Calcutta and another in Colombo, to take over the green teas manufactured, and to blend and pack the same in uniform and attractive packages, making regular shipments to one or more firms in America, so as to ensure continuous supplies of teas of standard qualities. The Committee have advised that steps should be taken in Calcutta to carry out Mr. Mackenzie's re commendation.

It is essential also, the Committee consider, that Indian planters should make greater efforts to produce the class of tea required, which, so far, they do not generally appear to have succeeded in doing.

TEA SAMPLES BY POST.

Further correspondence has taken place between your Committee and the Postmaster-General on the subject of permitting samples of tea to be sent by the sample post in hermetically sealed tin boxes so as to fully preserve their condition. Unfortunately, it appears that the department is precluded under the conditions settled by the last Congress of the Postal Union, which met at Berne, and which will not reassemble until the year 1903, from allowing samples of tea to be sent at the sample-post rate of postage, except when packed in such a manner that the contents can be examined. The Postmaster-General has therefore been asked to take the earliest possible opportunity to get this particular rule amended.

DOCK TRUST FOR THE PORT OF LONDON.

As was mentioned in last year's report, it was considered advisable, in the interests of the tea industry, to support the opposition to the proposals of the Dock companies, and a donation of £10 10s. was given to the London Chamber of Commerce towards the necessary expenses. The Royal Commission appointed to consider the whole question of Dock accommodation for the Port of London is now engaged in taking evidence on the subject.

PRIVATE AUCTIONS.

Importers having been approached by the buyers with a view to the restriction of the publication of prices realized at auctions, a meeting was held on December 11th, 1900, to consider the question. It was then suggested that the printing of garden marks in the catalogues might be discontinued, but this proposal was not approved of by the Association.

Afterwards a proposal to establish a Tea Exchange was put forward, and a meeting of the Committee was held to discuss the matter on April 23rd last. Considerable divergence of opinion was found to exist on the subject, and no decision was come to.

As an outcome, however, of these proposals, some importers, with a view to meet the wishes of the tea buyers, expressed their willingness to try the experiment of offering their teas at private auctions, and the Tea Brokers' Association was asked to draw up rules for holding these. These rules have now been formulated, and the first sale under them took place on July 4th, when a quantity of Ceylon tea was catalogued.

BRAZILIAN NOTES.

(From the *Brazilian Review*.)

The End of Funding.—From the 1st July payments in specie on the interest of the foreign debt have been renewed. The President and Minister of Finance have received innumerable telegrams congratulating them on the manner in which the engagements have been kept with foreign creditors in face of the most serious and seemingly invincible difficulties.

Rubber and Cocoa.—Our correspondent at Pará with date of 10th June writes as follows:—In spite of news of weakness in consuming markets and of the reports spread by Exporters of lack of orders, the demand for Rubber has been active at improving prices. Transactions ruled from 5$400 to 6$000 for "Fina das Ilhas." and 2$500 to 3$100 for "Sernamby." For "Serãto" we quote 3$900 to 3$600 for "Cametá." At present "Ilhas" are quoted nominal at 5$700 and 2$800, and 3$700 for "Cametá.

There was likewise a good demand for Cocoa, of which 45 tons were disposed of between 1$000 and 1$200 per kilo. The demand for nuts has been very active, the whole supply of 788 hectolitres having been bought up at 22$000 for which 25$000 and even 26$000

are now offering. The Import market is fairly supplied and also that of national produce such as Farinha de Mandioca, Cachaca, Tobacco, etc., entries of Farinha de Mandioca and Tobacco having been particularly abundant. Prices for Farinha de Mandioca have ruled from 2$500 to 3$500 per alqueire of 50 litres and Tobacco 15$000 to 50$000 according to quality. The Associação Commercial has protested against the enormous "Consumption" duties levied by the Municipality on produce arriving from the other States, such as 100 reis per kilo. of Xarque, 30 reis per kilo. of Coffee, and 20 reis per kilo. of Sugar. Such taxes are very injurious to the trade o fPará and are to the advantage of Manáos; as if the law regulating the packing and export of Rubber from that State had not done us enough injury already. If, as seems likely, these taxes are maintained, the knell of our trade with Manáos will be sounded, and it is all the more to be regretted because the tax will fall entirely on national produce. About 90,000 bales of Xarque, for example, are imported yearly, of which during the present half year only 20,000 came from other Brazilian ports and the rest from the Plate, generally of very bad quality. Naturally, if these duties are maintained against entries from national ports, all the business will in future be done directly with the Plate to the prejudice of the national industry and the shipping.

Exchange, 29*th June*, 1901.—Ninety days' Bank rate on London opened on Tuesday 25th at $11\frac{1}{16}$, fell to $10\frac{15}{16}$ on the same day and closed this evening at 11d.

Exchange, as was anticipated, was throughout the week without any backbone to it. In view of the scarcity of ready bills and heavy bull account to be settled, it was almost impossible that rates should not have slumped, and that they did not fall more is owing to Santos having been a heavy seller towards the close of the week. Whether the market will now recover must depend chiefly on coffee. If shippers are inclined to sell coffee ahead they will have to sell exchange too, which in the present uncertain state of the coffee market we regard as highly improbable. It is true that coffee entries should show an increase in the course of this month; but reports from the interior are so gloomy that it is just possible that, although the coming crop is certainly a big one, a good deal of it may be left on the trees for want of means to pick. In that case we shall not have large early entries and there will be no considerable accession of bills, at least for some time to come.

The probabilities of an early recovery seem dependent for the time entirely on Santos' action, as unless bills are forthcoming from that source, it is difficult to see what is to put exchange up just at at present. Whether or no it will fall again towards the end of the month must depend on the state of the bull account, whether it has in reality been liquidated or merely passed over. It is certain that a good deal has been passed for August and probably for the end of July, and unless plenty of bills are forthcoming by that date it is quite possible that, even if rates improve a bit at present, there may be another slump. In a few days the balance sheets of the banks will show whether there has been any delivery of bills on a large scale or merely postponement. . . Imports have increased considerably, stimulated probably by high exchange, from £1,348,000 in February to £1,627,000 in March and £1,860,000 in April.

In spite of appearnces, the economic condition of the country is unchanged. With the balance of trade generally in our favour, the re-establishment of equilibrium between the supply of and demand for bills, temporarily disturbed by the excesses of speculation, is merely a matter of time, one, two or three months, as the case may be. It is as foolish to imagine, because things look uncomfortable just at present that they will never recover, as it was to suppose that exchange was never going to stop rising when it was in the neighbourhood of 13d. The market oversold itself, as usual, and must face the inevitable reaction, but even so is in a better position than probably ever before, with the whole coffee crop to sell and a comparatively small oversale to liquidate. Unless coffee should go to the devil altogether, there seems no reason why a favourable reaction should not take place, though when it will precisely come must depend a good deal on the amount of liquidation effected. Looking at the comparative scarcity of bills during the last two months and the simultaneous growth of imports, it seems somewhat improbable that there can have been many bills left over for liquidation purposes, but until the Banks' balance sheets for June are available, surmises are after all but premature.

The value of the Coffee shipped (embarques) at Rio and Santos during the past week amounted to £257,000 as against £276,000 for the previous week. Declared sales, however, amounted to 154,000 bags at the two ports, and were 31,000 more than the previous w and more than double those for the corresponding week last ye

At Pará no Rubber at all was cleared last week and only 145 t from Manáos. The stock of Rubber at Pará is now reduced to c 218 tons all of which is already despatched for shipment. Acre Rubber season may now be regarded closed with the arri of a small consignment of 30 tons that is expected. The Co crop from the Islands is increasing and promises to be abund having given 500 tons up to date.

The total value of Coffee Shipments at Rio and Santos during month of June amounted to £1,029,000 as against £1,20?,00 May, £1,495,000 in April, and £332,265 during June last year. July Coffee may be expected to give about £1,300,000 to £1,500, Rubber gave only £278,000 in June as against £524,000 in M £644,000 in April, and £1,589,000 in March.

Coffee.—Entries here and at Santos during the week ended 2 June were 1,959 less than for the previous week but 22,506 bag 192 %, larger than for the corresponding week last year.

Embarques, or shipments, were 171,669 as against 184,154 previous week, and declared Sales 154,000 as against 123,000 previous week and 74,099 during the corresponding week last y

In consequence, principally, of lower exchange, feeling in l market was better and prices maintained in spite of increas entries. Shipments, however, were still very limited, but Friday a little improvement was noticed and the market closed at 7$100 for No. 7 and 7$200 to 7$300 for colory coffees. Ent are increasing and expected to be heavy towards the end of month, possibly reaching 1,000,000 bags between Rio and Santo

THE COST OF PRODUCTION OF COFFEE.

In his circular of 16th June, Sr. Rezende Carvalho publishes following interesting table showing the cost of production, du the last five years, on a large Estate in S. Paulo, known as "Colonia Parnahyba" and owned by Sr. Luiz Fagundes.

Year.	Exchange Average.	Gold Quotations, No. 7, New York.	Cost of the Plantation.	Gross Receipts.	Expenditure.	Net Revenue.
1896 ...	9	...	395:428$	189:970$	105:180$	84:790$
1897 ...	7 11/16	7·68	443:620$	118:450$	79:523$	38:927$
1898 ...	7 5/32	6·36	475:863$	86:610$	76:511$	10:100$
1899 ...	7 27/64	6·19	515:494$	72:036$	60:619$	11:418$
1900 ...	9 27/64	8·27	574:503$	166:578$	103:821$	62:757$
				683:646$	425:654$	207:992$

Year	No. of Trees	Quantity sold Arrobas of 15 kilos.	Price per Arroba.	Cost per Arroba at Santos.	Production. Per 1,000 trees Arrobas.	Production. Per alqueire 2,000 pés.	Expense per al-
1896 ...	120·000	13·400	4$176	7$849	111·7	3:166$	1
1897 ...	153·000	10·087	11$742	7$883	65·8	1:548$	1
1898 ...	153·000	9·880	18$766	7$444	64·5	1:132$	1
1899 ...	153·000	11·240	6$408	5$393	77·8	942$	
1900 ...	153·000	19·275	8$642	5$387	125·9	2:177$	1
		63·882					

This estate comprised in addition to Coffee, considerable p tations of Cane, Tobacco, and Rice that gave a gross revenu 45,122$ in 1899 and 10,779$ in 1900. As no additions have made to the Coffee area since 1897, it is to be presumed that, al ing for the cost of maintenance of new trees, a large part of increase of Capital since that date must be debited to other ducts. But even if the whole be debited to Coffee, when th

ere at worst and prices had fallen to 6$408 per arroba in 1899, ufficient profit was realized to give 2·2% on the whole Capital em-loyed on the estate. Exchange then averaged 7 27/64d., and has ince risen to an average of over 10d. Though not proportionately, rices and the cost of production must have, therefore, fallen, and in 1899 with currency prices ruling on an average of 6$408 per rroba it was then possible to work an estate to such a profit, there eems no reason why it should not be done now at 6$000. This lantation is situated in one of the best districts, Jardinopolis, of he State of S. Paulo and it is not pretended that everyone could o as well, but merely, that on properly managed and well chosen states, far from leaving a loss, even at current prices Coffee leaves profit still.

Indeed, the reduction of the cost per arroba delivered at Santos rom 7$444 in 1897 when exchange ruled 7 45/64d., to only 5$393 in 899 and 5$387 in 1900, when exchange ruled at 7 27/64d., and 27/64d., respectively, is remarkable and would seem to confirm he conclusion that in spite of the resistance of labour, its prices, as hat of everything employed by the planter, must have fallen too.

The average cost of the production and delivery of Coffee from his estate, situated near to the Jardinopolis station of the Paulista ailway over 300 miles from Santos was for the five last years only $663 per arroba of 15 kilos., whilst in 1900 it was reduced to 5$387. Ve see, therefore, no reason to suppose that, even should Coffee rices fall still lower, cultivation will cease to be profitable except, erhaps, for a time until prices of labour and commodities have ad time to be adjusted to new conditions. In 1896, the planta-ion gave 111·7 arrobas per 1,000 trees; in 1897, in consequence of resh plantations, the yield fell to only 65.8 arrobas and to 64.4 in 898. In 1899 it rose to 77·8 arrobas and in 1900 to the very large verage of 125·9 arrobas per 1,000 trees! It is probably now almost t its best, and unless new trees be planted, would within two years ommence to show some reduction in its yield. The same must be he case all over the country, as since 1897 comparatively little new offee has been planted. Coffee trees come into full bearing with-n six years, so that in 1902 or 1903, at the latest, the *maximum* ield of existing plantations will have been reached and production nay be expected to decline generally. Smaller production will ntail higher prices abroad and after the cycle of seven or eight ears of depression a cycle of rising prices may be looked for, that ill be reflected in our whole economy.

The cost of working and delivery per 1,000 trees was as follows: 76$ in 1896; 519$ in 1897; 500$ in 1898; 396$ in 1899, and 679$ in 900, variations being almost in precisely inverse ratio to the yield; rom which it may be concluded that, apart from the cost of harvest-ng, which depends on the larger or smaller yield, the cost of main-enance has not altered materially since 1897.

The "Bulls."—A correspondent writes us from New York as follows: Lewisohns are on the "bull" side of Coffee and will probably ac-uire very large quantities for the next two years. Great curiosity s felt with regard to the coming crop whether it will be so large s is said and if so, how low prices will fall. The limit for the lanter must be about reached. There are all kinds of rumours bout Government's intention to buy up and destroy 20% of the oming crop, which would be simply a proclamation to the World hat Brazil has more Coffee than could be disposed of at any price. One thing seems certain: that the whole foreign Coffee interest is doing everything in its power to bolster up prices. There is bsolutely no disposition here to hammer prices though all admit vith regret that prices will probably fall even lower. The only eople who seem inclined to knock prices down are the Woolson Spice Company. The market here advocates the adoption of a ingle type of Coffee for both Rio and Santos and no doubt, if it ould be brought about, it would faciltitate dealings considerably.

Coffee Prices.—A good deal of discussion is now going on in American trade journals regarding the cost of coffee. A late umber of the *New York Journal of Commerce* has a long article eaded "*Is a low priced era of Coffee at hand?*" in which the well known theories of the "bear" element represented by Crossman Bro. are ventilated on the one hand, and those of the "bull" side, ead by Lewisohn Bros., on the other.

The ideas emitted by these rival authorities are too well known to be worth reproducing. In this connection the *Journal of Com-merce* makes the following remarks:—

The Coffee market has for some time been showing a decided in-linination towards lower prices. The spot quotation is now on the asis of 6⅜c for No. 7 Rio (the market standard), and prices are among the lowest on record. As a matter of fact, the lowest record is 5 7/16c. This was reached in September, 1899, at a time when the October option sold at 4·10c. The question which is receiving attention is whether the current figures should be accepted as indicating an era of low prices as a result of over-production and of the cheaper cost of production, or whether they of themselves constitute the basis for an advance, on the ground that they do not pay the cost of producing Coffee, and that the production will on that account naturally be curtailed. The discussion is much complicated by the recent gradual advance in sterling exchange in Rio, giving increased gold value to the Brazilian milreis but giving planters at the same time fewer milreis for their Coffee.

The marked leaders at the present time are on the one hand Lewisohn Brothers, representing according to general market acceptation the Rothschilds, who have recently taken a large financial interest in Coffee: and, on the other hand, Mr. Hermann Sielcken of W. H. Crossman & Bro., and manager of the Sugar Trust's coffee interests. The former are the leaders of those looking for higher prices, and the latter believes that current prices are justified by the law of supply and demand, and that the increased gold value of the milreis makes it possible to produce coffee at a profit on the present basis of values.

THE TEA TRADE AND SECRET SALES.

A representative of the *Financial Times* has interviewed some members of the tea trade on the question of secret sales. Beginning with the producers, he dropped in at No. 60, Gracechurch Street, where he saw Mr. William A Verner, who represents an output of some 12,000,000 lbs. of tea, being the Chairman of the Dooars Tea, the Empire of India and Ceylon, and the Singlo Tea Companies. If doubt prevails in some quarters as to the effect of the new scheme on the tea producers, there is none in the mind of Mr. Verner. He said:—

"It is a well settled axiom that an increase in the price of a commodity invariably results in a reduction of consumption, and this is bound to adversely affect the tea producers. The advocates of the scheme state that under the secret sales they will be able to get 2d a lb. more for their purchases, and that consequently they will be able to give better prices to the producers; but is it likely that they will do so? As a matter of fact, the present low prices are due to over-production, and until this difficulty is surmounted it is hopeless to expect to artificially raise values. The public is already paying an extra 2d per lb. on account of the duty put on last year, and any further increase, whether in duty or in price, must reduce the consumption. If higher prices are to be paid at the secret sales the extra amount must either come out of pockets of the grocers or of the consumers. Now, the grocers are not likely to lie down in the struggle. They know very well what will be the result if they charge the increase in price on to their customers, and they will insist on their tea being bought at the open sales."

"Then I take it that the three companies over which you preside are unanimous in objecting to the secret sales?" asked our representative.

"Yes, the three Boards are of the same mind, and you will see from this letter, written to the Secretary of the Tea Brokers' Association, the attitude we take."

The letter was written by the Secretary to the Singlo Tea Company, and read as follows:—

. . . "The Board favours the continuance of the system of public sales without secrecy which has been in force for many years past, rather than one which aims at concealing facts from the great body of grocers and vendors of tea. It is said that the arrangement to which your letter referred must inevitably result in weakening or superseding the existing system of open and unconcealed public sales, and my Board, being naturally alarmed at this suggestion, are prepared by the selection of their brokers and other means to guard against such a result.

"I regard the question as of serious importance to the tea companies," continued Mr. Verner, and am therefore glad of the opportunity to make the position public. In this instance the

interests of the producer, the grocer and consumer are practically identical, and in opposing the secret sales I am fighting the battles of the three classes. The dealers, I consider, are the only persons who benefit from the departure from open sales, and they are naturally desirous of accomplishing their object. So anxious, indeed, are they to carry out their scheme that the recent open sales were almost boycotted by the adherents of the new scheme."

Our representative next called at the offices of the Anglo-Ceylon and General Estates Company, which he had been informed had approved of the "secret" sales. He here saw Mr. A. W. Crichton, the managing director, who expressed the following views: —

"We have merely tried the private sales," he said, as an experiment. Dealers have stated that they will be able to give higher prices if the results are not published, and in the interests of our shareholders we have thought it only right to test the effect of the scheme."

"But if higher prices be paid at the sales," interposed our representative, "the increase must inevitably be passed on to the consumer, and will not this check consumption in view of the present over-production."

"I don't see why it should," replied Mr. Crichton; "tea has been unduly low before, but though the price subsequently increased considerably, it did not check consumption."

The next authority our representative came across was a broker. He regarded the question with easy indifference, as it did not affect his position. His views were, therefore, the more interesting. His opinion was that the dealers would do themselves very little good by the innovation.

"It is well known," he said, "that blenders have cut so badly into the dealers' businesses that they are ready to try any scheme which they think will help them. Now, the blenders' and dealers' interests are opposed to each other and the former have no reason to wish to keep prices dark. Yet some blenders are in favour of the scheme. Why? The only conclusion is that they think they can see their way to squeeze out the dealers."

"Do you think," asked our representative "that dealers will be ready to pay higher prices at the 'secret' sales and act as philanthropists to the tea companies, especically as there seems no probability that the open sales will be continued?"

"It would be only human nature," laughed the broker, "to buy cheap in the secret sales and dear in the open market."

Our representative next tried the "secret" camp, but here he found the members much less communicative. After several calls he managed to see a gentleman who, he understood, was one of the leaders, but he declined to throw any light on his side of the question. "The matter," he said, "was entirely a trade question;" thus conveniently forgetting that not only the interests of the shareholders in tea companies, but also of the public, were involved. It would thus appear that the advocates of the new system are desirous not only to extend secrecy to the tea sales, but to all matters connected with that product.—*Home and Colonial Mail.*

TELLICHERRY PEPPER.

A few weeks ago when speaking about Pepper we pointed out, says the *London Commercial Record* of the 26th ultimo, the important part East Indian descriptions, but principally black Tellicherry, seemed destined to play in the future of our market. We then suggested that we might have occasion to refer to Tellicherry black again. Nothing striking, however, occurred in either our market, or in the position of the article on the other side until now, when we hear that so far the monsoon has been very favourable to the development of the crop, and that unless anything unforeseen occurs a good yield may be looked forward to. This in itself is a serious factor in the position of the article, but it gains in importance when we consider that owing to an absence of demand from Calcutta—the principal distributing centre in India—stocks have been allowed to accumulate which in extent, exceed those of the last four years. In face of these facts, the price offered is a tempting one, as the supply seems to be inexhaustible. When, in spite of this, values in India have managed to remain fairly high we have only to thank the bullish opinion of the Indian dealers for it, as they strongly believe in Pepper and firmly anticipate a good demand towards the Autumn months, when in their opinion the Calcutta dealers will be forced to replenish their stocks. In this they appear to be confirmed by bullish reports emanating from Havre and London speculators, in whose interest it is to avoi collapse of the market in the East. Up to now Calcutta has bee sparing buyer, principally no doubt because sufficient Pepper still available to satisfy any demand; besides, operators th hardly share the optimistic view of the future entertained by planters and dealers in the Pepper growing districts of South India, and they therefore abstain from purchasing. Financ difficulties also appear greatly to handicap many would-be-bull the Calcutta bazaar. The fact remains that the deliveries to t port fall still considerably short of those of the last four yea amounting to about 1,000 tons only as against an average of ab 2,000 tons. This apathy on the part of Calcutta dealers is certai perplexing and well calculated to disturb the peace of mind Indian bulls. To see a buyer whom we consider good for at le one-third of the entire crop confining himself to a strictly indiffer hand to mouth policy, is apt to upset all our calculations. T exceptionally heavy shipments to Europe during May and Ju which probably will amount to no less than 1,300 tons, will o add to the difficulty in arriving at a correct solution of the Pep question. Heavy supplies from the Straits, coupled with la shipments from India, are hardly conducive to higher prices, and is difficult to follow the bullish arguments of Indian holders, pa cularly if we consider the depressed state of trade genera in Europe.

TEA SALES IN AUSTRALIA.

Messrs. Cyril Trower & Co. held a sale of tea yesterday, which they report as follows:—"We offered yesterday morning catalogue of Ceylon teas, covering 343 packages, under instructio from Messrs. Gerber, Michaut & Co. The trade was well rep sented. Bidding was brisk up to a point, and as the vendors, usual, elected to meet the market, the entire catalogue was cleare Rates generally showed a lowering tendency, but more particula for common leaf sorts; broken leaf must be quoted without mater change. The local market shows a 15 per cent. lower tone for co mon leaf, compared with Colombo, and should thus be good buyi as an investment, with all future benefits considered. We quo sales in bond as under:—Clean common to fair Pekoe Souchon 4½d. to 5¾d.; common clean to fair Pekoes, 5d. to 6d.; clean comm to fair Broken Pekoes, 6d. to 7½d; medium to fine Broken Oran Pekoes, 7¾d. to 1s."—Sydney *Daily Telegraph*, July 17th.

CINCHONA AND QUININE IN JAVA.

The following, from the *Chemist* and *Druggist*, is based an interview with and memoranda supplied by Mr. F. L. See St. Louis, Mis., in regard to his recent journey of investigati in India and Java.

Java is generally supposed to have come later into the cinchon field than Ceylon and India, and some say that Java started whe the British dependencies left off—not an uncommon thing wi Britain's trade-rivals. But this is scarcely the case. As early 1829 the cultivation of cinchona in Java was mooted, but it w not until 1852 that the Dutch Government sent Hasskarl, who h been Director of the Botanic Gardens at Buitenzorg, to Peru a Bolivia, where he got with much difficulty seedlings that he to to Java, but these did not come to much. In 1855, Dr. Fra Junghuhn, an eminent Dutch botanist, was sent to Java with number of seedlings, commissioned also in the following year superintend the cinchona culture. Junghuhn was one of the mo diligent workers in the field up to the sixties of the nineteenth ce tury, indeed, by the end of 1860 there were about a million ci chona plants in Java, but 939,809 were the comparatively valuele *Cinchona Pahudiana*, which had been propagated from the seeds *C. ovata* brought from South America by Hasskarl, and renam after Pahud, Governor-General of the Netherlands India. Dr. E. de Vrij was sent out to Java in 1857 as a chemist, but he w really the man who recognised that the future of cinchona-cul vation in Java depended upon the adoption of the particular ki of calisaya that Charles Ledger had obtained in South Americ and which is now known by the generic name of the man w risked his life to get the seed. Ceylon and India might still

e centres of profitable cinchona-cultivation had the British overnment realised that Ledger's work was the consummation of long and expensive inquiry; but the Dutch Government, thanks de Vrij, was sufficiently fortunate to try the new seed well, and thin twenty years planters had proved that *C. Ledgeriana* (at st regarded as a rich calisaya) is the tree best worth cultivating.

Vrij's great service to quinology was the early recognition of e necessity for cultivating plants with a high quinine yield.

The Island of Java is only 673 miles long and about 125 miles de. About 25,000 acres of the island, are under cinchonas. There e 25,000,000 natives in the island, and only two of them speak e English language. The first thing Mr. Seely did was to secure e services of one of these men, whom he kept through his visit. e was a very accomplished young man, and somewhat of an aris-crat as compared with his countrymen. His main accomplishment y in the fact that he had two wives, and he claimed that for a man be a sincere Mahomedan he should have four, if his means per-it. He explained to Mr. Seely, however, that one wife did not ow of the other's existence, and he was quite confident that mat-rs would run somewhat smoother if he maintained that ignorance their part. The day after Mr. and Mrs. Seely arrived they oceeded to Bandong, which is about eight hours' ride from atavia, at which port they landed. It is a delightful little town about 1,000 Europeans and probably 60,000 natives, and the otel was as comfortable as any one could hope for. Nearly all uses in Java are one storey high, and, in the case of hotels, only e room wide, and sometimes a mile long. This is to prevent rious injury in case of earthquakes, which are common out there.

After resting for a few days Mr. Seely made trips to the planta-ons, which lay in different directions around Bandong, ranging om 9 to 30 miles distant, all of which had to be covered by pony-rts, pony-back, or in mountain-chairs each carried by four natives. nchona was seen growing in all its stages, beginning with the ed and the little plants just above the ground, to immense forest ees which have been allowed to grow for nearly half a century, d some of which are 100 feet high, and could not be spanned ore than half-way round by the embrace of a full-grown man.

Over 20,000 trees grew from Ledger's seeds, and a large number the trees are still standing . . . These trees have been al-wed to go to seed, and are simply used for their seed, as they are w about 45 years old, and a tree is harvestable at six years.

The seed is planted in what is known as the nurseries. Both edger seed and succirubra seed are planted. When the latter edlings grow to a height of about 3 feet they are cut down ose to the root, and a Ledger shoot about 6 inches long is afted to each. This is covered up with wax and bound with a ece of banana-leaf, whereupon, after a short time, the wound als and the little Ledger shoot comes out in leaf; then the tall p of the little succirubra tree is cut off, and we have the complet-combination ready to be transplanted in the forests. This is e of the most important events in the life of the cinchona tree in va—the bit of scientific culture which has enabled Java to out-rip the world in cinchona supply. It is done because the Ledger ant does not grow well in the soil, while the red-bark tree ourishes exceedingly. It is a wise procedure to graft the rich edger top on the poor succirubra-root, for the Ledger bark is so ch in quinine that as much as a fourth of the weight of the dry rk has on rare occasions been quinine sulphate.

The so-called cinchona "forests" are clearings made from the ngle, and the ground is kept clean from weeds and rubbish by ligent gardening. The trees are planted in rows systematically, d the ground is so worked that the rains penetrate to a great pth. The trees are allowed to grow until the sixth year, when they e ready to be harvested. The old system of harvesting was to el the bark off the trees. This is no longer done, but each tree sawed off at the roots, divested of its bark, and a new tree plant-l near by. It has long been a familiar *canard* in commercial rcles that the Java planters had tired of their work, and were prooting the trees in order to put tea in their place. It will be en that Mr. Seely's observation proves exactly the opposite; they proot because it pays. The new trees grow to the harvesting age nearly as soon as the bark would grow on again, and the ees are much richer in quinine than renewed bark.

After the trees are hewn down and cut into short lengths native omen beat the bark off the pieces. The wood is dried and used heat the ovens in which the bark is dried. The drying, however, largely done in the sun before the bark is put into the ovens, and the quilled or pharmaceutical bark is usually dried entirely in the sun, the native women and children sitting in the drying-trays and tying the bark into pipes while it is green and pliable. After the bark has been thoroughly dried it is coarsely ground, usually by water-power, and it is then packed tightly in bags of 100 kilos. each; these bags are sent to Amsterdam (90 per cent. of the Java bark going there), and the remaining 10 per cent. is manufactured into quinine at Bandong. This 10 per cent. yields 1,000,000 ozs. of quinine per year, and will very soon be increased to 2,000,000 a year.

Mr. Seely found the Java quinine-factory to be particularly attractive, as his own business-interest in quinine is equal to the annual output of the factory. It was a surprise to him to find so finely equipped a laboratory, and especially to receive from managers and owners such courtesy as belied the current tales of mystery about the Bandong works. Most people know that the manufacture of quinine has always been treated as a very profound secret, and probably there is not a quinine-factory in the world, outside Java, where a stranger would be permitted to learn anything of the process of manufacture. For this reason it was naturally difficult for the Bandong works to secure chemists who were conversant with the manufacture of the article, particularly on account of their being so far removed from civilised countries where chemists usually are found. In the first instance, the Bandong factory was placed in the hands of a man who was not familiar with the manufacture of quinine, though he had had a large experience in sugar-making, and was otherwise a man of scientific attainments, so the quinine first produced was not up to commercial standard. The enterprise went through a trying experience for about three years, and, although it was a hard struggle, it continued to exist and to manufacture quinine—such as it was. The owners were fortunate, however, in securing the services of Dr. A. R. van Linge, who had studied under Dr. de Vrij, as Manager and head chemist for the Bandong factory. He is the moving spirit of the enterprise now, and not only has he perfected the processes of manufacture, but has invented and personally supervised the construction of the machinery and apparatus used in the works.

Mr. Seely says about 4,000 oz. of quinine are made per day, which he could not distinguish when placed among the best-known European brands, and, in addition to this, every lot of quinine the factory manufactures is tested by the Director of the Government plantations, and he was present at one of these examinations, where he saw for himself that the samples were above the requirement laid down in the Pharmacopœia. The quinine is sold at open auction.

A word as to the process of manufacture. When the bark reaches the factory every parcel is assayed, and the natives mix the various lots so that an average strength of alkaloid is represented in each day's work. Tons of bark are ground up every day and sifted by very improved machinery, after which it is moistened with an alkali and pumped into immense digesters containing hot crude petroleum. There are agitators inside the digesters, which mix the bark well with the oil, and the oil extracts the alkaloid which the alkali sets free from the bark. The bark is then allowed to settle out, and the oil is decanted off and washed with sulphuric-acid water, which again takes the alkaloid from the oil. The oil is returned to the storage-tanks to be used over again. The crude quinine sulphate crystallises from the hot solution as it cools, and is afterwards purified by recrystallisation, the mother-liquors, of course, being worked up too. It is a beautiful sight to see the immense rows of big porcelain crystallising-pans, hundreds in number, full of the crystallised sulphate, which looks like snow in water; and it was a delight to Mr. Seely to run his hand down through the solid crystals and squeeze the water out as one would in making a snowball.

After the crystals have formed in the pans and the solution is thoroughly cooled, their contents are dumped into centrifugal extractors, which throw the water out and leave the quinine sulphate nearly dry. The last crystallising solution (distilled water with a trace of quinine sulphate in it) is returned to the main building through underground pipes, sulphuric acid is added to it, and it becomes the first washing-solution as above described. The quinine is then taken out of the centrifugal machines and spread upon trays to dry. Nearly every druggist knows that quinine sulphate should contain between 14 and 16 per cent. water of crystallisation. One of the most delicate operations in the manufacture of quinine is to produce the article without too much or too little moisture in the finished product. The Bandong factory follows a

process, invented by Dr. van Linge, which enables the workers to regulate the air and other conditions in the drying-room, to the extent that the product exactly meets Pharmacopœia requirements.

After the quinine sulphate has been properly dried it is accurately weighed, under the supervision of a European chemist, like all other operations in the laboratory. . .

The crystallising building, in which all of this work is done and in which no manufacturing operations are carried on except the purifying and crystallising of the quinine sulphate, is the most perfect specimen of absolute cleanliness Mr. Seely has ever seen. The floors are covered with porcelain-finished tiles, which are kept as clean as dishes, and he noticed that if the smallest dripping of solution was spilt on the floor it had hardly landed before there was a native after it with a cloth. The machinery and apparatus are kept in perfect order, and even the porcelain-lined crystallising-pans are washed with soap and water every time the solutions are changed. Cloths are stretched over each row of pans to keep out the dust and light.

The quinine sulphate, after being put into tins, is sent to the stock-room, where it is put in cases, which are manufactured by natives on the ground. After the goods are placed in the cases, a sample is extracted from each lot that is represented in the finished product, and the Director of the Government cinchona-plantation, who has spent twenty-five years in the service and who is a disinterested party, comes to the laboratory and applies the pharmacopœial tests to every sample.

The quinine then goes to Batavia, the principal business-city and port of Java, where it is sold at public auction about once a month. The factory owners have no interest in the sales, as they do no business except with the planter himself, who pays the factory a stated sum (8*s*. for every 35 ozs. for manufacturing costs), for it must be borne in mind that the planter owns the bark, and sends it to the factory simply to have the quinine taken from it, which is done on a guarantee that he shall receive the quinine that the bark assays, and he is at liberty to have assays made on his own account before he sends the bark to the factory. The quinine which comes from the bark belongs to the planters until it is sold at public auction. The factory owners have agreed not to enter into the manufacture of quinine on their own account.

The auctions in Batavia are carried on by Messrs. Tiedeman & Van Kerchem, the oldest-established bankers in Java. The quinine is bid for by various brokers, who act for any one that wishes to emyloy them, and who charge a stated commission for their work, but do not speculate. So strict are they with the auctions that a broker must mention the names of the persons for whom he is purchasing. The quinine is then shipped to various parts of the world.—*Chemist and Druggist.*

PROPOSED TEA-GROWERS' ASSOCIATION IN LONDON.

The *Ceylon Observer* gives the following special report of the Meeting of Importers:—

LONDON, *July* 19.

There was a meeting of some 20 of the largest Tea importers at Winchester House on 17th instant to discuss a proposal to form an Association with a capital of £1,000,000 to protect Indian and Ceylon teas in the London and other markets.

Mr. Thomson, of Messrs. Whittall & Co., was in the chair and briefly explained the scheme, which was, he said, to regulate the quantity of tea for the Trade by purchasing any quantity in excess of actual requirements and holding the same—until required. Some discussion was begun by those present on the details of the scheme, when Mr. H. K Rutherford pointed out that it would be advisable, before they went on to discuss the details, that the meeting should come to a decision whether such a gigantic combination was necessary in the interests of growers at the present time. He said that, after giving the matter his most careful consideration, he regretted he did not see how he could support the scheme. The present state of affairs solely hinged on the question of supply and demand, and he firmly believed, with the influences now at work, that supply and demand would become more evenly balanced in a shorter time than most of them seemed to think. The proposed scheme did not strike at the root of the existing evil; as it would still leave the surplus tea in existence and act as a on the market, whereas he contended, if a remedy was necessar could only be found at the fountain head and that was eith the non-production of the tea or the opening out of new mark or a combination of both, and not in simply holding the tea off market for a given period. Poor lands going out of cultiva would, he thought, counterbalance the crops from new a coming into bearing; the unlikelihood of a favourable season tak place concurrently in India and Ceylon in 1900 and the expan of new markets coupled with the severe lesson planters learned from coarse plucking last year, would inevitably ten bring supply and demand into closer relationship, and prospe would return. This scheme, which was to protect the gro instead of diminishing the output would have the tendenc increase it, as the proprietor with a non-paying estate would m as much tea as he could if he were assured of protection to even per lb. over the cost of production. We were undoubtedly, as been pointed out by Mr. Thomson, at the present time in the ha of the buyers, as regards the price of our teas. This was the natural position, for, when there was an over-supply of a c modity, the purchaser had the seller under his control, but position becomes reversed when the supply is not in excess of demand. This altered situation was bound to come about in the industry in time, and we could not force that period by any s scheme as the one proposed as it did not permanently get rid of tea. He concluded by saying that, once this crisis of over-produc was over, which he ventured to predict was not far off, we wo gradually enter a period of remunerative prices, and he did think that in our time at least we would again suffer from o production.

Mr Alfred Brown said he regretted he could not share Mr. Rut ford's views, and he also had given this matter a great of thought, and willingly hailed the proposal for the promotio such an Association. The buyers had combined and were str and unless we also combined we would continue to be in their gr even if there was no over-production. It would require a great margin between supply and demand to make them com and pay up for our teas. He asked how it was that, before we h so much about over-production, indeed since 1890, the price of had gone steadily down, entirely in his opinion through the w ings of the dealers' combination to keep down prices, and we w never be right until we put combination against combination. certainly thought that some combination was necessary.

Mr. W. McKenzie pointed out that the gradual fall in the p of tea dated from the time of the packet-tea man, and that Lip Ltd., made nearly the entire profit of their business out of tea, ing most of their other commodities at cost, or under. He c not agree with Mr. Rutherford in his opinion that Ceylon practically reached its maximum production. Ceylon, if pr improved, could double its yield by manuring, so the question a wider one than that of excessive areas of new land coming bearing. With reference to green tea, there was an enormous for their energies in America and Canada; but he regretted to while they talked of combination between India and Ceylon, former had started to undersell the latter in green teas, and he understood, arose from India giving a higher bounty t Ceylon. This state of affairs should not be allowed to go on.

Mr. Jas. Sinclair said he would like to know if any one pre could authoritatively say there was a combination among dealer whether the low prices of our teas were solely due to exces supplies.

Mr. Magor (Williamson & Magor) gave it as his opinion what importers suffered from was the want of combination to the trade the quantity required at the proper time. At one tim the year we throw thousands of chests at them, and sell regard of price. At another time we have nothing on the market. thought if an Association could be formed to "carry" the te would be a good thing, and he also thought it was necessary to such an Association. He believed, if the great mass of impor came to this conclusion, then he was sure the money would forthcoming.

Messrs. Macleod, Bryans and others spoke in favour of so thing being done, if not exactly on the lines proposed, in some that would limit the offerings to the buyers.

It was finally decided to appoint a Committee of eight, representing India and four Ceylon, to consider the whole ques and report.

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION (CALCUTTA).

The following is from an Abstract of Proceedings of a leeting of the General Committee held on 30*th July*, 1901.

PRESENT:—Messrs. H. S. Ashton (*Chairman*), A. Tocher (*Vice-hairman*), H. W. Boyd, W. Brown, D. A. Campbell, R. H. A. resson, A. C. Lawrie, and R. Magor.

Letters dated 5th and 12th July, from the Secretary, Indian Tea ssociation, London, were brought up for final consideration and sposal.

The principal question raised in these letters had reference to he bounty to be granted to Companies and Proprietors manufac-uring green teas suitable for the American market. With his tter dated 23rd May, Mr. Tye had sent a statement of the views f Mr. W. Mackenzie, the India and Ceylon Commissioner in merica, upon this question. This statement was summarised in he proceedings of the General Committee Meeting held on 18th une. In the letter dated 12th July, Mr. Tye stated, in reply to nquiries made by the Committee, that the opinion had been ex-ressed in London that "green" tea of the Ceylon type would no oubt in the long run take the place to some extent of the green ea now used in America. But the manufacture of a pure green ea resembling the Japan type, but without any mineral facing, ould be more likely to find a ready market. It was also suggest-d by the London Committee that a Sub-Committee should be ppointed in Calcutta to deal specially with the production and hipment of green teas.

After discussion it was decided to appoint a Sub-Committee as uggested. The Vice-Chairman consented to serve upon it; and Ir. L. C. Baines (Messrs. Moran & Co.) and Mr. H. B. Yuille Messrs. Balmer, Lawrie & Co.) were to be invited to act. The ub-Committee were to be asked to consider and to report upon he feasibility of inducing growers to manufacture green teas of imilar quality; and of making arrangements whereby such teas ight be bulked in Calcutta; the object being to ensure greater niformity and to enable orders to be duplicated without difficulty.

The files of papers dealing with the question were to be placed efore the Sub-Committee for their guidance.

Considered letters dated 16th and 24th July, from the Honorary ecretary, Central Travancore Planters' Association, respecting he proposal that steps should be taken to induce the Colonial uthorities, to abolish the import duty levied in Ceylon upon ndian Tea.

Reference was made to this proposal in the proceedings of the ast meeting. It was there recorded that the Committee had ecided to ask the Planters' Association for further information ith regard to a statement made by their Honorary Secretary that here would be no objection to an *ad valorem* duty of 5 per cent. eing levied in Ceylon as in India.

In replying to these enquiries the Honorary Secretary of the lanters' Association had stated that the members of that Associa-ion were quite agreeable to the suggestion that Government should e asked to move for the abolition of the Ceylon duty.

The Committee understood that the question generally had been onsidered at the Annual Meeting of the Assam Branch which was eld on the 20th July. They decided to await the report of the roceedings of that meeting before addressing the Government of ndia.

Considered a letter dated 5th July, from Captain R. L. Kennion, .S.C., British Joint Commissioner, Ladak, with reference to the uestion of the introduction of Indian tea into Tibet.

Captain Kennion pointed out that there were two obstacles in the ay of developing the trade. The first was political in its nature. he Tibetan authorities objected to having Indian tea in their ountry. They had, it was believed, the support of every local fficial in taking up this attitude; as all the latter were interested n the sale of China tea. The second obstacle was the fact that the ibetans had for centuries drunk brick tea imported from Szechuan. heir method of making tea included its prolonged stewing. And ndian Tea when subjected to that process was, they complained, ess palatable than China tea. It did not therefore find favour mong them. Captain Kennion had no suggestion to offer as to ow the political difficulties might be overcome. And he pointed out that if agents were sent from India they would not be allowed to sell tea in Tibet. A stream of trade flowed from Leh to Lhassa —through the chief marts of Western Tibet. But his experience did not lead him to think that any result would be attained by trying to induce the Ladakis and Afghans engaged in this trade to take Indian tea across the border. He was of opinion that, pending the solution of the political difficulties, Indian growers should prepare the way by placing in the frontier markets an article resembling the Chinese brick tea as closely as possible. Even under the existing adverse conditions Indian brick tea having the characteristics of the Chinese would (he believed) by its comparative cheapness, oust the latter on the British side. It would be smuggled across the border; and would gradually permeate into the interior. He also offered to watch the result if Indian made bricks were sent to Leh, which was a meeting place for traders from India, Chinese Turkestan and Tibet.

The General Committee decided to send a few samples of Indian brick tea to Captain Kennion for his opinion as to their suitability for the frontier markets. An expression of their thanks for the information contained in his letter, and for his offer of assistance was also to be conveyed to him.

In the proceedings of the meeting held on 2nd July, it was stated that enquiries were to be made from the Singapore Agents of the Russian Volunteer Fleet as to the rates of freight for tea from that port to Odessa.

These orders had been carried out, and from the reply received it appeared that the rate was 30s. per 900 lbs. net.

It had also been ascertained that the rate from Calcutta to Singapore was Rs.25 per ton of 50 c. ft. It was however understood that Messrs. Jardine, Skinner & Co., and Messrs. Apcar & Co., the owners of the two lines running to Singapore, were prepared to make a reduction. The Committee accordingly postponed the matter pending the receipt of further information, which Mr. Gresson undertook to obtain, upon this point.

THE INDIAN TEA ASSOCIATION.

THE GENERAL MEETING.

The twenty-first Annual Meeting of the Members of the Association was held at the offices of the Association, 14, St. Mary Axe, on Wednesday, the 17th ultimo. The chair was occupied by Mr. D. Cruickshank. PRESENT:—Messrs. A. Bryans, R. J. Boyle, G. W. Christison, F. H. Cumberlege, W. N. Clark, Surgeon-General De Renzy, H. Earnshaw, Robert Hart, G. Henderson, J. M. Hall, H. Luttman Johnson, C. C.McLeod, J. C. Maclean, R. B. Magor, G. F. Moore, J. N. Stuart, Arthur Thompson, and Edward Wahab.

In opening the proceedings the Chairman said: Gentlemen, in the absence of Sir Henry Seymour King, who is unable to be present to-day, it has devolved upon me to take the chair on this occasion, and I will now ask the Secretary to read the notice convening the meeting.

The Secretary (Mr. Ernest Tye) then read the notice.

THE OUTLOOK.

The Chairman continued: Before dealing with the formal business of the meeting, I believe I shall rightly interpret the feeling of those present and of the members generally, in giving expression to our regret at the loss which the nation has sustained by the death of the great and good Queen who ruled so long and so wisely and well over our vast English Empire. The report of the General Committee for the past year has been circulated to members, and if you will take the same as read, I shall proceed to propose that the proceedings of the General and Sub-Committees during the year be confirmed, that the report be adopted, and that the accounts as audited be passed as correct. Before putting the resolution formally to the meeting, however, I would wish to say a few words with reference to some of the matters which have occupied the attention of the Committee since we last met. And first in importance, I think, may be put the question of over-production, which was attracting serious attention more than a year ago, and the effects of which have since been brought home to all of us by

the fall in the price of our teas, and the reduction, and in many cases the extinction of profits shown in the working of estates which formerly yielded good returns. It is greatly to be regretted that the proposal put forward for restricting output, and which was framed on a basis affording a wide latitude to individual concerns as regards the methods by which reduction might be effected, should have fallen through. Although in India the yield this season has been affected by unfavourable weather, and finer plucking on many gardens will reduce outturns, we must bear in mind that we have not yet reached the limit in the increase of production which may be expected from the extensions made in recent years, and personally I had hoped that if India and Ceylon could have united to restrict output, the foundation might have been laid for future co-operation in the way of regulating production in accordance with the demands for consumption, and thus place the industries of both countries in a sounder and more prosperous position than they occupy at present. It is still hoped in some quarters that some combined action by Indian and Ceylon proprietors with the object of benefiting producers may be possible; but, while ready to welcome any practical efforts in this direction, our experience does not tend to encourage any sanguine expectations of their success. With the failure of the attempt to restrict output we are left to face the evil of over-production by efforts to find fresh outlets for our teas and to push their consumption wherever possible. The report deals with the work that is being done in this direction. In the United States and Canada we continue, in conjunction with Ceylon, and under the able guidance of Mr Mackenzie, to advertise freely, and you will note that out of a total consumption in these countries of 28,000,000 lbs,, of black teas, 16,000,000 lbs., or considerably more than half, are Indians and Ceylons. There would appear to be no insurmountable difficulties in the way of further increasing the consumption of British-grown black teas in America, but progress may be slower than in the past, and Mr. Mackenzie strongly recommends that vigorous efforts should be made to obtain a hold of the market for green teas, of which the consumption is much larger than that of black tea—68 million pounds, against 28 million. As every pound of green tea produced in India and Ceylon means a pound less of black, of which we have an over-supply, the importance of trying to secure this fresh outlet for our teas is apparent. The difficulty experienced has been in ascertaining exactly the description of green, or partly fermented, teas, which will be most readily taken in America, and I am not sure that this point has been quite settled yet. I may say, however, that I met Mr. Mackenzie a few minutes ago, and he mentioned having received a letter from Mr. Larkin, one of the largest importers of green teas in America, stating that he had purchased 200 packages (about 10,000 lbs.) of Indian greens which had just come over, and which he stated were the finest green teas he had seen. Mr. Larkin is coming to England to arrange for further supplies. It is very satisfactory to find from this that some Indian gardens have succeeded in producing the class of green tea suitable for the American market. Experiments in the making of green teas are being carried out on different gardens in India, and we have suggested to our friends in Calcutta that a special Commitee might be appointed there to deal with the whole matter, who could arrange for the manufacture of teas of a suitable class, and see to their shipment, so as to ensure the market being kept regularly supplied. It is to be hoped that success may ultimately attend the efforts that are being made. On the Continent of Europe all our advices go to show that the taste for tea is decidedly on the increase, and, in addition to the opening of tea rooms in Paris and Rome, where the results obtained are encouraging, the Committee have in contemplation—as funds permit—the establishment of an agency at Antwerp, through which Belgium, Holland, and Germany may be worked, and the adoption of measures for further pushing our teas in Russia, a country in which there is already a large consumption of tea, but mostly at present obtained from China. In Australia the consumption of British-grown tea shows a steady increase, the quantity taken last year amounting to 27 million lbs., and representing about 77 per cent. of the toal imports. Lastly I come to India itself, where I venture to think we may find in the future a very promising field for the consumption of our teas. There would seem to be no good reason why natives of India should not drink tea as freely as the Chinese and Japanese, and if they can only be induced to do so we should have here a large outlet for our excess in production. A strong effort is to be made to encourage the consumption of tea by natives, a sum of Rs.40,000 having been allotted by the Association to meet the necessary expenses. Committee appointed in Calcutta to deal with the matter cons ed it essential that in addition to the money grant they sh have contributions in tea, and, I believe, promises for the supp the minimum quantity required have now been secured, so tha work should soon be commenced.

All these efforts to push the sale of our teas require money, the Committee have been obliged to call for a new levy, and earnestly urge all interested in the welfare of the industr subscribe to the fund. I would especially appeal to those—a am sorry to say they amount to a large number—who have hitherto subscribed to the fund for opening out new market come in now and take their share in helping the industry at time of urgent need. A proposal has been put forward, as afford an equitable means of raising the funds required to exploit markets, for the imposition of a cess on all teas exported from In but to enable this to be carried out, the support of the great bul those interested in the tea iudustry is necessary, and even if were forthcoming, which I hope it will be in time, the scheme c not be put in force this season, and we must, therefore, go on the new levy in order to obtain the funds required for the wor be done. The only objection which I think I have seen to the posed cess is that although it may be imposed for the spe purpose of helping the industry, when no longer required for purpose the Government might be tempted to find some excuse continuing it for general revenue purposes. This I consider t an absolutely groundless fear, and hardly complimentary to Indian Government. Several other matters are dealt with in report, but the only one of these to which I think I need make special reference is the holding of private auctions. You will it is stated that the proposals for omitting garden marks from sale catalogues, and the formation of a tea exchange, not hav met with sufficient support, some importers, with a view to m the wishes of buyers in the matter of restricting the publicatio the prices realised for individual lots at the auctions, had agree try the experiment of offering their teas at private auctions c ducted under the control of the Tea Brokers' Association. I m explain that the Association is in no way committed to these priv auctions, with regard to which considerable difference of opin exists amongst members. Whether this method of selling is a g one or a bad one, the Association cannot interfere with the righ any importers to dispose of their teas by private auction if t choose to do so. In regard to the question of restricting the p lication of prices, the large dealers hold strongly that this absolutely necessary in the interests of their business, and th objection to their business being interfered with by an outs organisation only concerned in making money by the circulat as at present, of detailed particulars of all sales, is hardly surprisi Objections to the system of private auctions have been taken the country grocers, I understand, but they and the large deal may be left to fight the matter out between them. So far growers are concerned I do not see how they are likely to lose a thing by selling some of their teas in private auctions, but it is easy to discern where any direct benefit to them will come in. do not think I need detain you with any further remarks, will now propose that the proceedings of the general and spe Committees during the past year be confirmed, that the report adopted, and that the accounts as audited be passed as correct.

THE SECONDER'S VIEWS.—FOREIGN MARKETS.

Mr. A. Bryans: I rise to second Mr. Cruickshank's motion. Y will not, however, wish to be detained here unduly by me, therefore I propose to deal with what is practically one questi *i.e.*, the *levy* and *the means we have of raising funds* for pushing wares in other markets. It is most disappointing to the memb of the Committee who have this matter constantly before them see the half-hearted way in which producers subscribe to voluntary levy. It becomes more difficult each year to raise necessary funds, and I think this year will be the most difficult all. Many of the old subscribers are hanging back, and others attaching conditions to their subscriptions which may imperil success of the levy.

Now, gentlemen, this is not unnatural, seeing the large num of growers who subscribe nothing to these funds, and who are w ing to come in upon other people's backs, and to see oth subscribe whilst they pay not a half-penny themselves. Th people are willing to take advantage of the benefits gained by th subscriptions, and not to give a hand's turn to help matters. Th

a class of man who thinks this is clever. I think that most of us this room would give it another name. There is another class of on-subscriber who says he would subscribe if everyone else did so. urely it is time for this man to put his hand to the plough, or I ould say, into his pocket, and set an example.

I feel very strongly on this matter. Every member of the oreign Markets Committee must do so likewise, and my object -day is to bring this most important matter home to the minds of l growers. We, the members of the Committee, appreciate the ct that the very existence of the levy is hanging in the balance, d it is timethat the growing community, as a whole, understands is to be the case, and steps in to save the position. Now is the me, if there was ever one, that we require special efforts to be made develop the existing markets, and find new ones for our teas. If ur efforts are allowed to lapse what must be the result? It must absolutely clear to everyone who gives a thought to it that less we can increase the foreign consumption, which has in the st year made such satisfactory strides, we shall be in a worse sition than we are at present. The only other solution is by the ng-talked-of compulsory cess, or export tax. It is too late this ar to hope for any success with this, but I am one of those who ink that it is the proper solution of the difficulty, and I further ink that the objections raised to joining this movement have een frivolous objections, and should be put aside at once by growers. mean such objections as that the Government, if it could induced to collect this money for us, would hereafter appropriate for itself. I do not believe for a moment that such a course ould ever be adopted. The difficulty is, as you know, to get the overnment to assent to collect it for us, an almost insuperable fficulty, but one that might, I think, best be overcome by getting petition signed practically by the whole of the planting commu-ty. I, for one, see no reason why such a petition should not be afted at once, and signatures obtained to it. I think a well-orded petition to the Government of India should be sent in, inging out—

1. The depressed condition of the industry.
2. The importance of the development of outside markets, in-uding that of India.
3. The large area of tea that has still to come into bearing, and
4. The consequent results if some such steps are not taken.

A petition on these lines, asking the Government to take steps levy, say, quarter of a pie per lb. on every lb. of tea exported om India, to be applied for the special purpose of development foreign and Indian markets, signed, as I said before, by the lk of growers, must needs, at any rate, receive the earnest con-deration of the Governor-General, and I believe that if properly ndled might result in a successful issue, for how can we hope to ploit Russia or India, or anywhere, without funds?

I should like to hear the views of other members with reference this matter, which seems to me to be one of such very vital portance.

THE NEED OF A CESS.

Mr. Robert Hart: We have read from time to time, and we have eard to-day, of the useful work done by the Association during the ear. This work has been mainly in the direction of increasing e sale of Indian tea by the opening up of new markets. In so r as the limited funds have gone I feel sure it will be acknow-dged by everyone that your work has been a stand-out success. If u look at the most recent figures of the consumption of British-own teas in America and on the Continent, and compare them ith what these were five or six years ago, we cannot but confirm at has been said by those who are in the trade in America that he results are wonderful for the amount expended."

You, gentlemen, our London Committee, have largely contri-ted to this result, and we all, when we think of the smallness of e means, and the comparatively big result, feel that our thanks e due to you for the efforts you have made to secure it. By we all" I include not only the half of Indian tea growers who ntribute to the funds of the Association. but also the other half hich contributes nothing to the funds without which these results uld never have been reached.

The proprietors of half the Indian tea area who do not contri-te towards these funds are said to be mainly of two classes, the st who won't subscribe because they say that so many others do t bear their fair share; the others are those who give no reason because of some excuse which from the results we recognise to ve no foundation in fact.

It is reasonable to suppose that the first of these two classes of non-subscribers is the greater. If so, then over three-quarters of the industry would only be too glad to subscribe towards the opening up of new markets if everyone else could, by some means, be got to contribute.

We have found that Indian and Ceylon tea growers cannot combine, at least, Ceylon growers cannot combine, to reduce the excessive production, and we all realise that any such measure to artificially restrict the amount of tea produced could only be a relief of the most temporary character. We are one and all agreed, too, that not only the prosperity, for it has gone, but the very life of the tea industry depends on our opening out new outlets for our produce, and that such a state of crisis has come about that, to save us from disaster, this must be done quickly. We all know, further, that to do so, operations will have to be carried out on a scale and with a determination which we have not yet seen.

Are we making any preparations to do so? The answer to this is that while there has been a good deal of talking and writing we have unfortunately so far been unable, owing to want of funds, to do anything beyond following the comparatively slow methods that, so far from being adequate to meet the present situation, were not allowed to be good enough even for that of several years ago.

If the means at our disposal and the consequent rate of progress India has made, which progress has been, we observe, less than half and proportionately less than one-third, compared to that made by Ceylon in outside markets, how miserably inadequate this is in comparison to what even one large business house does to keep pace with the times, or in comparison to the measures we have seen recently advocated from America.

We are satisfied, gentlemen, that you have spent the funds at your disposal to our great advantage, and the question now is how to get more, so as, if not sufficient to do a great thing for tea, to do at least something substantial to relieve us from the position in which we now find ourselves of being able to make little or no profit, and in many cases a loss in working our estates.

A cess like the Ceylon cess is believed, as I understand, by your Committee, and by probably nine-tenths of those interested, to be the only way of attaining our object. This, indeed, is only too plain, as the voluntary contributions are falling off, owing to the feeling that it is not fair that half should bear the burden of saving the situation, which should be borne by all alike. Only one or two people have spoken against it, and they being, like the rest of us, strongly in favour of opening up the Indian market close to our doors, have, instead of this cess, proposed that voluntary contributions in the shape of tea should be also asked for. As far as we have seen, what most of us felt sure would happen, has happened—namely, that the great bulk of those who contributed to the fund have also promised donations of tea, which is money in another form, for opening the Indian tea market, and those who do not contribute do not give tea either. It is said that those very few gentlemen who say that they do not approve of the cess being levied in India, but suggest instead what really, when put in its true light, means that the burden on the 50 per cent. should be increased to further save the pockets of those who do not help at all—it is said that they do not contribute to the present funds. We can in this case understand their attitude, and it is perhaps only what might be expected. In relation to this matter I would like to express the opinion which one hears that the Committees of the Association have not done their full duty in not publishing the names of the concerns who do not subscribe to the funds, with the reasons which they give for not doing so opposite each. This would also be useful in letting us know how we stand. These, you will agree, are not the times for half-hearted measures.

Some time ago your Committee wrote out to Calcutta asking our friends there to make a representation to the Government of Bengal to suggest that it should collect the present very modest rate of contribution in the same manner as is done in Ceylon from everyone equally. This would bring up the annual amount available to only the comparatively small sum of about $2\frac{1}{2}$ lacs of rupees, or, say, £16,500, or to less than half the sum Messrs. Larkin and Hayter, of Toronto, state could be so profitably spent in America alone. Shortly after this was done we were informed that a Government Secretary was approached, who expressed the opinion that he didn't think it worth while for us to make such on

application to Government. Who sounded this Government official, who he was, and how it was done, we were not informed. It would be useful to know whether it was made through the one or two people in India who do not approve of the contribution being made a general one. Anyway, two or three years were allowed to pass and your Committee recently brought up the matter before the Calcutta Committee, who made another informal representation, and we were told that the Lieutenant-Governor himself had expressed his views to the effect that if there was a unanimous representation from all tea proprietors asking for this he would recommend the Government of India to grant our request and collect this small sum from everyone concerned, as is done in Ceylon. Well, our attitude in this matter being as it has been, and, so far as appearances go, still is, one of indifference, it is evident that however strongly the Lieutenant-Governor may be of opinion that something of the kind could be done and should be done to save the industry, he could not very well have said more than this until we had thoroughly made up our minds and put the matter before him in such a way as to make him believe we were in earnest, and that the big majority were convinced that this was a necessary measure and in the interests of all tea growers.

Although the Lieutenant-Governor's reply was passed on to us in this form, he knows as well as we know, that complete unanimity was never reached in Ceylon on this matter any more than it ever can be among Indian tea proprietors. We also know by recent events that in matters closely affecting our interests, we can stand together better than our friends in Ceylon. We have had evidence of this more than once recently, so if they obtained the required proportion of unanimity we can safely rely on it.

Gentlemen; if you display the same energy and ability you made use of in the pound draft agitation, yon will get this moderate cess contributed to by everyone Your case could not be stronger, and if you draw up a plainly put representation you can hardly fail to get three-fourths of those representing the area planted with tea in India to sign it and the Government to act upon it. The excuse that the Government in India is less willing to assist the tea industry to help itself than the Ceylon Government is, is not a fair way of speaking, and we have no grounds for assuming anything so unjust. I would suggest your asking for a moderate contribution, and making it for a terminable period of, say, five years, to be renewed again after that period on the reapplication of the large majority of tea-growers concerned (say two-thirds to three-fourths), which they would make if they found the result obtained by it a profitable one for them. A few years after you get it you will be able to buy at a low price and retail some millions of pounds annually to the people of India and also have introduced each year ten or fifteen million pounds of Indian green tea into America. We have already secured the supply of nearly the whole of the black tea there, but the introduction of green is more difficult and more expensive, and it is full time we had made a commencement It cannot be said we have done so yet. It was indeed hoped and preparations were made to do so last season by you, but the experts appointed in Calcutta were so hypercritical that practically no bounty was paid, and naturally, it not being a paying business at the best, next to no green tea was made.

This is a critical time, and time is passing. Too much has already been allowed to pass without anything at all adequate to meet the situation being done. I hope, therefore, that, as you are the only body which acts in the interests of Indian proprietors, you will make up your minds what is to be done, and will make a sustained effort to put this into full effect, and not be dissuaded from carrying out what you know should be done by allowing yourselves to be baffled or turned aside from it by some of the people there are in every community who invariably take up an attitude of objection and opposition however plain to the great majority the right course may be.

The Chairman then put the resolution, which was unanimously carried.

SIR SEYMOUR KING ELECTED CHAIRMAN.

The following motion was then proposed by the Chairman: "That a cordial vote of thanks be given to Sir H. Seymour King, M.P., for the valuable services he has rendered to the Association during the past year." The Chairman said that Sir H. King was always ready to give his advice and assistance in matters that were referred to him, and had taken a great deal of trouble in connection with the Labour Bill lately passed by the Indian Government, and the question of the tea duty. Only members of the Committee who were brought into contact with Sir H. King knew all the and attention he had given to these matters, and the Associa was fortunate in having him as their Chairman.

Mr. J. N. Stuart seconded this, and it was carried unanimo

The Chairman proposed that Sir H. Seymour King, M.P. elected as Chairman, and Messrs. Arthur Bryans and J. N. Stu Vice-Chairmen of the Association for the year 1901-1902.

In seconding the motion, Mr. R. B. Magor referred to the q tion of the proposed cess, and said that in his opinion the diffic of only having 50 per cent. of voluntary support would decide Government against taking the proposed action. If it were sible to get 85 per cent., or 90 per cent., things might be differ There were a great many persons who would contribute willi if it were made general; so that if that number were ascerta the Government could be approached with 50 per cent. alre subscribing and promises to willingly subscribe for anothe per cent.—the others did not matter. But to go to the author at present was, he thought, useless. He thought the Commi had done exceedingly well.

Mr. Hart pointed out what he considered a fallacy in Mr. Mag argument as to the compulsory cess. He stated that, roughly per cent. of the acreage under tea subscribed now, and that o 25 to 35 per cent. was represented by those who were willin subscribe if *all* did. These men would sign for a compulsory c and thus about 80 per cent. of the industry would, at any rate secured.

THE GENERAL COMMITTEE.

Surgeon-General De Renzy proposed, and Mr. Luttman John seconded, that the following gentlemen should form the Gen Committee during the current year:—

Messrs. D Cruickshank, G. W. Christison, J. S. Hulbert, Henderson, Robert Lyell, C. C. McLeod, F. A. Roberts, A Stanton, W. H. Verner, and C. W. Wallace.

The motion was carried.

Mr. C. C. McLeod proposed that a cordial vote of thanks sh be given to Mr. Cruickshank for presiding at the meeting and his able services during the year.

Mr Robert Hart seconded the motion, and it was supported Mr. Bryans, who, as one of the Committee, spoke as to the Ch man's untiring efforts for the Association.

The Chairman having briefly thanked the meeting, the ceedings terminated—*H. & C. Mail.*

COORG.

Proceedings of a Quarterly General Meeting held at Bamboo Club, on Wednesday, July 24th, 1901. PRESENT Messrs. E. Clarke, Geo. Davies, J. W. Finlayson, H. Grant, G. C. Garrett, A. H. Jackson, R. Kaundinya, J. Log F. Macrae, H. G. Parsons, H. T. Shaw, and A. Lamb *Honorary Secretary.*

Mr. Logan was voted to the chair.

The Minutes of the last Meeting being taken as read the Ba papers for the election of a second member of the Coorg Dist Fund Board were then opened, and Mr. Jackson was found have been elected.

U. P. A. S. I.—Mr. Lambert was appointed to attend the Ann Meeting as the delegate from South Coorg. The Agenda pa was then discussed, Messrs. Grant and Parsons being asked look through the Madras Labor Bill, and Mr. Hodgson's rema thereon and report any comments which they desired to mak the delegates.

Coffee-Stealing Prevention Act.—It was suggested that Peppe included under this Act.

Proposed Coffee Cess.—This question was strongly supported, the feeling was in favor of the cess being levied on the cwt., no the acreage of coffee as suggested by the Shevaroy Plant Association. Several other points of the Agenda paper were discussed, but nothing of importance was arrived at thereon.

It was proposed to bring forward the anomaly of the diver of the weights and measures at present in vogue throughout In and to ask the U. P. A. S. I. to take action and make enq thereon, with a view to the introduction of a uniform standar the same throughout the country.

Remission of Taxation.—This important question was brought forard, but as no formal resolution was forthcoming, it was allowed drop. This matter will again come up for consideration.

Railway.—A resolution to the effect that we hoped, when the final stimates and plans were rendered, our Government would strongly upport the early construction of a line through Coorg was carried nanimously. Proposed by Mr. Parsons, seconded by Mr. Lambert.

Financial State of the Association.—After a statement by the onorary Secretary and some discussion, it was decided to ontinue to pay the full subscription to the U. P. A. S. I., provided hat other Associations were prepared to do so.

General.—It was determined to ask Dr. Lehmann, Agricultural hemist to the Mysore State, to make his promised tour through oorg during September next.

The Honorary Secretary read correspondence from the Comissioner stating that the Government of India had sanctioned the ldition of an Entomologist to the present staff of the Imperial useum in Calcutta, to be employed in economic research work, ith special reference to insects injurious to agriculture, and lding that he would be glad to place any matter before the ntomologist they may desire.

A vote of thanks to the Chairman and Honorary Secretary rminated the Meeting.

The following papers were laid on the table :—

Proceedings of Annual General Meeting, Nilgiri Planters' Association.
" " Meeting of Nelliampathy Planters' Association.
" " " Wynaad Planters' Association.

BANGALORE, *th August*, 1901.

A. LAMBERT,
Honorary Secretary, C. P. A.

SHEVAROY.

Proceedings of the Monthly Committee Meeting of the hevaroy Planters' Association held in the Victoria Rooms, 1 p.m., on Monday, the 12th August, 1901. PRESENT :— lessrs. C. G. Lechler, E. Dickins, J. C. Large, Revs. J. M. empf, and M. Anderson, Messrs. C. Rahm, and R. Gomrtz, *Honorary Secretary*.

1. Read notice calling the Meeting.
2. Read letter from Mr. Foote (and accompaniments) enquiring nether any of the Planters here could find employment for r. Dalby, a Surveyor, who submits letters showing that he as employed by Government as Head Surveyor and was for me time in charge of the Survey of the Shevaroy Hills.
None of the Planters present knew of any suitable work for such man.
3. Read letter from Mr. Rhodes James forwarding a number of rculars setting forth the advantages of using refined saltpetre hich he wished distributed. Distributed them to those present.
4. Read Secretary's Circular, No. 58/01, forwarding letter from r. Sanderson asking him to send money to the Committee for tempting to stop the adulteration of coffee, and the Secretary's ply asking how much he wants and requesting him to incur no pense till further advice.
Resolved that this meeting approves of the proposal of the cretary.

The following letters were read and recorded :—

Circulars received from Secretary, U. P. A. S. I., during month of July, 1901 :—

No. 54/01. Correspondence between I. T. A. and Mr. Acworth about pushing sale of tea in India. Mr. Acworth suggests a Limited Company—capital Rs.50,000.

No. 56/01. Forwarding resolution of the U. P. A. S. I. "That the Report of the Sub-Committee appointed at the Annual General Meeting of the U. P. A. S. I. regarding (*a*) markets and the sale of coffee in India, and (*b*) Paris shop, be adopted."

No. 57/01. Government cannot spare the services of Dr. Watt and suggest employment of or reference to Dr. Nieville, Imperial Entomologist.

No. 53/R.U., dated 1st August, 1901. Report of Sub-Committee on pushing sales of coffee.

Books and papers received during the month.

Brazilian Review, dated June 4th, 11th, and 18th, 1901.
Proceedings of the Indian Tea Association, dated July 2nd, 16th, 25th, and 30th, 1901.
Planting Opinion, dated July 6th, 13th, 20th, and 27th and August 3rd, 1901.
Proceedings of the Wynaad and Central Travancore Planters' Association.
Copy of accounts of the U. P. A. S. I., Madras.
A few copies of leaflet *re* the value of refined saltpetre as a fertiliser.
Agricultural Ledgers, No. I. A new fodder grass for India.
Do. do. II. (Wheat).

YERCAUD, *13th August*, 1901.

ROBT. GOMPERTZ,
Honorary Secretary, S. P. A.

OLD "THREE-DECKERS."

H.M.S. "Rodney" ploughed the sea into two broad ribbons of white foam, as she gathered weigh on her journey out to the Cape of Good Hope, in days when the Boer War was undreamed of and ships like this old "three-decker" ruled the waves supreme.

Nine hundred men manned her, and prominent among them was Corporal Eccles, one of the "boys of the old brigade."

Corporal Eccles, who spins this yarn to me, is now hale and hearty at 65, and he has served Her Majesty 21 years as a Royal Marine—"soldier and sailor too."

"'Twould take me days to tell you all my experiences during the 21 years I spent on the old 'three-deckers,' H.M.S. 'Dragon,' 'Camellian,' and 'Rodney,'" said the bluff old Corporal, shifting his quid, "but that storm off the Cape in the 'Rodney' was the worst bit o' weather I ever experienced.

"Nine hundred men on board her, and 150 men disabled or wounded in the hurricane. Casks broke adrift from their lashings, thundering against the bulwarks until they started a plank. Sheep, caught by hills of incoming green seas, were swept down the hatches like corks in a mill-race.

"I carry a wound on my thigh to this day that was caused by a table hurled against me when scrambling into my hammock. Aye m' lad, a sailor-life is full of adventures and *tests of endurance*. During the whole 21 years of active service I never had a day's illness. That's a pretty good record!

"When my term was nearly completed, I was transferred to H.M.S. 'Pembroke.' She had just been taken off active service and was being fitted out for a work-ship. During the alterations, as she lay at her moorings dismantled, her ports wide open, I had to take my turn on sentry duty, rain or snow.

"Mid-winter it was, and the weather cold and raw.

"Pacing about 'tween decks," said the Corporal, "exposed to the worst of weathers, I caught a severe cold, and I couldn't shake it off. My record was broken.

"It settled on my chest, hard and fast, making my breathing awfully bad. I couldn't walk uphill. I was too wheezy. You could hear me breathing, like a tug, twenty yards off. I did manage to struggle through my work, though.

"Then indigestion set in. After eating, my stomach became swollen with wind, making *a disagreeable rumbling noise* and causing great pain. Several doctors tried to help me, but their medicine didn't hit the mark. I got worse and worse.

"The old 'Pembroke,' now lying at Chatham, is something like the hulk I then was. My cough shook my body through and through. For months I slept propped up with pillows. After a fit of coughing, perspiration rolled off me, soaking my linen. My body seemed on fire.

"Like the sharp stab of a cowardly knife did a long breath pain me. I got alarmed and nervous, for *things were looking ugly*.

"Though this day is the 20th of April, 1900," said the gallant Corporal, "I yet remember that aching pain that caught me in the back, on the right side, and that my bowels were very costive. Altogether, I was in a bad way. My wife, when the doctors had failed to help me—a sheer hulk—insisted on giving me Mother Seigel's Syrup, to pull me round.

"I had no faith in it, *because* it was an unprescribed medicine, but I *swear* by Seigel's *now*. My first bottle sharpened my appetite, improved my breathing, and loosened my cough.

"The improvement continued week by week until I was completly restored to health. Cough, pain, and weariness were *swept away like chaff before the wind.*"

"Corporal Eccles," of 9, Southill Road, Chatham, says Mr. H. Woolgar, "is personally known to me. Unquestionably, Seigel's Syrup saved his life. Now he is getting younger every day."

"Aye," continued the old seaman, who, by the way, is proud of his medal for "long service," "Mother Seigel's Syrup put life, power, and 'go' into my almost lifeless hulk. I am now sixty-five, still young and full of life and energy—all due, mark you, Sir, to Seigel's Syrup. If you think others will try its powers, you may publish this."

Such was the Corporal's stirring narrative, and its truth is vouched for by Mr. G. W. Philips, of the Chatham High Street, number 312, who writes: "I can verify every word that Mr. Eccles has said. Mother Seigel's Syrup has made a new man of him. *No man* acquainted with Mr. Eccles's case *could* doubt the efficacy of Mother Seigel's Syrup for all disorders of the stomach and liver."

H.M.S. "Rodney" no more ploughs the deep, but she lies in peace and quiet at Chatham; yet *you* who are sailing in stormy waters because there is trouble within you—mutiny among your digestive organs, in fact—can follow in the steps of the gallant Corporal, and can attain, in this way, to the same hale old age.

MARKET REPORT.

[*Per Mail advices of 26th July* 1901.]

COFFEE.

The London Commercial Record says:—The market since our last has been quiet, prices are generally about steady, while a little more has been paid for home trade Costa Ricas. The market has been well supplied, chiefly with Central American descriptions, and of these a good proportion found buyers, but the small quantity of East India offered met with scant attention and was mostly withdrawn. A further decline in the Brazilian exchange and continued heavy receipts in Rio and Santos have imparted a week tone to the market for "futures," and prices have given way a further 3d per cwt. At the close the tone is steadier. We quote:—

London ...	... Santos ...	Sept. delivery	... 27s 3d.
New York	... No. 7 Rio...	„	... 4·80 cents.
Hamburg...	... Santos ..	„	... 27 pf.
Havre ...	... Santos ...	„	... 33¾ francs.

The postponed sales of Coffee were held to-day, and passed off quietly without alteration in prices. A good deal bought in.

It is been decided to hold no auctions of Coffee from this day until Thursday, the 8th proximo.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ..	21,816	19,272	35,280	27,045
	Home Consumption.		Export.	
	1901.	1900	1901.	1900.
Tons ...	12,068	10,059	16.250	12,457

The preceding figures exhibit— Tons.

In the Imports an increase this year of ...	8,235
Home Consumption an increase of	2,009
Export an increase of	3,793
Stock an increase of	2,544

Auctions this week have passed off as under:—

EAST INDIA.—At the auctions 374 bags only partly sold, *viz.*:—*Coorg*, smalls, common 27s, peaberry 50s; *Wynaad*, smalls, common 30s to 31s 6d, good ordinary 34s to 36s, peaberry 33s. East India *Liberian.*—50 bags were bought in.

JAMAICA.—10 barrels bought in.

MOCHA.—167 half-frazils bought in.

COSTA RICA.—1,542 bags mostly sold, *viz.*, good smalls 39s 6d, good ordinary greenish 36s to 36s 6d, middling to good middling 44s to 55s 6d, good bold blue 63s to 70s, peaberry 32s to 65s.

GUATEMALA.—3,543 bags only partly sold, smalls 23s to 35s, ordinary brownish 30s 6d, good ordinary grayish to fine ordinary colory 35s to 38s 6d, low middling 39s to 41s, middling 46s to 48s, good middling blue 52s, peaberry 39s to 48s.

SALVADOR.—3,766 bags mostly sold, *viz.*, smalls 33s, ordi brownish 32s, good ordinary greenish 37s to 39s, low middlin middling 41s to 45s, peaberry 36s to 46s 6d.

NICARAGUA.—644 bags mostly sold, *viz.*, ordinary to good ordi foxy greenish 32s 6d to 34s, low middling to middling greenish to 45s, good middling greenish 53s, bold 70s to 97s, very fine l peaberry 34s to 66s.

COLOMBIAN.—1,228 bags mostly sold, *viz.*, smalls 24s to 35s, g ordinary to fine ordinary brownish 34s to 37s, low middling 38 39s 6d, good middling 45s 6d, bold 40s to 44s, fine smooth 63s peaberry 30s 6d to 30s 9d.

MEXICAN.—Of 105 bags offered 4 bags sold at 27s for pickings

HONDURAS.—44 bags mostly sold, pickings 20s, low middl brown 38s 6d, peaberry 40s.

GUAYAQUIL.—112 bags partly sold at 27s 6d for good ordi pale.

HAVRE, *July* 25.—Good average Santos July opened steady 33½f. and closed steady at 33¼f., September opened at 33¾f. closed at 33¾f., December opened at 34¼f. and closed at 3 March opened at 34¾f. and closed at 34¾f., May opened at 35 and closed at 35¼pf

HAMBURG, *July* 25.—Good average Santos July opened steady 26¾pf. and closed steady at 26¾pf., September opened at 27pf. closed at 27pf., December opened at 27¾pf. and closed at 27¾ March opened at 28½pf. and closed at 28¾pf., May opened at 2 and closed at 29pf.

NEW YORK, *July* 25.—Closing prices of No. 7 Rio were as follow

		July.	Aug.	Sept.	Oct.	N
July	24...	4·75	4·80	4·90	4·95	
July	23...	4·75	4·80	4·85	4·90	

TEA.

INDIAN.—Rather more was brought to auction, *viz.*, 9,600 packa of which 5,600 were New Season's, compared with 6,200 packa and 1,700 packages respectively on the 15th instant, and 10, packages, nearly all New Season's, last year.

Recent arrivals especially from Assam and the Dooars inclu some invoices of attractive character, which met with str competition, prices ruling in sellers' favour. There was on whole a better feeling apparent in which all descriptions partici ed, common leafy grades being wanted and saleable at a deci rise from the bottom point. Among the best results were Assam: Khobong Estate, A.F.T.Co., 210 packages, 1s 1¾d; Hok goorie Estate, A.F.T.C., 111 packages, and Samdang Est D.D.T.Co., 33 packages, 1s 1d; Budla Beta Estate, B.B.T. 65s packages, and Sookerating Estate, A.F.T.Co., 128 packa 1s 0¾d; Talup Estate, A.F.T.Co., 424 packages, 1s 0½d; Hi Estate, A.F.T.Co., 74 packages, and Beesakopi Estate, D.D.T. 47 packages, 1s per lb. Darjeeling: Thurbo Estate, B.D.T. 63 packages, 1s 0½d; Phoobsering Estate, Dar.T.Co., 97 packa 11¼d; Ging Estate, Dar.T.Co., 139 packages, and Thurzum Est 60 packages, 10½d per lb. Dooars: Bamandanga Estate, Doo T.Co., 74 packages, 10d per lb

For 8,200 packages on estate account 7⅞d per lb. was secu being the same as 8,400 packages realised at this time in 1900.

Telegrams from Calcutta state that 5a 8p per lb. was obtai there for 20,000 packages on the 19th instant. No mate change occurred, but the lower sorts tended upwards For to- a like quantity has been declared. Late cable advices indica considerable shortage in shipments to the United Kingdom

CEYLON.—Catalogues included 29,800 packages—12,900 packa on Tuesday and 16,900 packages on Thursday. In the week bef 31,000 packages were dealt with and 27,200 packages at corresponding date twelve months since.

Bidding was more general, and a larger proportion was dispo of under the hammer. Pekoe Souchongs and Pekoes up 5½d per lb. were again in request and generally dearer. Medi to fine kinds, particularly Broken Pekoes, showed a somew irregular market and quotations in many cases were maintained.

The average is 6½d per lb. On the 18th it was barely 6½d per and 7¼d per lb. in 1900.

JAVA.—In the absence of public sales there is nothing to rep

Deliveries.—The clearances of all tea (on which duty has b paid) from the London warehouses, as per official returns are, *viz.*

From 1st to 23rd July,	1901	...	...	11,515,620 lb
Do. do.	1900	...	...	11,315,010 „

During the week the following have been printed for sale by ublic auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	8,566	1,037	9,603
Ceylon ...	25,118	4,675	29,793
Java ...	—	—	—
Total ...	33,684	5,712	39,396

Also 1,466 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated July 26th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
01-1902	78,864	216,168	9,779
00-1901	45,587	191,202	5,959

,819 *pkgs.* INDIAN
,509 ,, CEYLON
— ,, JAVA
} Total 41,328 packages were offered in public auction this week.

INDIAN.—The market passed with a strong tendency, Teas for ice being a trifle dearer, and all other grades selling very eadily. 6,199 packages of New Season's Tea were brought rward, and included some good invoices from Assam; these met th fair competition and sold well.

Week's average of New Season's Tea sold on Garden Account, 1901, 75 pkgs., av. 8·58d. 1900, 8·445 pkgs., av. 7·72d.

New Season's Tea sold on Garden Account, 1st June to date, 1901, 375 pkgs., av. 7·29d. 1900, 25,023 pkgs., av. 7·13d.

CEYLON.—Tuesday's Public Auction comprised 12,847 packages, ost of the Teas selling at steady rates. The proportion withdrawn s not so large as during the last fortnight, and many of the as taken out were sold after sale at better prices. Thursday's le passed with animated competition at very strong prices, the ght improvement noticed last week being fully maintained for grades.

Average for week 6·56d., against 7·29d. same week, 1900.

Ceylon Tea sold on Garden Account, 1st Jan. to date, 707,327 pkgs., 6·57d. 1900, 717,131 pkgs., av. 7·24d.

JAVA.—Was not represented. 10,066 packages are advertised for e in Amsterdam on the 25th instant.

Bank Rate 3 per cent. Exchange on London three months' sight:— cutta 1/4$\frac{1}{16}$. Colombo 1/4$\frac{3}{32}$.

Comparative prices of Indian Tea in London.

		1901.	1900.	1899.	1898.
st.	(Fair ordinary, dark liquor)	3 d.	4½d.	5¼d.	3½d.
nnings.	(Red to brown, strong rough liquor)	3 d.	5 d.	6¼d.	3⅝d.
oken Tea.	(Brownish to blackish, strong liquor)	5½d.	6 d.	7¼d.	6 d.
r. Soug.	(Blackish greyish, useful liquor)	5⅝d.	7 d.	7½d.	6¼d.
toe.	(Greyish to blackish, some tip, useful liquor)	6¾d.	7¾d.	8 d.	7¼d.
r. Soug.	(Blackish greyish, inferior liquor)	4¼d.	5¾d.	6¼d.	5¼d.
toe.	(Blackish, greyish, some tip, inferior liquor)	4¾d.	6 d.	6¾d.	5½d.

Comparative prices of Ceylon Tea in London.

		1901.	1900.	1899.	1898.
toe Soug.	(Ordinary leaf, fair liquor)	5¼d.	6½d.	6⅝d.	6 d.
oe.	(Ordinary leaf, little twist fair liquor)	6 d	7 d.	7 d.	6⅜d.
oe Soug.	(Rather bold leaf, indifferent liquor)	4¼d.	5½d.	6¼d.	5¼d.
toe.	(Somewhat bold leaf indifferent liquor)	4½d.	6d.	6½d.	5⅝d.

COCOA.

There were no auctions on the 23rd instant and business privately been small, comprising 50 bags Bahia at 65s 6d, and 600 bags d red Arriba at 75s to 76s up to 77s 6d per cwt.

PEPPER.

BLACK.—A somewhat firmer feeling has been manifest this week, steady prices have been paid. Sales of fair Singapore have n made on the spot at 6d; for arrival 50 tons September-vember shipment have been sold at 6d to 6$\frac{7}{16}$d for September-vember shipment, closing with buyers at 6$\frac{1}{8}$d. At the auctions ags Tellicherry bought in at 6$\frac{1}{8}$d. Of 9 bags, etc., Ceylon ckets sold at 5$\frac{3}{8}$d for light shelly grayish.

epper firm to-day and dearer for Black; 50 tons Singapore , including September-November shipment at 6$\frac{3}{16}$d, an advance $\frac{1}{8}$d.

WHITE.—The market is quiet without alteration in values. On the spot small sales of fair Singapore at 9¼d, and fair Penang at 8⅝d. For arrival 50 tons have changed hands, *viz.*, Singapore April-June (s) at 9¼d. Penang July-September at 8$\frac{9}{16}$d, and August-October at 8½d to 8$\frac{9}{16}$d. None offered at auction this week.

GINGER.

Of *Jamaica*, 1,229 barrels, etc., offered and the bulk sold at 1s to 2s decline on qualities below 40s, whilst the better qualities were steady. The prices realised were as follows, *viz.*, fair to good at 45s 6d to 50s, middling to good middling 37s to 43s 6d. ordinary to good ordinary at 35s to 35s 6d, common shrivelled at 30s per cwt.

Of *African*, 38 bags offered and sold "without reserve" at 33s.

Cochin quiet 136 bags offered and bought in. Privately small sales have been made at 42s for bold bright rough Calicut and at 31s 6d for fair unassorted.

Of *Green*, 5 barrels offered and 2 sold at 7s per cwt.

CINCHONA.

At auction on Tuesday, says the *Chemist and Druggist*, the small supply of 2,125 packages was catalogued, and met with a fair demand, the buying being principally for America. About half of the above quantity changed hands at a decline of ¼d, the average unit being 1¾d, against 2d paid at the last London sale. Compared with the Amsterdam sale last week it is ⅛d better. The above offerings contained 4,500 kilos. quinine sulphate, against 24,000 kilos offered at Amsterdam last week.

The following were the quantities of bark offered and sold by the principal buyers:—

	Packages offered.	Packages sold.
East Indian Cinchona	1,003	745
South American (principally Soft Colombian)	628	39
Ceylon Cinchona	412	279
Java Cinchona	78	68
African Cinchona	4	4
	2,125	1,135

The approximate quantities of bark purchased by the principal buyers were as follows:—

	Lbs.
Agents for the American factories	101,500
Agents for the Brunswick factory	60,500
Agents for the Mannheim and Amsterdam factories ...	42,000
Agents for the Paris factory	32,500
Agents for the Frankfort and Stuttgart factories ...	9,700
Messrs. Howards & Sons	7,100
Agents for the Imperial factory	4,400
Druggists, Brokers, etc.	31,200
Total quantity sold ...	288,900
Bought in or withdrawn...	149,560
Total quantity offered ...	438,460

The prices paid were as follows:—

SOUTH AMERICAN.—Bolivian cultivated Calisaya fair quill, 9¾d to 10d. Soft Colombian, 557 packages, imported in 1882 and 1883, were bought in.

AFRICAN (WEST COAST).—Dull quill and chips, 4⅝d per lb.

JAVA.—Ledgeriana crushed stem, 10¼d; red original stem, 4½d per lb.

CEYLON.—Ledgeriana original stem chips and shavings, 7⅜d; hybrid original stem, 3¾d; hybrid root, 3⅝d. Officinalis, renewed chips and shavings, 7d to 9⅛d. Red stem chips and shavings, 1½d to 5⅜d per lb.

EAST INDIAN.—Ledgeriana chips and shavings, 4d to 6½d; stem and chips, 3¾d; broken quill and chips, 7d; and branch, at 2d to 3⅜d. Red chips and shavings, 2d to 7d; stem and chips, 2⅞d to 3⅞d; broken quill and chips, 3¼d to 3¾d. Crown original chips and shavings, 2¾d to 8⅝d; renewed, 8⅝d to 10½d; stem and chips, 2½d to 3¼d; broken quill and chips, 3d to 6½d; branch, 2d to 2⅛d per lb.

QUININE.

No alteration has been made in the maker's price, and it is not intended to make any change at present. In the second-hand market business has again been very quiet at about unchanged to steadier rates, small sales of good German sulphate having changed hands at 1s 1¾d. For December delivery 1s 2¼d has been paid, and there are sellers for October at 1s 2d.

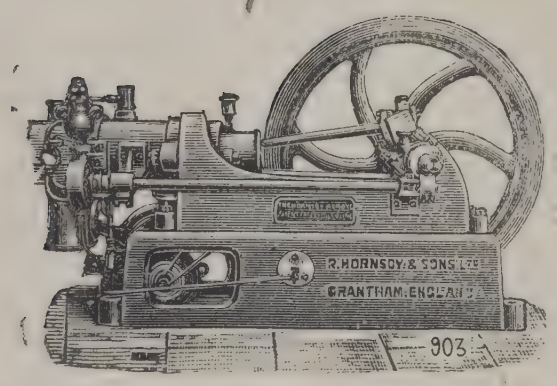
(AVERAGE FOR ALL INDIA 7·85d., JULY 26TH.)

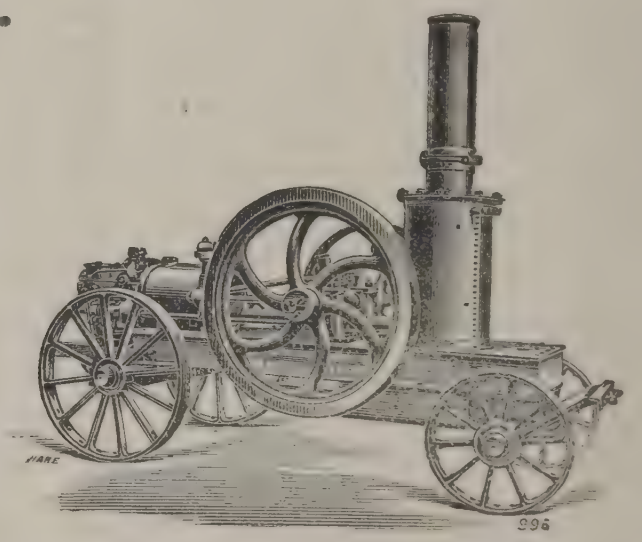
GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, and Vari	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	P
Neilgherry ...														
Curzon ...	50	6	...		29	5¾	21	6½	...	...	...	..	...	
Travancore ...	**923**	**6·20**												
Glenmore ...	150½c	5			93½c	4½ 4¾	54½c	6	...	...	1½c	2¾	2½c	
Kan Dev H Co. G	64½c	6¼	9½c	6¾	17½c	6¼	10½c	7	28½c	5¾	..	...	...	
„ Sevenmally ...	130	7⅓	31	8¼	44	7¼	20	9½	35	5¾	..	..	...	
Poonmudi T Co. B	123 p	5½	...	...	43	5½	34	6¼	22	4¾	10	4¾	14 p	3
„ Braemore ...	22	4¾	...		22	4¾	...	...	...	...	...	...	...	
„ Poonmudi ...	78 p	5¾	14	7½	35	5 6	7	6	18	5	1	3¼	3½c	
S T T Co Venture	146	6	...	...	65	6¼	50	6 7½	31	4¾	...	...	..	
Suriavalle ...	30½c	7¾	14½c	7¾ 10¾	7½c	7	..	...	9½c	5¼	...	...	...	
Trav T Est Co K K	180	6½	43	8¾ 9	57	5¾ 6	49	6¾ 7	29	4½		...	2	
Wynaad ...	**257**	**5·90**												
Chulika ...	36 p	7	17½c	7¾	19	6¾	...	...	...	..	...	..	...	
Erramaculla ...	86 p	6¼	...	...	48½c	7	21½c	7	17	5		...	...	
Perindotty ...	77 p	5¼	...	...	28	5	21½c	8	28	4½	...	...	...	
Wynaad T Co. Per...	58 p	5½	7	5¾	..	...	26½c	6½	19	5	6	4½	...	

HORNSBY-AKROYD OIL ENGINES.

SOLE AGENTS IN SOUTHERN INDIA

MASSEY & Co.





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(Single Cylinder.)—Subject to Revision without Notice.

ACTUAL OR BRAKE H. P.	1½	2½	3½	5	6½	8	9½	12½	16	20	25	32	40
Price without Water Vessel ... Rs.	1370	1580	1825	2185	2375	2815	3040	3745	4330	5035	6080	7600	9120
Extra for Water Vessel ... .. „	45	50	60	75	85	100	120	180	200	260	370	460	540
Extra for Standard connections to Water Vessel ...	35	40	45	50	53	55	60	100	100	150	200	240	300
Extra for Foundation Bolts	7	8	12	15	15	17	17	40	50	60	60	70	80
Extra for Exhaust Piping about 5 ft. to Silencer and 9 ft. to atmosphere	27	35	43	55	60	65	65	90	90	110	130	150	190
Extra for Pulley of list size	12	13	20	27	32	38	38	53	58	70	100	150	200
Extra for Self-Starter with Hand Pump ...	...		...	...	...	...	....	...	...	...	600	600	700

In Stock 3½, 6½, and 8 B. H. P. Engines.

Full Particulars and List of the Principal Users of these Engines on application.

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

OL. VI.] MADRAS, SATURDAY, AUGUST 24, 1901. [No. 34.

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ADVERTISEMENTS.—The charge for line advertisements is As. 4 per line for the first; As. 3 for the second, and As. 2 for the third and succeeding insertions. Five-line (or shorter) advertisements from Subscribers will be inserted for three issues for One Rupee; non-Subscribers will be charged Two Rupees.

DOMESTIC OCCURRENCE.—The fee for inserting a domestic occurrence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. O. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 30th instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad.

August 20th.—*Weather*—Rain continuous, but light; days generally overcast and gloomy. *Works*—Supplying about finished on most places. *Plant diseases*—Borer severe, but no leaf disease. *Crop prospects*—poor, a good many of the beans from the first blossom are falling. *Labour*—Abundant. *Health*—Good.

Coorg.

POLLI BETTA, 21*st August*.—*Weather*—Rainfall for week ended 17th 1·50 inch. Since monsoon very light. Benefiting coffee immensely, apparently, as it is looking fine. Growth of weeds tremendous. Borer campaign nearly over. Losses have been much larger than during recent years. *Labour*—Ample. All works making good progress. *Health*—Fair. Work on paddy-fields somewhat retarded.

FINANCIAL AND ECONOMIC SITUATION IN BRAZIL.

THE financial and economic situation in Brazil is very largely dependent upon coffee crops in that country and the prices realised for them in consuming markets. It is dependent also upon the course of Exchange, and this in its turn is intimately connected with the value of exports of the staple produce of the country. Brazilian coffee sways the coffee markets of the world, and in this manner the economic situation in Brazil has an interest for every producer of coffee in other parts of the world. Perhaps it was hardly necessary for us to preface thus a reference to a report on the financial and economic situation in Brazil by Mr. Acting Consul-General RHIND, yet it seemed desirable to give readers an explanation of the main reasons that have caused us to peruse this report with interest. It is by no means optimistic. We

must presume that it is fair and impartial. Of the Funding Loan it shows that the results achieved as a consequence of that loan are, in the main, that the decrease on previous responsibilities and the cash accumulated in London are stated to exceed in amount the new onus arising from the Funding Loan by £3,045,010. The country is said to have acquired the following immense advantages:—(1) an increase in value of paper currency to the amount of £16,000,000, in spite of a reduction of the paper in circulation from 786,000,000 milreis to 693,000,000 milreis; (2) average increase in value of 35 points in each gold bond of the foreign debt, representing an increase of assets to the holders of not less than £13,000,000; (3) the funding bonds quoted at 95 per cent.; (4) budgets showing surplus instead of the deficits that were formerly the rule. The improvement in the valuation of the fiduciary currency is incontestable, and Mr. RHIND remarks that the appreciation attained, in combination with the system applied in the collection of duties, more than balances, from the importer's point of view, the additional gold taxation now imposed.

The conditions referred to are naturally conducive to an extension of the import trade, but Mr. RHIND strikes a despondent note in his remark that "in contrast with the apparently flourishing condition of the public exchequer, it cannot be denied that there prevails a very general absence of prosperity among the community at large." This can only mean that there is a strong probability, if not a certain, that while the Government and a few among the public have benefited, the general community has suffered loss from the artificial buoying up of the milreis. Federal taxation has become very heavy; the system adopted by the Governments as well as the municipalities is described as not only exaggerated but irksome and discouraging to enterprise. Unfortunately, too, the necessity for increased taxation has shown itself simultaneously with a great local depreciation in the value of the national produce. Of this depreciation Mr. RHIND remarks that, strange as the statement may seem, it is in great measure due to the enhanced sterling value of the currency. As he says, it is not always realised that, although expenditure within the country has naturally to be liquidated in paper currency, the exports, which represent the marketable wealth of the community, are valued according to the sterling value on consuming markets. This is an elementary principle of currency economics, but it is often overlooked, and we might fairly question whether it was sufficiently appreciated by the Governments of Great Britain and India when the present currency policy of this country was first introduced. Indian producers of tea, coffee, etc., may find in their own experience of late years an imperfect parallel with the experience of the Brazilian coffee-planter, Mr. RHIND's account of which we are now about to summarise.

Writing in the Spring of the current year Mr. RHIND states:—"Coffee which at this period last year—was being sold at 15 milreis per 32 lbs. is now being sold at from 6 to 6½ milreis, while, at the same time, wages and other expenditure affecting cost of production naturally remain unchanged on a currency basis, which means that the producer finds his resources reduced by 50 per cent." The gravity of this, from the producer's outlook, is very apparent. Coffee is the vital element of Brazil's export trade, it is the commodity out of which the greater part of the population make their living. Even a large increase in outturn is no advantage, therefore, when prices fall so much that the total crop realises less than did previous smaller ones. The large stocks now on ha the abundant crop about to be harvested, and the opening of new land that is proceeding in Brazil and other countr preclude the hope of any permanent rise in values for s time to come. Mr. RHIND's remark about the stimulatio Brazilian import trade under the influence of the curre policy must not be lost sight of. In it we find a clue to w has puzzled many observers, *viz.*, the refusal of Brazi exchange to rise to 1s. 6d. when it has been mathematic demonstrated that that level *must* be reached. Whate course is eventually taken by the milreis—planters in I must not forget that their rivals in Brazil are pressing lower rail freights and various other reforms that would t to lessen the cost of placing their coffee on the consum markets of the world.

THE HOUSEHOLD PHYSICIAN.

In offering this useful work to our readers we offer th no "quack" guide to sure remedies for all diseases. book gives a comprehensive review of the anatomy and physiology of the human frame together with a vast amo of information regarding ailments and diseases, and the tr ment usually adopted. To planters, many of whom have medical aid near at hand, a book of this kind is invalua It is expressly written for "those so situated that medical will be remote," and its most prominent characteristic is thoroughness with which it describes the nature and working of the complex mechanism comprised in the hur frame. The advantage of this is that it facilitates a study causes, and the man who can discover these has alway better chance of curing disease than the man who can o note effects. From a minute description of the construct of the human ear to the management of a baby is a very w leap, but the book under notice covers very much wi ground than this, going even into the questions of ho drainage, clothing and bathing, exercise, etc. It dilates u the properties and uses of drugs, and is throughout writ in the simplest possible style so that it may be readily und standed of the people, even those that have no knowle of medicine. There are some fine plates in the book, many minor illustrations. At Rs.25 it is certainly as ch a bargain as any man could reasonably wish to have.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S.

Trade with Persia.

The following letter has been circulated by the Ben Chamber of Commerce, Calcutta, 14th August, 1901, for information of members of the Chamber and of the Ind Tea Association:—

To

THE SECRETARY,
Bengal Chamber of Commerce.

QUETTA, 16*th August*, 19

SIR,—The erection of a suitable building in Quetta for accommodation of merchants and others interested in the Nus Seistan trade route and the appointment of Khan Bahadur M Mohamed Taki Khan, an old and respected Government pensio with duties to safeguard the interests of traders arriving in Que and to aid them in disposing of their goods and making t purchases, has enabled me to put into practice a scheme I h

had under consideration, and to provide a small institute in tta where patterns of such goods as are in demand in Persia always, in future, be kept on view.

ne building selected is especially adapted to the purpose for ch it has been provided, as it is within the limits of the caravarai and is thus immediately in view of every trader arriving Quetta.

beg to request that you will favour me by requesting such mbers of your Chamber of Commerce as are interested in trade Persia to forward me, carriage paid, specimen patterns of goods they manufacture, taking care to label each pattern in glish, Urdu and Persian with the manufacturer's name in full, initial cost of each article per maund, bale, etc, as the case may the carriage to Quetta as well as any other incidental charges, such other information as can be compressed into a small e, and will prove of advantage to would-be purchasers

would request you to explain to the members of your Chamber ommerce that within a reasonable limit they cannot forward many patterns, as the requirements of Persian trade are as nerous as they are varied, and include such goods as tea, indigo, e-goods of every description and variety, iron-mongery, glass-e, cutlery, jewellery, watches, saddlery, leather goods of every cription, not excluding ladies' kid boots and shoes, glass-ware, er, cigarettes and tobacco, fancy goods, etc. In a caravan which ntly left Quetta were included, amongst other goods, iron steads, mincing machines, stained glass windows and bicycles.

would note that when calculating railway freights to Quetta, rebates on the freight of goods granted by the North-Western lway and other railway systems, should necessarily be duly sidered.

lessrs. McIver and McKenzie of Karachi and Mr. D McBean of Quetta Branch of the Punjab Bank are prepared to act as varding Agents.

would lastly beg you to give the widest possible circulation to letter.

J. WEBB WARE, Captain, I.S.C.,
Honorary Member, Karachi Chamber of Commerce,
Political Officer in charge of the Quetta-Seistan trade route.

COFFEE IN DISTANT LANDS.

XXXI.

Dutch Guiana.—The coffee crop in 1900 again showed a siderable falling-off. The Liberian variety is cultivated e, and the prices are so low, that on some plantations it is ng gradually replaced by cocoa. The crop for the year 196,431 kilos.

New Caledonia.—The cultivation and importation of fee is gradually increasing, the berry being of a superior lity already quoted in European markets. If local wers will only take more care with the preparation of the d, New Caledonian coffee will, says Mr. Consul Haggard, tainly soon rank high in the markets of the world.

North Borneo.—The Assistant Superintendent of Customs, rth Borneo, reports (1900) :—"Coffee, as in many other acent countries, seems to have seen its best days. It is to hoped for the sake of those now engaged in this production t good times may again come round." There was a decase of $10,195 in exports during the year.

Peru.—The low price of coffee is discouraging the cultiion of this product, and this is much to be regretted, as st of the coffee grown in Peru is of excellent quality. ny small estates in the Perene district have been abaned by the colonists and have reverted to the Peruvian rporation, from which the lands were held under certain ditions. The Peruvian Corporation have taken in hand managment of these estates with good results, as the crops now heavier. During 1899 only about 1,000 tons were orted. The exact quantity shipped during 1900 is not yet wn. According to data furnished by the manager of the ntral Railway, 1,324 tons of coffee were carried over that line during 1900, the greater part of which was, no doubt, exported. About 50 tons were also shipped from Salaverry.

Porto Rico.—Coffee, which in normal times is the principal of the three staples of the island, did not, owing to the great damage done to the plantations by the hurricane of August, 1899, yield, on an average of the whole island, one-fifth of an ordinary crop. Indeed many of the poorer plantations had no crop at all, through want of capital to clear up their smothered cultivations. The new tariff makes no change in coffee introduced into the United States, which was free before, therefore there has not been the stimulus of additional profit. The planters had not the means of raising money so easily as the sugar-growers to spend in clearing their wrecked gardens, and this inability, added to the damage to trees that nothing but time can cure, has resulted in the virtual failure of the crop, rendered doubly crushing by the growing descent in prices. Taking the medium of the years 1896 and 1897 as an average, the 1900 crop falls short to the extent of 46,868,000 lbs.

Java.—The coffee crop in 1900 suffered both in quantity and quality owing to the excessive and long-continued rainfall. In consequence of the enormous yield in Brazil, prices reached such a point that even where large production per acre was obtained, it was impossible to work profitably. Several lands have already been sold for merely nominal sums and others are being offered for sale. The prospects for 1901 are very gloomy as the majority of estates expect only a minimum outturn. The Government crop was small.

Costa Rica.—Coffee is still the staple product of Costa Rica and the most important article of export. The year 1900 was a good one for exporters, the average price paid by them to the growers for the berry in fruit being only £1 10s. per fanega (400 litres), as against £1 11s 2d. per fanega in 1899, while the prices realised abroad were higher by $1\frac{1}{4}$d. per lb., the actual figures being : 1899, net average value, $4\frac{1}{2}$d. per lb. ; 1900, net average value, $5\frac{3}{4}$d. per lb. It is true that, owing to the fall in exchange, the colon was worth more in 1900 than the peso in 1899, but the principal decline did not take place until April, by which time most of the coffee drafts had been negotiated. Growers complain, however, that at these prices coffee barely pays expenses, and it is possible that, if there is no improvement in the near future, many of the older farms and also those in inferior soil will be abandoned. This is even more probable now, as so far from any prospect of an advance in price appearances all point the other way. The improvement in the coffee markets abroad, mentioned above, was only temporary, and the prices so far obtained for this year's (1901) crop are, in many instances, as much as £1 per cwt. less than those of the preceding year. The latest British Consular Report contains the following tabular statements :—

Export during the year 1900.

Articles.		Quantity.	Value.
Coffee	... Kilos. ...	16,100,905	£760,038

Coffee exported of crop 1899-1900.

Country.	Number of Bags.	Weight. Kilos.
United Kingdom ...	202,367	9,562,334
United States ...	70,722	4,055,496
Germany	35,076	1,819,581
France	9,830	584,456
Other countries ...	3,249	193,024
Total ...	321,244	16,214,891

Note.—The difference between the weights of coffee in these tables is explained by the fact that the latter refers to the crop 1899-1900 and the former to the year 1900.

Colombia.—Exports of Coffee from Colombia during 1900 were valued at £270,876, as against £508,820 in 1899.* *Apropos* of this we may refer to the terrible fluctuations of Colombia Exchange. It appears from a British Consular Report that the rate of exchange on December 31, 1899, was 550 per cent., whilst on December 31, 1900, it was 2.000 per cent. for American gold, and 50 points less for British gold; thus in 1899 a dollar was worth 5 dol. 50c. paper, and £1 sterling 27 dol. 50c. paper, whilst in 1900 American dollars were worth 20 dol. paper, and £1 sterling 97 dol. 50c. paper. The depreciated rupee can still knock spots out of the depreciated Colombian currency unit known by courtesy as a "dollar."

The following table shows what leaps it is possible for the above currency to take along the easy road of Avernus :—

Rates of Exchange on British gold during the years 1900-1899.

MONTH.	Per Cent. 1900.	1899.
January	550	240
February	700	240
March	1,100	240
April	1,100	243
May	1,552	250
June	1,300	300
July	1,500	330
August	1,620	410
September	1,550	470
October	1,500	410
November	1,650	730
December	1,950	550

Reunion.—Exports are decreasing, though there is not room for a much greater falling off than occurred last year. Only 14½ tons were shipped in 1899, and but 10 tons in 1900. The following table of wages may interest some of our readers :—

DESCRIPTION.		From £ s. d.	To £ s. d.
Coolies or engaged labourers—			
Servants, cooks, etc.	Per month....	1 0 0	1 8 0
Skilled labour in mills, etc	„	1 4 0	2 8 0
Agricultural labourers	„	0 16 0	1 4 0
Boys and girls	„	0 8 0	0 16 0
Free labourers—			
Servants, cooks, etc.	„	1 4 0	2 0 0
Carpenters, tinsmiths, etc.	Per day	0 2 3	0 3 11
Agricultural labour	„	0 1 3	0 1 10
Unskilled labour	„	0 0 10	0 1 3

NOTES.

St. Petersburg Exhibition, 1902. The arrangements for the British Exhibition in St. Petersburg are said to be going on very leisurely.

Labour in Brazil. More trouble is reported at Casa Branca between Planters and "Colonists," and the Italian Consul has been called in to pacify his aggrieved compatriots.

The Indian Tea Crop. The Indian tea crop is believed, from statistics privately compiled, to have been ten million lbs. less than last year at the end of July, and the probabilities point to a still further deficiency.

Silk in Brazil. The *Brazilian Review* observes :—"A Syrian, named Solomon Bufarah, is doing wonders at Santa Rita in the silkworm line. He has already planted a large area with mulberry trees and is going to exhibit cocoons and silk from his estate at S. Paulo."

The London Tea Market. Telegraphic advices, dated the 1 instant, from London report that general tone of Ceylon tea is firm, and there is good comp tion for Broken Pekoe as well as Pekoe and Orange Pek prices being somewhat higher ; while Pekoe Souchongs firm and steady.

Amsterdam Bark Market. The exports of Java bark July were 1,228,000 Amsterdam l against 629,000 Amsterdam lbs. last year, and 940,000 A sterdam lbs. in 1899. The total for the seven months 6,376,000 Amsterdam lbs., against 4,729,000 Amsterdam l last year, and 6,034,000 Amsterdam lbs. in 1899.

Java Quinine. At the auction of quinine at Ba via on July 24 2,100 kilos. (73,3 oz.) Ed. II sold at an average of 21½fl. per kilo. (about eq to 8½c. Amsterdam unit). At the previous auction on June an average of 23½fl. per kilo. was paid for this quali The next auction to be held at Batavia will take place September 5.

Coffee Imports into Ceylon. The *Ceylon Observer* laments taste of some of the people on island in that over a million pou of coffee is still consumed there annually. "Why not dri tea instead," asks our contemporary. As Ceylon draws m of her coffee from India, we are rather pleased to see that is still a consumer of that commodity, are if only a small o

Calcutta Tea Sales. At Friday's auctions 14,400 pa ages were offered, the select being good and above average, although in same cases qual has fallen away from the best. Darjilings and Assams s irregularly at lower rates, other sorts remaining about same as last week with an easier tendency. The demand Bombay and Gulfs was better.

Coffee. According to the *Rio News*, David B. Reeder, of Chicago, c demns the habitual use of coffee as harmful, and his opini is supported by the *Journal of the American Medical Assoc tion.* Coffee is said to produce serious nervous disorde and is considered by some physicians to have a worse eff than alcohol. It is urged that Americans consume too mu coffee. They certainly consume too little *Indian* coffee, that is a curable complaint.

The London Tea Market. Cable advices state that 25,0 packages Indian teas were offer last week and sold 23,000 packages, average 8¾d. Comm steady, and fine qualities firm. Of Ceylon teas there w offered 31,000 packages, and sold 28,000 packages. Genera firm. Fine qualities very firm and in some cases rath higher. P. Souchong.—4½d. Average price.—6⅝d. Ceyl telegraphs that only 71,750,000 lbs. have been shipp to Great Britain to date, against 77,314,000 lbs. to same d last year.

The American Tea Campaign. The agenda paper of the n meeting of the Ceylon Chamber Commerce refers to a resolution

* The number of bags shipped in 1900 was 86,917, as against 254,410 in 1899.

ch notice has been given by Sir Wm. Mitchell and which o be seconded by Mr. F. M. Mackwood. It runs as ows :—"That in the opinion of this Chamber it is not irable to continue expenditure in America on the existing e by the 'Thirty Committee,' and they recommend that h expenditure be modified and a portion of the funds erted towards efforts being made in other directions."

Brazilian Paper urrency.

The *Brazilian Review* has a 'light' way of touching upon things. It says :—"There is in America an i-expansionist millionaire who smokes like a furnace and, how his principle, lights his cigars with 100 dollar notes ! only we had a few of his kind, or could induce him to end his practice to this country, there would be an end he crisis in no time. At the rate of only 50 cigars a , he would get through our paper money comfortably in years, and if he were in a hurry might take on assistants."

ee in the U. S.

Mild sorts are quiet and in buyers' favour, says the *American Grocer*. od Cucuta, 7¾@8c, and washed at 8@11c ; Padang Inte-, 15@18c, with fancy mats at 24@28c, and extra fine lots 2c higher ; Mocha, 15@19c, and very fancy higher ; gota, washed, 9@13 ; Bucaramanga, washed, 9@12½c ; tral American, best grades, 8@12½c for invoices. C. E. kford, San Francisco, Cal., reports stock of Central erican in first hands on July 6 of 93,640 bags, against 742 bags in 1900. Costa Rica, 11½@14c for prime to cy washed ; Guatemala and Mexican, good to fancy hed, 9¼@14½c ; Nicaragua, fair to fancy washed, 8½@14c.

in the U. S.

The *American Grocer* of 17th ultimo, says :—There is some little rest shown in new crop Japan, the best grades of which at 23 @ 25c in bond, and lower grades down to 17½c in d. New crop Congou, to arrive, offered at 10c in bond. v crop Formosa not here, but sales on sample reported private price to arrive. To-day at noon the Montgomery ction and Commission Company hold their regular auction of teas, comprising 6,534 packages, as follows: 301 pack-s Moyune, 155 boxes Pingsuey, 177 half-chests Japan, 388 -chests Congou, 267 packages India, Java, and Ceylon loe, 50 boxes scented Orange Pekoes, and 5,198 half-chests boxes Formosa.

ee and Brazilian xchange.

We read in a Home paper :—Coffee auctions have only been held on one day this week, when a very l demand was experienced for the somewhat limited plies offered ; prices of nearly all growths were 1s. to 2s. cwt. and privately more free buying is noticeable than of . "Futures" of Brazil rose 1s. per cwt. on an advance Exchange, but subsequently this improvement was almost lly lost through heavy receipts and declining Exchange, ough a slight recovery took place yesterday on Continental ing orders. This morning Santos August delivery is ted 27s. 9d, September 28s., and December 28s. 6s. per

Quality Indian eens.

Says the *Canadian Grocer* of the 18th ultimo, a feature of the tea trade in Toronto is the samples of Indian n teas that are being submitted to the trade this week. They are from the Dooars and Sylhet districts, and they are being offered at a most favourable price. But their chief recommendation is their quality. Those who have tested them say they are beautiful in style, and in cup quality exceptionally good. One dealer declares they are the finest he ever saw. Hitherto green teas of India shown here have not been properly made. But, however excellent the quality of the Indian teas may be, the attention of the public must be drawn to them if they are to become an important factor in the market, either in Canada or the United States.

Indian Tea Markets Expansion Commission.

Messrs. Andrew Yule & Co. state that they want subscription of tea fit for human consumption. They suggested a sound Pekoe Souchong, as more suitable for the purposes of the Commission than dust or Fannings. In trade parlance "Common" is a term applied to the lower grades. A common tea may at the same time be a good tea. It was not in their opinion, common tea which flooded the market last year, but coarse plucked badly made "rubbish," which, buyers said, was fit only for manure. They think the sooner such stuff becomes unsaleable the better for the industry, and they certainly would not attempt to distribute it among the Indian public. So far subscribers have sent them the class of tea asked for.

Coffee in London.

This week has most likely seen the last of the heavy auctions until next season, says the *Produce Markets' Review* of 27th ultimo, as, so far as can be ascertained, all the principal Central American crops have been received, and have at once been offered, so that the amount in importers' hands unsold is less than has been the case at this period for many years. The result of pressing supplies forward so rapidly has been to unduly depress prices, and now that the pressure to sell is over there should be a decided recovery in values. Already there are indications that dealers on the Continent are short of medium coffees, and orders have been more general than for a long time. Home trade sorts have also been more inquired for, and are often 1s. to 2s. dearer. In the terminal market quotations tended downwards until yesterday when a recovery of nearly 1s. took place, and the business transacted was larger than had been the case for many weeks past.

The Consumption of Coffee.

One-half of the world's production of coffee berries is brought to the United States, says *Bradstreets*. Americans are the greatest coffee drinkers on the face of the globe now, and every year the consumption of coffee is increasing here. Last year it was more than 80,000,000 pounds for the whole country, or more than 10½ pounds a head of the population. Germany and France together only consumed half as much coffee. Germany less than 6¼ pounds a head and France only 4½ pounds per capita. The United Kingdom used little more than half a pound of the berries per head of the population, but over there they made up for it by drinking more tea than any other nation. More than a million dollars is sent out of the United States every week in payment for coffee. South and Central American countries, which supply us with more than 6,000,000 pounds of coffee a year, get most of the money. Porto Rico, Java, and the Philippines get almost all the rest, but a little goes to Hawaii. Last year the total value of the coffee imported into the United States was about $60,000,000, and that was

less than for several years, because the import price of coffee has fallen about one-half.

Tea in Hamburg.

The season 1900 was, upon the whole, not favourable for the tea trade, and satisfactory relations between supply and demand could not be maintained for this article. The British Consul-General reports that the accumulation of large stocks of tea, arising partly from the increase in the import duty in the United Kingdom and partly also from a mistaken estimate of the probable effects of the troubles in China upon the trade in this article, had a depressing effect upon the tea market, and it was only in the superior sorts that it was possible to do a steady business. For Souchongs there was a fair demand, as well as for Congous, though large stocks remained on hand of some sorts of the latter at the end of the year. Canton and Macao teas are stated to have been of such miserable quality that only the very best sorts were able to find a market, whilst even for these, few orders were executed without complaints being made regarding quality. The disturbances in Northern China appear to have had practically no effect upon the gathering of last year's crop and its transport to the coast for shipment, though prices for green China teas from the district mentioned were rather higher than usual. The consumption of Indian and Ceylon teas is increasing in Germany, but only at a very slow rate.

Quality of Cardamoms.

Messrs. R. C. Cowley and J. P. Calford have made investigations into the quality of cardamoms and have aimed at the following results :—

	Malabar.	Mysore.	Mangalore.
Number of fruits in 10 gmes. ...	80	55	45
Percentage proportion of pericarp.	30	25	20
Percentage proportion of seed ...	70 { dark 57 / light 13 }	75	80
Percentage of ash from dark seed..	5	3·3	2·9
Percentage of ash from light seed.	8 5 to 9	4·5	—
Percentage of ash from pericarp...	13	7·1	7·6

They say that lime predominated in the pericarps of all varieties to such an extent that an admixture of 20 per cent. of pericarp with seed would be readily distinguished by precipitation as oxalate from acetic acid solution of ash. Two-thirds the ash of Malabar pericarps is soluble in acetic acid, but of the seed ash less than one-half is soluble, and this portion is mainly potassium salts. Manganese and iron are present in all varieties, but in Mysores the proportion is very small. Cobalt was not found. It is suggested that the yield of volatile oil might be a useful test. (1) The conclude that an ash determination of the seed is *per se* of questionable value as an index of quality. (2) The mineral constituents are not constant. (3) The large proportion of lime in pericarps is characteristic of all varieties. (4) The ash percentage of light-coloured seed is always higher than that of dark because of the imperfect development of organic matter. The reference to lime is somewhat astonishing in the face of the general deficiency of this ingredient in South Indian soils.

The Tea Service from Chittagong.

The Board of Directors of the Assam-Bengal Railway have now concluded arrangements with the Clan Line of steamers for a fortnightly service of steamers from the port of Chittagong in co-operation with the plan interested in the development of this route. An agreem has been concluded by which the planters guarantee a m mum fortnightly shipment of 500 tons of tea by each steam The first steamer to leave the port was the *Clan Menz* which took away over 13,000 chests of tea, and it has b arranged that two more steamers are to sail from the p during the present month, it is probable that this route be largely resorted to in future, as the tea is conveyed f the heart of the tea districts of Sylhet and Cachar right alo side the steamer, the Assam-Bengal Railway having c structed sidings from the Chittagong station to the port that the trains carrying the tea go direct to the port, and placed in commodious goods sheds on the jetty pending arrival of the steamer. The jetty is fitted with the la pattern of hydraulic cranes, so, that the cargo can be wor very rapidly. The great advantage of the Chittagong ro for tea to be shipped direct to London is that the te carried direct to the seaboard without any transhipment t minimising the risk of any damage in such a wet country Assam ; and there are no charges incurred for conveying tea from the terminal station to the docks, as in Calcu At present the rate of freight is five shillings per ton over Calcutta rates, but this is merely a temporary arrangem and subject to revision should the success of the route established.

GENERAL ARTICLES.

THE BRITISH EXHIBITION IN ST. PETERSBU

ITS VALUE TO THE TEA-GROWER.

This exhibition has not yet aroused the attention it deserve this country, and on that account it is fortunate that circumsta will probably prevent its being opened till next season. For t is no question of its importance to British producers and ma facturers as a means of bringing before the people of Ru commodities which we in Great Britain and the Colonies make they require. In particular the exhibition will be the most fav able occasion yet offered of bringing Indian and Ceylon teas to notice of Russian consumers. Already there is a rapidly incr ing trade done in tea between India, Ceylon, and Russia, but t is ample room for a large development of consumption of Brit grown teas in the Tzar's dominions, and it is to be hoped producers and merchants will bestir themselves to take advantage of the opportunities presented by the exhibition. scheme was originally orgainised by the Countess Schouvaloff, obtained the interest of the Tzarina from the very start in success. Count V. N. Lamsdorf, Minister of Foreign Affairs, up the project, and a strong Russian Committee was at once for with an Advisory Committee in London to assist. The Tzarin is understood, has a great desire to foster the developmen British trade in Russia, and hopes by means of this exhibitio draw the two nations into a close bond of commercial interest, so advance the interests of peace. Germany, Hungary, Fra and Switzerland are all steadily pushing their way in Russia, Russia is willing enough to increase her trade with us also, conclusively proved by the efforts of the Russian Governmen Glasgow this Summer, and the splendid display it is making at exhibition in that city. Mr. Renton has been instructed by Thirty Committee in Ceylon to make provision for the Colo representation in St. Petersburg, and a final agreement betw him on behalf of Ceylon on the one hand and the Russian C mittee on the other was sent off to St. Petersburg for signa a few days ago. If planters co-operate with him as they ou Ceylon should make a far better display of its staple produc the Tauride Palace in St. Petersburg next year than it did Summer at Paris. The Ceylon Court at the Paris Exhibi though very fine from an artistic point of view and an excel representation of the Colony's gems, natural history and picture

activeness, was not a good advertisement of its commerce. had not the prominence it ought to have had as the great ıstry of the island, and we venture to say that had the commer- aspect of Ceylon been more studied a much greater result as he consumption of Ceylon teas in France would have followed. he Tauride Palace, lent by the Tzarina for the exhibition, is a dsome building, surrounded with spacious grounds. It has been nd, however, that none of the entrances are large enough to it some of the British machinery, and consequently it has been ded to build two annexes in the grounds connected with the ace by covered ways. The main building will be kept for ibits other than machinery. By the time the annexes are ready, ever, it is expected the Baltic will be closed, and as Spring, n ships would be able to carry freight once more to Russia is dead season at St. Petersburg and everyone is out of town, it is ed the exhibition may have to be postponed till the early umn of 1902. The delay will not, however, be too long for in- ling exhibitors and will allow tea exhibitors in particular to ect some of the errors that weakened their success in Paris. example, all directions on tea packets ought to be in Russian well as in English. The failure to have the instructions for king tea on the sample tins at Paris printed in French as well as glish was a noticeable blunder at several of the tea stalls. It is e that tea making is understood in Russia while it is not in nce. Still attention to such small details spells success. A e display of photographs of tea estates and work at the factories ht be shown with advantage in Russia and tea served in the sian fashion ought to be a distinct feature at the Ceylon sec- of the St. Petersburg exhibition. Other suggestions will no bt occur to Mr. Renton and the Ceylon planters, ere the time sending in exhibits, and we trust that the exhibition in the ride Palace will prove an immense impetus to the growing trade ween Ceylon and Russia.—*Tea.*

HAT A PROTECTIVE TARIFF DOES FOR THE UNITED STATES.

Apropos of the current discussion anent Differential Duties quote the following from the *American Grocer:*—

he following table, from the annual report of the American n and Steel Association, shows the production of tinplate and neplate in the United States during each calendar year from 2 to 1900:

	Long tons.		Long tons.
2	18,303	1897	256,598
3	55,182	1898	326,915
4	74,260	1899	360,875
5	113,666	1900	302,655
6	160,362		

he following table shows the imports of tinplate into the United tes in each calendar year from 1890 to 1900:

	Tons.			Tons.	
0 ...	329,425	$23,670,158	1896 ...	119,171	$6,140,101
1 ...	327,882	25,900,305	1897 ...	83,351	4,366,828
2 ...	268,472	17,102,487	1898 ...	66,775	3,311,658
3 ...	253,155	15,559,423	1899 ...	58,915	3,738,567
4 ...	215,068	12,053,167	1900 ...	60,318	4,617,813
5 ...	219,545	11,482,380			

he following table shows the exports of tinplate from the ited States in the ten months ending with April, 1899, 1900, 1901, respectively:

	Quantity exported. Pounds.		Quantity exported. Pounds.
9	183,955	1901	1,306,100
0	275,900		

n 1890-92, the tariff-for-revenue advocates and apostles of free de ridiculed the attempt to establish a tinplate industry in this ntry. No end of ridicule was hurled against the infant industry l its advocates. The above record tells a wonderful story. The ne production in 1900 was within 26,780 tons as large as the al imports in 1890. The industry has given employment to an ny of men, and been one factor in making the present era of sperity. And now the United States begins to make a record exports of tinplate, and probably in a few years will sell the ited Kingdom a good part, if not all, its requirements.

CULTIVATION OF COCOA IN THE WEST INDIES.

To the active young man possessed of a limited amount of capital who is looking for an occupation as well as an investment, in the Lesser Antilles or in many parts of Venezuela, the cultivation of cocoa is at the present time the most inviting of the agricultural pursuits. The island of Trinidad, which is the one most familiar to the writer, produces cocoa of a quality second to none, and only equalled by that grown in the vicinity of Caracas, and always brings the highest price in the London market. Considerable patience is required to grow it from the seedlings, as it takes five or six years of cultivation before there is a harvest worth mentioning, and seven or eight years before a full crop can be realized, but when the trees are once full grown they will continue to bear fruit for an almost indefinite time.

Cocoa has been grown on this island as early as 1700, in considerable quantities, and there is so much of its area under cocoa cultivation that it is always possible to purchase bearing plantations at a price that would make a paying investment for the man who will give his own time to the management. Want of proper care seems to be the cause of more failures than the lack of the trees to produce paying quantities, or the market price of the product.

The cocoa tree seems to flourish best in the rich and well-watered soil along the banks of the many ravines that traverse the uplands of the island. where they are more or less protected from the violent storms. The small plants are reared in nursery grounds until they are ten or twelve inches high, when they are planted in rows like a northern fruit orchard. The cocoa tree must always be protected from the powerful rays of the tropical sun, that seems to blast the fruit. When young, they are shaded by growing bananas or plantains adjacent to the young tree; these grow very rapidly and furnish the required protection, as well as a source of some profit, while the cocoa is too small to bear. But it is necessary to provide for a future shade—for the cocoa after three or four years outgrows the banana—and for this purpose a tree known as the "Bois Immortel" (sometimes called the "Mother of the Cocoa") is planted at the same time as the cocoa tree; this is a tall tree with high and spreading branches that form a sort of canopy over the entire cocoa plantation and give it the required shade, making it resemble an open forest. The coffee tree, which is much smaller than the cocoa, is often grown in small quantities among the cocoa.

The cultivation of cocoa consists largely of draining the land, keeping down the undergrowth of bush and weeds, and trimming the trees. The flowers occur in clusters on the main branches and on the trunks of the trees, usually only one of each cluster reaching maturity. The fruit is a hard pod six or seven inches long, resembling a cucumber, growing from the trunk or large branches, and looks very much as though it were artificially attached. Buds, blossoms, and fruit, in all stages, occur side by side, and ripened fruit is harvested at all times of the year. The main crop, however, matures in the dry season and is usually harvested in February; only small quantities ripening during the remainder of the year.

The pods each contain five rows of seeds or beans, quite similar to a large, thick Lima bean, embedded in a pink, acid pulp. These seeds are the cocoa beans of commerce. The harvesting consists of cutting off the mature pods by means of a knife on a long bamboo pole, gathering them into heaps on the ground, where they are allowed to lie for about twenty-four hours. They are then cut open with a cutlass, the seeds and pulp coming out in a mass; these are carried to the dry-house. The dry-house consists of a smooth, tight floor, or platform, set on posts at a height of four or five feet above the ground to allow a free circulation. A light iron trail is spiked on each side near the edge and extending one-half the length of the floor beyond each end: a corrugated iron roof, with its eaves level with the floor, covers the platform. This is carried on a frame, divided in the middle of the floor, mounted on small car wheels travelling on the rails. The drying of the beans is accomplished on this floor by spreading them over it and exposing them to the sun. The roofs are to protect them from the rain and dews, and are kept wheeled back on the extended tracks when the sun is shining. As soon as the beans reach the dry-house, they are placed in the "sweat-box" or pit, where they are closed up tight and allowed to ferment for some time. This process requires very careful attention to prevent the temperature from getting too high and to stop the fermentation at the proper time to insure the proper flavor, as well as the fitness for the preservation of the beans.

The next process is the drying, which is accomplished by spreading the beans in a layer over the platform and drying them in the sun. Labourers are kept constantly stirring them, while exposed to the sun, with a wooden rake, so that they will dry evenly. Each morning, during the early stages of the drying process, the beans are gathered into a heap in the middle of the floor and given a thorough mixing. This is sometimes accomplished by the labourers mixing and kneading them by treading them with their bare feet. This is known as "dancing the cocoa" and renders the beans smooth and uniform in color. It usually requires ten days or two weeks to finish the drying, depending on the weather; a great many attempts have been made to dry the beans artificially with more or less satisfactory results, but no general satisfactory drier has yet been designed, and the open dry-houses are in general use throughout the island. It only remains, however, for some ingenious mind to make a careful study of the requirements. The most difficult problem seems to be to get an artificial drier that will give the proper color to the dried beans—the brick-red color, and the property of retaining it is a very important feature in the cocoa market. The dried beans, when ready for market, are put in canvas bags holding about 150 pounds, and the name of the plantation stenciled on the bags, these names or brands at times becoming very prominent in the market for the quality of cocoa the plantation is reputed to produce.

The manufacturing, which is invariably done in northern factories, consists of roasting the beans in a revolving cylinder; this develops the aroma and fits them for crushing. After the beans are crushed they are screened to separate the "nibs," or crushed nuts, from the shells. The nibs are then ground to a fine meal; this is put in sacks and put in a powerful press, where it is subjected to heat and pressure, and the fat, known as "cocoa butter," is squeezed out, and the hard substance left in the sack has only to be broken or powdered to become the pure chocolate, and this more or less adulterated is the chocolate of commerce.—*Scientific American.*

RUBBER PLANTATION ON THE SEKONG RIVER.

Mr. Henry Walker writes to the *British North Borneo Herald*:—

On the 28th May I accompanied Mr. W. E. Roberts the General Manager of the North Borneo Trading Co., to the Pará rubber plantation opened by Mr. Roberts for the above Company at the end of 1898 making the age of the oldest trees a little over 2½ years. Mr. Roberts has imported in all about 40,000 plants besides seed which last was a failure. About 30,000 plants are now living. The girth of the older ones at three feet above the ground average about 7½ inches and the height must be 20 to 25 feet. I walked round the whole plantation which lies on the right bank and extends up the river being rather longer than broad. The soil is a good free soil. remarkably friable when exposed to the sun. Some drains had to be cut but, generally speaking, the ground is free from wet. I remarked there were no vacancies among the older trees which Mr. Roberts said was to be accounted for by careful supplying from the outset. I did not see a single sickly tree. I noted trees without leaves but new branchlets were forming and the stem was quite healthy. Among the latter plantings I noted some cuttings which I was told do well. Very little damage has resulted from deer which are scared away at night by watchmen. Looking to the future this promises to be a valuable Estate from the rubber which will begin to be collected in a year or two and from the seed which may be expected in quantity in the seventh year and will probably find a ready market. There is a large extent of flat land on the Sekong belonging to the same Company and I should say it would be a good thing, having such soil, if the Company while extending their rubber plantings up stream, would plant cocoanuts down stream and thus have two good and valuable strings to their bow.

I saw some cuttings of native Borneo guttas which were doing very well and I was informed that a plantation of Kalapei gutta of 4,000 plants had been made by the same Company. We took some very successful photos of the Pará rubber which I shall be glad to show.

COFFEE–TEA.

A correspondent writes to the editor of the *Queensl Agricultural Journal*:—

As you invited experiences *re* coffee-tea in the *Queensl Agricultural Journal* of March last, I am very pleased to send mine. I acquired it when on a selection, on the road to Emu P from Rockhampton. Having then an experimental plot of ab twenty coffee-trees growing, and reading that tea made from co leaves dried was very highly esteemed in some coffee countri determined trying it for myself. First, I dried leaves in the but the product was disagreeably tasted when tried. Finall dried some leaves in a camp-oven, slung so as to swing over a keeping them constantly stirred until they were dry and fa crisp. Tea made from them was much enjoyed by all who ta it; and one who did was the editor of the Rockhampton Bull at that time, but dead now for years past. He greatly enjoyed and my wife and I liked it better than any tea we could purch I intend growing a few coffee-trees, for the leaves only, where I now, as I am sure if it be only dried properly we could dispe with tea, provided we had sufficient coffee leaves to make our tea from. To dry it properly is everything. It must be d quickly, and done to a turn; then it has an aroma, and flavour any lover of tea would enjoy.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange, *6th July,* 1901.—Ninety days' bank rate on Lon opened on Monday 1st inst. at 11⅛d. rose to 11½d. on Wednes and closed this evening at 11¼d.

Too many balance sheets are yet missing, especially for the Paulo and Santos branches, to be able to speak with certainty, so far as can be judged from those to hand, although no dou good deal of liquidation has been effected in the sense of payn of differences or contango, the bills have not been delivered the *descoberto* is as big as ever. It is possible that the São Pa and Santos balance sheets may modify matters somewhat, bu far as it is possible to judge at present there seems little cha of rates improving for some time to come. It is true that coffe now arriving in large quantities, but sterling prices are so and the amount of money in banks waiting to take so large, there does not seem to be much hope of a surplus. Rub shipments are almost nil and in fact, the only considerable sou of bills at present is Coffee, both Sugar and Tobacco bills be almost exhausted for the season. The question then arises coffee almost alone supply the requirements of Brazilian marke About 1,000,000 bags may be expected to be shipped this mo yielding £1,500.000. Supposing other exports to reach f £600.000 to £800,000 the total would be some £2,000,000 £2,300,000. Of this trade requirements absorb some £1,800 for payment of Imports and Government takes £300,000 m making £2,100,000 in all. So that on the best of hypotheses margin of £200,000 left over for private remittances must be v narrow.

Where the bills are to come from to cover the overdraft, i not easy to see Until the banks can get in some of the bills standing, it does not seem likely they will commence draw again on a large scale, and unless they do, however anxi speculators may be to work the oracle once more, they wil unable to do so.

The value of coffee shipments during the week ended July amounted to £234,000 as against £210.000 for the previous w and £236.000 for the corresponding week last year.

Rubber shipments at Pará and Manáos were to the value about £90,000, the stock at Pará being now reduced to 93 tons.

Entries at Rio and Santos during the week ended 5th J showed a decided advance, an indication that the new season commenced in earnest. Compared with the previous week, t show an increase of 60,453 bags and of 61,111, compared with corresponding week of last year.

The market was much more animated this week than it has b for sometime, there being a lively local demand for cover

rpose that kept prices well in advance of European quotations. e quote 6$700 to 6$900 for N. 7 and 6$800 to 7$000 for colory ffees. As far as export is concerned, however, these prices are rely nominal and out of all parity with orders. European rkets are very weak and indeed, refuse to buy at all except on ir own terms, which the weakness of exchange here allows them do without much reducing currency prices. It seems evident t consuming markets intend to regulate prices so as not to eed the minimum indispensable for coffee to come down.

The quality of entries of coffee continues poor with a large portion of badly dried coffees. The weather is reported to be cellent throughout the interior with sharp snaps of frost in eral districts.

THE HOMŒOPATHIC POOR DISPENSARY.

KANKANADY P. O., MANGALORE.

Rev. Aug. Muller, S.J., the Manager, has issued the follow- g notice to customers and patients :—

Whatever profit made by the sale of medicines in the H. P. Dis- sary, as you are probably well aware, is all applied to the intenance of the lepers. indigent sick, and aged and infirm in my pitals and asylums. The annual income, however, is barely ficient to cover all the expenses, hence there is no margin left to vide larger and better accommodation, of which there is urgent d. In this emergency I have resolved to throw myself on the rity of my friends, patients and customers to beg them to come my aid. There are over twelve thousand names of patients or tomers on the books of the Dispensary, and if each one would tribute the small sum of four annas the amount realised would sufficient to meet the present requirements. Those who are e and willing to contribute more liberally are free to do so. ey might ask also their friends and acquaintances to contribute ir mite, and send in their names and contributions with their i. A list will be printed at the end of the year, with the name l amount contributed or collected by each one, a copy of which l be sent to every subscriber. Contributions may be sent in tage stamps. "Blessed is he that understandeth concerning needy and the poor: the Lord will deliver him in the evil day." *alms*, XL: 2.)

LTIVATION OF SEEDS FOR OIL EXTRACTION.

Mr E. Wilson, Engineer to Messrs. Finlay, Muir & Co., Katugastota Estate, writes to the *Times of Ceylon* with erence to certain questions put by a correspondent of that per :—

eeing that there are some planters thinking of going in for the tivation of sunflower seed (for oil extraction) I thought it might be out of place to give a few particulars with reference to the wing and treatment of the seed to be converted into oil.

think a valuable vegetable oil industry might be carried on in lon if the planters would go in for the cultivation of the various ds of oil plants, such as castor oil, sunflower seed, pea nuts, stard, cotton seed, gingelly, and even olives, I think, might be wn to advantage.

have extracted a very large quantity of oil from the above iety of seeds, grown in Victoria by the Department of Agricul- e, in whose services I was for several years as manager of the artment's mills.

To encourage the oil seed industry the department gave a bonus 2 per acre to farmers to cultivate the seed for three years, and racted the oil for them at a nominal cost, refining and packing oil ready for the market.

f the Ceylon Government would do likewise, the planters would y be too glad to try some new industry to help them over the sent very hard times.

unflower seed 8 lbs. of seed per acre is enough to plant, the oil e is excellent as a food for horses, cattle, pigs, etc., and is worth nt £6 per ton for feeding purposes.

he best to grow for oil is the small black variety (grandiflora) t yields the larger percentage of oil, 20 to 25 per cent. of good almost equal to the best olive oil, it is a first class table oil and there is always a good market for it if properly refined. When in Colombo I could let you see samples of the above oils if you care to inspect them. I hope to be down in a week or so.

Since writing the above, I see another correspondent asks information about the castor oil plant. There are two kinds of this seed that I have manufactured into oil, the large and small variety. The small is the best, as it contains from 40 to 42 per cent. oil, the price of the seed varies from Rs.5 to Rs.6 per cwt. It can be obtained in Bombay, and is grown in the Gujarat district; castor cake is worth from Rs.40 to Rs.50 per ton, it is an excellent manure, as it contains a large percentage of nitrogen. It should find a ready market in Ceylon.

For "Palma Christi's" information:—

(1) In my opinion it is better to put in seed, say, 3′ x 3′—two seeds in a hole above 2.

(2) Bombay, that which is grown in Gujarat district is the best.

(3) After the seed is ripe enough, it is cut off in clusters, allowed to dry and then trampled on by bullocks, same as paddy, then collected and cleaned.

(4) About 40 bushels per acre, or more on good soil.

(5) There is a good market, both in England and France, for good castor seed, also oil, seed is worth, say, in Colombo from Rs.5 to Rs.6 per cwt. Castor cake should bring at least Rs.40 to Rs.50 per ton.

(6) By hydraulic pressure, a small plant could be got for £500 or £600, but this would depend on what power could be got on owner's property.

(7) In my opinion plants grown as an annual give best value. After seed is sown, there is little or no attention required until seed is ready for plucking.

(8) The plants would certainly crop best grown alone.

THE COFFEE CROP IN COORG.

An estimate of the coffee crop in Coorg for 1901 has been received from the local Administration, and the figures are appended, with the estimates of 1900, for comparison:

	1900. tons.	1901. tons.
Estimated yield (2 cwt. an acre for Europeans in 1900 and 1½ cwt. in 1901)	2,751	1,988
Estimated yield ½ cwt. an acre for natives in 1900 and ½ cwt. in 1901)	1,120	701
Total ...	3,871	2,689
Estimated average yield per acre of ordinarily well cultivated coffee in full bearing ...	2¾ cwt.	2 cwt.
Export of coffee taken from the toll gate returns	2,366 tons	3,665 tons
Average annual export of coffee in the ten preceding years	3,326 tons	3,358 tons

Taking the average crop to be about 4,560 tons, the estimate of 2,689 tons for the present season represents about 59 per cent. of the average against 76 per cent. in 1900.

TEA DUTIES IN THE OLDEN DAYS.

It may interest the planting community who are anxious to see the British tax on tea reduced if not abolished altogether to know that proposals that were made over a century ago with the same object. In those days the tax was very heavy, and in consequence there was a great deal of smuggling. The *London Chronicle* of May, 1784, published the "Third Report from the Committee appointed to enquire into the illicit practices used in defrauding the revenue." The Committee considered whether the entire abolition of the tax would not be compensated by resulting advantages. "Such a measure," they reported, "would undoubtedly deprive the smuggler of the chief inducement to his practices, so injurious to fair trade and regular commerce, so pernicious to the manners and morals of the people, and so destructive to all good government in its consequences, it would also prove an effective relief to the East India Company, and would be particularly well-timed as no less than twenty ships are expected to arrive within a short time from China; and as it is estimated that above twenty millions of

pounds of tea may be in the Company's warehouses, unsold, previous to the next September sale. The future and permanent advantages accruing from such a measure both to that Company and to the general navigation of these kingdoms; and also by retaining a very considerable sum which is now annually remitted to the Continent of Europe, are too obvious to be described." "It seems reasonable to presume," the Committee continued, "that under such a plan the tea legally consumed in Great Britain would not be less than 13 millions of pounds annually; at present it is rather less than six millions of pounds. The legal import of tea, upon such an alteration, would employ 38 large ships, and about 4,500 seamen constantly in the China trade, instead of 18 smaller ships and about 2,000 seamen." The way in which the Committee proposed to raise an alternative to the tea tax is very curious. "It has been suggested to your Committee that if an account were taken of all the houses in the kingdom liable to the window tax, which consume tea (and there are few of that description in which tea is not consumed), the present produce of the tea duties might be assessed and rated upon the windows of such houses." It was pointed out that this could be done with little extra trouble and expense, and the result would be that "the whole family within such houses would purchase their tea at about one-half the present legal price; and even those who smuggle it at present would, in that event, have it much cheaper and without fraud; servants and the lower class of people would have tea free of duty." Houses under seven windows each would be assessed at 10s. 6d.; seven to ten windows, 16s.; and so on up to houses of 20 windows and upwards, which might be assessed at 70s. It is curious to notice that the taste for different kinds of tea was assumed to be regulated by the number of windows in the tea-drinker's house. Persons having houses containing from seven to ten windows were supposed to drink Bohea, eleven to thirteen windows Congou, Singlo and Hyson; while those with fourteen windows, upwards could drink nothing but Hyson. It was also pointed out that a mere reduction of the tea duty might reduce the profits of smuggling and lead to increased consumption of tea, which would more than make up for the revenue lost by the reduced duty. It is, perhaps, unfortunate for modern tea-growers that they cannot plead extensive smuggling as justifying their demand for reduction of the duty.

THE YEAR'S COFFEE MOVEMENT IN THE U. S., 1900–1901.

The trade year ending June 30 is notable says the *American Grocer* for the heaviest Brazil crop on record; deliveries below those for 1899-00 and 1897-98; an increase in visible supply of 1,027,066 bags; enlarged sales on the New York Coffee Exchange; lower prices.

The actual deliveries of coffee in Europe and the United States have been as follows for the past ten years:

	United States. Bags.	Europe. Bags.	Total. Bags.
1891-92 ...	4,411,832	6,392,719	10 804,551
1892-93 ...	4,398,549	6,547,679	10,946,228
1893-94 ...	4,298,845	6,272,688	10,571.533
1894-95 ...	4,395,146	6,816,905	11,212,851
1895-96 ...	4,339,128	6,803,685	11 142,813
1896-97 ...	5,088,594	7,155,610	12,244,204
1897-98 ...	6,036.311	8,535,591	14,571.902
1898-99 ...	5,682,636	7,798,268	13,480,904
1899-00 ...	6,035,623	8,937.876	14,972,699
1900-01 ...	5,843,883	8,486,042	14.329,925
Grand total for ten years ...			124,277,610
Yearly average ...			12,427,761

The above figure show that during three years—1890-91 to 1892-93, inclusive—the yearly deliveries in Europe and the United States averaged 10,107,437 bags; and for the three years ending June 30, 1901, the annual average was 14,261,133 bags—a gain of 4,153,696 bags, representing an increase of 41 per cent. On July 1, 1890, at the beginning of the period, No. 7 Rio coffee sold at 17½ cents, and as high as 19¼ cents, or nearly three times the present price.

From 1890-91 up to 1896-97, coffee ruled high in cost, and if this fact is taken in connection with the above table of deliveries, we note that for five years—1891-92 to 1895-96, inclusive—the delive were practically stationary, and did not vary much from the ye average of 10,935,595 bags. At the commencement of the t year beginning July 1, 190-, No. 7 Rio sold at 815-16 cents up 9⅞ cents; at the close—June 30, 1901—at 6 1-16c. During past four years of low cost, deliveries increased greatly, hav averaged 14,333,825 bags annually, against 11,292,850 bags as yearly average for the previous four years of higher cost. Evide consumption rises and falls with the rise and fall of prices.

The exports from Rio and Santos for the past ten years, enc June 30, compare as follows:

		To U. S. Bags	To Europe, etc.—Bags.	Tot. exp Bags
1891-92	Rio ...	2,536,000	1,148,000	7,267,0
	Santos ...	997,000	2,556,000	
1892-93	Rio ...	1,972,000	953 000	6,295,0
	Santos ...	1,102,000	2,268,000	
1893-94	Rio ...	1,641,000	606,000	4,016,0
	Santos ...	797,000	972,000	
1894-95	Rio ...	1,816,000	687,000	6,401,0
	Santos ...	1,347,000	2,551,000	
1895-96	Rio ...	1,499,000	899,000	5,515,0
	Santos ...	1,050,000	2,067,000	
1896-97	Rio ...	2,342,000	1,084,000	8,360,0
	Santos ...	1,565,000	3,369,000	
1897-98	Rio ...	3,007.000	1,562,000	10,584,0
	Santos ...	1,356,000	4,659,000	
1898-99	Rio ...	2.364,000	874,000	8,754,0
	Santos ...	1,987,000	3,529,000	
1899-00	Rio ...	2,376,000	905.000	9,019,0
	Santos ...	1,619,000	4,119,000	
1900-01	Rio ...	1,840,000	832,000	10,504,0
	Santos ...	3.107,000	4,725,000	

The above shows a total export in ten years of 76,715,000 (4,512,647 tons), or a yearly average of 7,671,000 bags (451 tons).

Out of total deliveries in Europe and the United States for past ten years, the Empire of Brazil furnished 62 per cent. of total. During 1900-01 the shipments from Brazil were 75 per c of the total deliveries in the United States and Europe for same period, against 50 per cent. for the pervious ten-year per The figures show the tremendous increase in coffee productio Brazil, and how Rio and Santos dominate the coffee market the world.

Deliveries in the United States for the year ending June 1901, were 5,843,883 bags, of which Brazil supplied 4,722,919 b or 80·8 per cent.; all other countries, 1,120,964 bags, or 19·2 cent. Evidently a good deal of Santos coffee masquerades other sorts.

The Brazil crops for the past ten years compare as follows:

	Bags.
1891-92 ...	7.397,00
1892-93 ...	6,202,00
1893-94 ...	4,309,00
1894-95 ...	6,695,00
1895-96 ...	5,476,00
1896-97 ...	8,680,00
1897-98 ...	10,462,00
1898-99 ...	8,771,00
1899-00 ...	8,959,00
1900-01 ...	10,927,00
Total crop for ten years ...	77,878,00
Average per year ...	7,787,80

The map which accompanies this article shows the coffee-proc ing area of Brazil; the area of decaying plantations; those in bearing; new districts, and the territory capable of developm and which will insure a supply great enough to meet the wor wants for many years to come, subject to the influences which markets of the world exert in stimulating production by h prices and checking the development of the industry by price low as to render the industry unprofitable.

In 1840 Brazil exported 1,000,000 bags; in 1900-01 over 10,000, bags. That country has enough uncultivated coffee land not planted to produce 20,000,000 bags annually. It is probable t coffee-planting will continue to expand, even on the present b of cost. Low prices will force lower cost of production

sportation. They do not appear to be low enough to check industry in Brazil as yet. The *Brazilian Review* says:

At 5 or 6 cents per pound coffee may not leave much profit to planters, but before Brazilian coffees could be driven for the kets, there are wide margins yet to be reduced—not only in prime cost of production, but of freight and handling. Should ensive cultivation prove too costly, it must be made intensive, labour replace planters as proprietors, as was the case with on in the Southern States. But, come what may, coffee will er cease to be profitably produced, because Brazil possesses an ost unlimited area and climate suitable for growing coffee such o other country enjoys."

COFFEE EXCHANGE TRANSACTIONS.

he total sales in the New York Coffee Exchange for the year ing June 30, 1901, were 7,383,000 bags, against 5,879,500 bags 1899-00, 4,060,500 bags in 1898-99, 4,277,500 bags in 1897-98, 3,000 bags in 1896-97, 3,426,000 bags in 1895-96, 4,351,000 bags 1894-95, 3,963,500 bags in 1893-94, 7,911,500 bags in 1892-93, 9,000 bags in 1891-92, 7,700,750 bags in 1890-91, and 13,011,500 s in 1889-90.

he most active month in the year was July, 1900, when 4,500 bags were sold; the dullest, May, 1901, with sales of ,000 bags. The highest price paid was 9.20 cents in July for rch or May delivery; the lowest, 5 cents in June, 1901, for June July delivery.

he average monthly price of No. 7 Rio for the trade year ing June 30, 1901, and for the year, was as follows:

900.	Cents.	1901.	Cents.
y	9·39	January	7·12
gust	8·87	February	7·19
tember	8·40	March	7·25
ober	8·27	April	6·42
ember	7·82	May	6 27
cember	7·14	June	6·05
Average for the year 1900-01.			7·52
Average for the year 1899-00.			7·11
Average for the year 1898-99.			6 33
Average for the year 1897-98.			6·30
Average for the year 1896-97.			7·73
Average for the year 1895-96.			14·54
Average for the year 1894-95.			15·94
Average for the year 1893-94.			16·13
Average for the year 1892-93.			16·05

DISTRICT ASSOCIATIONS.

ASSAM BRANCH INDIAN TEA ASSOCIATION.

ANNUAL MEETING.

The following are extracts from Minutes of the 12th Annual neral Meeting of the Assam Branch Indian Tea Associa- held at the Jorhat Club on the 20th ultimo :—

CHAIRMAN'S ADDRESS.

The Chairman (the Hon'ble Mr. J. Buckingham,) then addressed meeting as follows:—

GENTLEMEN,—I have looked forward to this meeting with much asure, hoping that it might be the most representative one we e ever had. I say this for the sake of the tea industry, for if r we have been in a position demanding unity of purpose, and ion it is the present. There are very many points combined ion can carry, and it is useless to say we have no power; that are worked from Calcutta, and that the Agents do just what y like, and if we vote against them, we stand a chance of losing billets. I tell you there is not a firm in Calcutta that does not nire a man for having views of his own, and we are met here lay for you to express them We cannot expect to be all of one nd, but what I say is this, if a resolution is passed, it is no use minority saying they will never agree, they will have their n sooner or later, in fact, unity is a matter of continually giving, taking, and if we adhere to these conditions, there will not be tronger body of men in India than planters. There are subjects ich will be introduced at this meeting, which I am exceedingly ry we have to touch on, but I have had so many communications he absolutely uncalled-for interference in the matter of inspec- of gardens, and the trouble and worry planters have been put to, that unless something is done, and that soon this systematic bullying (for I can call it nothing else) will become unbearable. (The above remarks were received with unanimous and prolonged applause and after quiet had been restored again the Chairman again rose first referring to the financial position of the Association as follows.)

As usual the first subject I must allude to, are the accounts. You will remember that last year we passed a resolution agreeing that they need not pass through the hands of an auditor, and I quite agree with this view, they are particularly simple, and can be well understood by all, in the form our Secretary submits them. On the 31st December, 1900, we had a balance at credit of Rs.10,968-14-1, and on the 31st May Rs.12,103-13-8. This is a somewhat smaller balance than the previous year, but our disbursements on some important items were higher, as the following summary will show:—American Market, 1899-1900, Rs.2,000, 1900-1901, Rs.2,500; Paris Exhibition, 1899-1900, Rs.1,000, 1900-1901, *nil*; Viceroy's Visit, 1899-1900, Rs.1,013-8-6, 1900-1901, *nil*; Scientific Officer, 1899-1900, Rs.400, 1900-1901, Rs.2,000; Models for Museum, 1899-1900, *nil*, 1900-1901, Rs.1,208-1-0; Total 1899-1900, Rs.4,413-8-6, 1900-1901, Rs.5,708-1-0.

or an excess in 1900-1901 of Rs.1,294-7-6. I am sorry to see there are still many subscriptions in arrears, the sum total of these amounted on the 1st July to Rs.1,349-10-0. Since our last meeting four gardens have withdrawn. To make up for the following gardens have joined. In Dibrugarh Singlijan, acres 250; in Mungledye Orangajuli, acres 571; in N. Lakhimpur Silonibari, acres 1,000; total acres 1,821; or a total gain of 596 acres.

After some discussion Mr. F. E. Hulbert rose and moved the accounts be passed; seconded by Mr. J. Henderson.—Carried *nem. con.*

WAGES OF TEA GARDEN COOLIES.

I have already addressed you on the subject of the above resolution, but I have still much more to say. The Tea Association, Calcutta, wrote asking for our opinion on bonuses not being included in wages, and also alluded to some strong, and extraordinary expressions in this resolution of our Chief Commissioner's. It is quite impossible, gentlemen, to disguise the fact that the resolution is couched in terms calculated to cause irritation, and it most certainly has done so. (Hear, hear.) I had expressed a sincere hope that we should leave the "somewhat stormy agitation" (the words used by His Honor the Chief Commissioner) behind us in Calcutta, and that, during the remainder of the period Mr. Cotton might be with us, we should live in harmony, and good understanding; the contest was over, and I saw no use in keeping up any ill-feeling, that might have arisen during the controversy. In fact, I sincerely hoped the hatchet was buried. We naturally resent suspicion, and we should be unworthy of the name of British subjects, if we did not do so. (Hear, hear.) From the threat Mr. Cotton holds up before us, he evidently contemplates that planters will take the law into their own hands, and refuse to submit the return called for, he says, "the return is prescribed under Section 122 (1) of Act VI. of 1901, and the failure to submit it will be punishable under Section 185 of the Act." I think there was no occasion whatever to make this threat, we are a law-abiding community, and there is no occasion for the Chief Commissioner to flourish his penal weapons in our faces. (Several members at this juncture again expressed strong feelings of resentment at the form and general tone of the resolution.) In 1883, when there was a certain amount of dissatisfaction expressed about statistics, and the number we had to send in, Sir Charles Elliot observed "that he felt quite confident such an enlightened body of men as the managers of gardens would readily assist him in collecting statistics; if they were to refuse, the only alternative would be to appoint a separate Government Agency to make enquiries on the Estates, and draw up the figures, and all managers whom Mr. Elliot has consulted have agreed that it is more convenient for them to do the work through their own agency." Would any former Chief Commissioner have introduced a new form of statistics without first of all getting the opinion of his District Officers, and asking them to consult representatives of the tea industry? I think not. (At this point again the Chairman's remarks were drowned in general expressions of agreement with his last remark, and resentment at the unnecessarily suspicious and irritating form of the resolution under discussion.) It seems to me that every Inspector is to proceed to a garden with a lurking suspicion of inaccuracies if not of falsification of returns, etc.:—Although the Chief Com-

missioner owns that "low wages may be due to a variety of causes, it may be due," he says, "to a large number of labourers being absent without leave, etc.," still, he continues, "that Inspectors should always have their suspicions aroused when the number of half haz : or of absentees is considerable," why should their suspicion be aroused when the number of absentees is considerable? How many of us would like to have a labour force, so as to be able to take no notice whatever of absentees, but let coolies work when they like, and do a half, or even quarter haz, : if they preferred it? It has been shown over and over again that the average rate of wages on any particular garden is not a criterion of the condition of coolies on that garden! A Chief Commissioner said in his report that many of the circumstances which lead to a low average rate of wage are such as tend to make a garden popular with coolies. Another Chief Commissioner in alluding to inspections said, "it is not intended that the Inspecting Officer should put the questions himself to coolies, and thus seem to invite complaints, but rather that he should state the results of his own observation," and I maintain this is the only way to arrive at any satisfactory conclusion regarding the real condition of labour. The "Outrageous Custom" (so called by the Chief Commissioner) of debiting against a cooly Rs.5 paid for deserters recovered is rather strong language, and, as for deducting it from his wages until the amount is paid, which the Chief Commissioner says is not uncommon, I may affirm that such a practice is most uncommon, the sum may nominally be against the man's name, but in many cases it is eventually debited to profit and loss account. I feel quite sure that if the Chief Commissioner had suggested to us in a friendly spirit that he thought it was hard on the new cooly to be debited with such a charge, there is not a planter in the Valley who would not have acceded to his wishes. Any impartial person reading the above mentioned resolution would undoubtedly say that it reflects discredit on tea planters generally. That there may be weak points in the tea industry, as in all other industries, we do not deny, but is it the right policy of an administration to publicly expose exceptionally solitary cases, which that administration is in itself all powerful to prevent? And thus to stigmatize an industry on account of the failings of the few, is neither just nor fair! Nor is it calculated to imbue us with the impartiality of the administration. (Cheers.) To a young inexperienced Officer encouragement is given to exact enquiries which do not bear on the working of the Emigration Act, and to facilitate vexatious complaints on the part of coolies, which not only disorganises labour, but weakens the authority of those in charge. (Prolonged cheers.)

Mr. J. Henderson, Chairman of the Nowgong Sub-Committee, after reading numerous letters (among others a most pertinent letter from Mr. Wood of Silghat) showing the unanimity of the Association on the uselessness of Statement A and the necessity of first having it amended so as to clearly show the wages and collateral means of livelihood of Act Labour, and pointing out that an amended statement on those lines submitted half-yearly would place the Local Administration in full possession of correct statistical data for the purposes of the Provincial Immigration report, moved the following resolution—

"That the Secretary of the Assam Branch Indian Tea Association be directed to write to the Secretary to the Chief Commissioner, and "clearly point out the grave objections to submitting a monthly statement in form A as prescribed in the Chief Commissioner's resolution No. 1165-73 R, dated 10th May, 1901; and that such statement if submitted in the prescribed form would be mischievous and misleading as it would not correctly show the wages and collateral earnings of Act Labour—apart from the fact that it will impose an excessive amount of clerical work on gardens, out of all proportion to the increased statistical accuracy aimed at—and that he do further submit that a half-yearly return showing the true wages and collateral earnings of Act Labour be substituted as meeting the exigencies of the case in the place of the monthly statement A not called for."

Seconded by Hon'ble Mr. J. Buckingham, C.I.E., and carried unanimously.

WAGES OF UNSKILLED LABOURERS IN ASSAM.

He said:—You will remember a short time ago I sent round a memorandum asking you to give me statistics regarding the wages of unskilled labour in your Districts in order that the statement made by His Honour the Chief Commissioner in Council *re* the above might be satisfactorily disproved, and the question set at rest. The Chief Commissioner gave great prominence to what he said was a "highly significant table" showing, as His Honour conte that "The average daily wage of an Act I labourer who doe tasks is 0-3-0. The daily average wage of an unskilled labo Assam is a little over 0-6-0 or more than twice as much T are facts, they speak for themselves, and comment on them is s fluous." Now, considering planters give employment to at lea per cent. of this rural unskilled labour, (a very small propo only going into the stations for employment on the Municipali I certainly think their dictum on wages is reliable. I have heard from every District in the Valley, and I am informed the rate of wages for unskilled labour is usually 0-3-0, but in or three Districts it is 0-4-0; where then does His Honour the C Commissioner get his statistics, from which he says: "These facts and comment is superfluous," he can hardly ask us to to "Prices and wages in India" for these statistics for Assam sent direct from the Chief Commissioner's own office. A Mr. Cotton can hardly take the temporary wage of unskilled la working on railway embankments for a few months in the year criterion. My colleague, Mr. Henderson, was very strong on point, and forcibly rejected the statement made by Mr. Cotto am condensing the replies sent to me, and when this is do should recommend that all the correspondence on the sub should be sent to Calcutta to be submitted to the Governmen India.

This was agreed to amidst considerable applause.

STATISTICS CALLED FOR BY GOVERNMENT OFFICERS.

The Chairman then continued:—

You are aware that we are continually having letters and cards from officials asking for various information and statis The frequency of these lately induced the Secretary of the Association, Calcutta, to address the Secretary to the C Commissioner on the subject, to which the following reply received.

"The Chief Commissioner regrets that the action taken unde circular by District Officers should have given rise to misun standing. Mr. Cotton is not aware of the object of the post- issued to Managers of Tea Estates in Cachar, and a report wi called for from the Deputy Commissioner of that District.

"The Chief Commissioner acknowledges the readiness with w requests for statistics, and information regarding the tea indu have been met by the Association, and by Managers, and Ag of tea gardens generally, and he is glad to accept the suggestio paragraph 4 of your letter, that requests for information, addre to the Managers of Tea Estates, should contain a statement the object for which the information is required, as to wh replies are compulsory or not, and, if compulsory, under what Instructions will be issued to District Officers accordingly."

THE TEA INDUSTRY AND THE PRESENT CRISIS.

Continuing the Chairman said:—His Honor the Chief Com sioner in his speech in Council appeared rather to ridicule the c we are now passing through, saying it could not be compared that of the sixties. He remarks that "the industry recovered that blow and it will recover from over-production also, as c industries have done, which have been stricken by the same ca the crisis from over-production will pass away as new market opened out, and the supply learns to adapt itself to the dema I would ask, and what are 50 per cent. of the Tea Gardens to the meantime while the "supply learns to adapt itself to demand?" I should rather have inverted it, and said until th mand adapts itself to the supply. It hardly looks like the su adapting itself to the demand when we see in Messrs. Gow, Wil report of the 7th June, that the imports of all teas into Lo during the season just closed, show an increase of 40 mi pounds over that of two years ago, in spite of the fact that C tea was five millions less. It is very easy for Mr. Cotton to sa industries have their ups and downs, but we know that the pr condition of tea has no precedent. The *Globe* informs us tha share capital of 45 of the principal companies having a face v of nine millions sterling on 1st January, 1901, had on 1st J 1901, an agregate market value of only Rs.71,75,000. Out o 61 Indian Tea Companies registered in England 20 pay no divi at all. Of those paying, Doom Dooma, heads the list with Lebong next with 7½, the rest pay from 2½ to 3½ per cent. T are 61 companies also registered in India, and the results are worse, only 24 pay a dividend for 1900, and the shareholders companies get nothing, and out of these, eight companies have nothing for eight years, and a large number no dividend for t

r, and five years, and now, gentlemen, I will ask you, is re a remedy for this state of things? I most undoubtedly say re is, and it is

A COMPULSORY CESS.

wont say it is exactly a panacea for all evils, but, as Messrs. eswell & Co. say, "none of us like to be taxed, but taxation has de the British Empire and it may save tea." I am very glad to ar that others beside myself are going to speak on this important ject, and I have no doubt, if there are still a few who do not our the cess, we shall be able to convert them to our way of nking. It is necessary for me to say a few words regarding the gin of the tax levied in Ceylon in 1892. The ordinance in that ar provided for a duty of 10 cents per 100 lbs. of tea exported, it swered so well, that in 1894 it was converted into a permanent , and was raised to 20 cents per 100 lbs., amounting in all to out 2½ lakhs of rupees yearly. With our voluntary levy insti- ed in 1893 we do not realise one half of what Ceylon does, and, the Tea Association inform us, the net result is that while Ceylon h a production of 130 millions of pounds sent 29 per cent. of ir teas to foreign markets, India with the 175 millions sent only per cent to foreign markets. Up to the 17th June this year, ylon has distributed outside the United Kingdom nearly 4 million . more than last year to the same date the imports to England ng just 3 millions less. She has actually sent more than 1¼ llion lbs. to China this year against ½ million last year His nour the Lieutenant-Governor has been written to on the subject a levy, and he suggests that before laying our case before the vernment of India it is absolutely necessary to show there is y one feeling in the matter, or in other words the industry must unanimous in voting for the tax. The proposed tax would only ount to ½ a pie per lb. of tea exported which would yield about lakhs of rupees or four times what the voluntary subscriptions ounted to. His Honour also remarked that no such legislation, as posed, has ever been undertaken in India, and the doubts whether Government of India would agree to an export duty, but surely. ere we have such a precedent as Ceylon, and such a long and ried experience of its practical benefit to the tea industry of that and, I cannot help thinking Government would come to our cue. It appears to me from what I have read that the planters in uthern India are nearly all in favour of a compulsory cess, the luntary subscriptions are dying a natural death, and unless I am staken, will dwindle down this year to a very low figure. The n'ble Mr. Greenville Acworth says in his letter to the *Madras il*, and "so disgusted are many in the south with the failure of foreign market fund, that from private information I know ere will be more abstainers therefrom in the current season, yet these gentlemen would welcome, and indeed have voted for a mpulsory cess." The *I. P. G.* says the non-flourishing planter wont oscribe, because, by the time the relief comes, he thinks he will ve ceased to exist: I don't believe this, because I maintain a com- lsory cess will give immediate relief, if, at the same time, we have import duty of 0-4-0 per lb. Again we are told, the opulent nter won't subscribe, because he does not want to prop up his ighbour, he says the sooner he is out of my way the better. Can ulent proprietors think for a moment that they are going to pe offthe face of the earth every tottering concern? I give em credit for better thoughts, but if there are a few who think let me tell them that gardens are not going to be wiped off easily, they will exist in a new form, which will be far more noxious than at present. Capital will be so reduced, that it quite possible they may be made to scrape through with a re existence, we have already seen some such cases, for with the most parsimony, gardens may give returns to native proprietors, ich would not be accepted as satisfactory by Europeans. No, I we must come to the assistance of the weak, and help them to utmost of our power. I have been thinking that if the Govern- nt of India would not consent to an imperial export tax, we ght persuade the provincial Governments to impose a cess on orts of tea from their several provinces. Our local rates are sed very much on the same principle as we now propose that s tea cess should be raised. Our local cess is virtually paid out one pocket into the other, none of it finding its way into the Im- rial coffers the money being expended entirely for the benefit of trict in which it was raised.

The resolution I have therefore to propose is, "that the Govern- nt of India be urged to impose a compulsory cess on all teas orted from India on very much the same principle as is now practised in Ceylon and that the proceeds be handed to the Indian Tea Association for the better exploitation of new markets."

Seconded by Mr. W. H. St. J. Mildmay and carried unanimoulsly.

IMPORT DUTY ON FOREIGN GROWN TEAS.

At a meeting of the Indian Tea Association held on the 7th May last a resolution from the Central Travancore Planters' Association was read, urging the necessity of imposing an Indian import duty, on all foreign grown teas. The Committee of the Calcutta Tea Association pointed out that there was an *ad valorem* duty of five per cent. on all foreign teas. The Travancore Planters' Association must have meant that a protective duty should be imposed, and I am going to ask you to-day to support their resolution. We are told that in 1899 ½ a million lbs. and in 1900 1½ million lbs. of tea found its way into India; and I see from the last statistics, in Circular No. 246 of the Chamber of Commerce, that up to the 1st July of the present year 054,918 lbs. have been imported into India from Ceylon against 299,505 lbs. to the same period last year, or more than double. Then we have the China tea to contend against. I see in Messrs. Cresswell's report that no less than 16,069 piculs of China tea were imported into India last year against 9,698 piculs in 1899, or nearly 2¼ million lbs. in 1900, against 1¼ in 1899. These facts speak for themselves. We don't want any inferior tea from China or elsewhere placed on our market, for we have sound teas of our own we should like to see disposed of first. The tea imported from Ceylon is mostly without Estate mark, and although in the old days we got a paying price for even "O. O." which our Calcutta Broker friends may remember, I am afraid we mostly now consign this class to the dust heap, or to the chemist, for the sake of coffeine only. I therefore shall propose the following resolution, *viz.*: That we entirely support the Central Travancore Association in urging the Calcutta Tea Association to take in hand, and petition the Government of India for a protective duty on all foreign grown teas. The *ad valorem* duty of five per cent. is of course not protective at all, we want a duty of 0-4-0 a lb. the same as is imposed on all teas imported into Ceylon.

The Chairman then moved the following resolution which was seconded by Mr. H. Miller.

"That this Association entirely support the resolution brought forward by the Central Travancore Planters' Association urging the necessity of imposing an Indian import duty on all foreign grown teas on the same terms as is imposed on all teas imported into Ceylon."—Carried unanimously.

DISTRIBUTION OF TEA IN INDIA.

It is satisfactory to see that this scheme has now made a start, and I doubt if it could have got into better hands than Messrs. Andrew Yule & Co., with Mr. Henson to superintend the business. A lamentably small amount of tea has been so far promised, but I have no doubt, now that it looks more like business, a large quantity will be added in the course of a month or so, and I am sure our Secretary will be very pleased to take down the names of any gentlemen, who have not as yet promised assistance but wish to do so now. I am a great believer in having public sales in many of the towns in India. There is nothing natives like better. The quality of tea required can be bought at the auction sales in Calcutta and made up into small lots to suit purchasers up country, and here again comes in the question of import duty on tea. Are we going to make a market for China teas in India? for they will surely pour in, if purchasers are to be had, and there is no duty to pay, in preference to where there is a heavy duty. Let us therefore take care we do not play into the hands of the heathen Chinee.

The Secretary then read extracts from a letter to the Chairman from Mr. H. S. Ashton setting out the basis on which Messrs. Andrew Yule & Co., were taking over the scheme of distribution of tea in India, which were generally approved.

GREEN TEAS.

The doubt which has existed whether our Indian "Green" teas will be accepted in American or not, has I think deterred many a good man from making such teas. The America and Ceylon representative, Mr. Mackenzie, has advised planters in India to make the same type of green tea as Ceylon, and the London Committee have now been asked to confirm this, and give us any further information they can. If it is true that America is taking all she can from Ceylon, it is a great pity India does not help to relieve the market as well, with a few million lbs., and I trust very shortly we shall hear from the Tea Association, Calcutta, definitely on the subject.

To give the characteristic colour to green tea, there is no doubt

deleterious matter, which has been condemned by many food experts, has to be introduced. This certainly can be done in India, but should we be right in adulterating tea in this way? Is it not far better even if the progress is slower, that we should allow unfaced green teas to force their way by their own merits, rather than by any adulteration which, happily to date, Indian teas have been guaranteed free from?

REFUSE TEA.

We have had various memoranda from the Tea Association as to the disposal of this tea, and I must say the importance of seeing that none of it gets into the hands of native dealers, cannot be too strongly urged. Many of us, no doubt, did in times past dispose of unsound teas to Marwaries, or any one who would give Rs.5 to 10 a maund for it, but I believe we all realize how unsound this practice was, and all sweepings, etc., are now sent to Calcutta for chemical purposes, a guarantee being given by Messrs Barlow & Co., that they will not be sold for consumption. These teas are now taken to Calcutta by the Steamer Companies at a reduced freight.

INDIAN TEA ASSOCIATION.

IMPORT DUTY ON TEA.

The following is from an abstract of the proceedings of a meeting of the General Committee held on the 15th August, when there were present Mr. H. S. Ashton (*Chairman*), Mr. A. Tocher (*Vice-Chairman*), Mr. H. W. Boyd, Mr. R. H. A. Gresson, Mr. A. C. Lawrie, and Mr. R. R. Toynbee. Mr. D. A. Campbell and Mr. R. Magor were out of town, and Mr W. Brown was unavoidably absent. Proceedings of the last meeting, which was held on the 30th July, having been approved in circulation, were confirmed. Considered a letter dated the 6th August, from the Secretary, Assam Branch, forwarding a copy of the following resolution which had been adopted at the Annual Meeting of the Branch on the 28th July, *viz.*:—"That this Association entirely support the resolution brought forward by the Central Travancore Planters' Association urging the necessity of imposing an import duty on all foreign-grown teas on the same terms as that imposed on all teas imported into Ceylon." The position of the General Committee in regard to this question was defined in the proceedings of the meetings held on the 7th May, 18th June, 2nd, 16th, and 30th July. In those proceedings it was shown that the object of the Southern Indian planters was to secure the abolition of the Ceylon import duty, rather than to obtain a protective tax in India. The General Committee had accordingly decided to approach the Government of India with a request that an attempt should be made to induce the Government of Ceylon to abolish the duty at present levied in the island. But they did not in the meantime propose to go beyond this, and to suggest the imposition of a protective duty in India. It was, in their opinion, more desirable that no duty should be levied in Ceylon upon Indian teas, and no duty in India upon Ceylon teas. But they thought that the existing duty in each country should be retained in the case of non-British teas. A reply in these terms was to be sent to the Assam Branch. The Committee also discussed a letter dated the 6th August, from the Secretary? United Planters' Association of Southern India, submitting the following resolution which had been adopted at the recent Annual Meeting of that Association, *viz.*:—"That this Association urge on the Indian Tea Association the necessity of approaching the Government of India with a view to its urging on the Government of Ceylon the advisability of abolishing the import duty on tea, and that that Association should point out to the Government of India the immense advantages that might thereby accrue both to British-grown tea and the Port of Colombo." The General Committee were entirely in accord with this resolution; and they decided to address the Government of India as soon as possible. The Secretary to the United Planters' Association was to be informed accordingly. Considered a letter dated the 6th August, from the Secretary, Assam Branch, forwarding a copy of the following resolution which had been adopted at the recent Annual Meeting of that Branch, *viz.*:—"That the Government of India be urged to impose a compulsory cess on all teas exported from India on very much the same principle as is now practised in Ceylon, and that the proceeds be handed to the Indian Tea Association for the better exploitation of new markets." The following resolution which had been adopted at the last Annual Meeting of the United Planters' Association of Southern India was also before the Committee, *viz.*:—"That this Association cord supports the movement for the imposition of a cess on tea. the Indian Tea Association be asked to regard the matter as urg so as to lose no time in ascertaining whether the Governme India will give effect to the wishes of the tea planters, shou large majority be in favour of the measure." The General C mittee were in agreement with these resolutions. And they dec to inform the Assam Branch and the United Planters' Associat that they proposed to approach the Government of India as as they were in possession of the views of the industry upon question, which they had for some time been endeavouring obtain. They desired, however, that it should be made clear it was no part of the scheme that the proceeds of the tax shoul handed over to this Association, but that a Special Committee which the whole Indian Industry would be fully represen should be constituted to administer the fund. The Commi further decided to telegraph to the London Committee, ask them to interview various firms who were unfavourable to proposal, or who had not expressed an opinion upon it. Chairman, the Vice-Chairman, and some of the members of Committee, also undertook to interview certain of the Calc Agency firms regarding the proposal.

TRADE WITH PERSIA.

A letter dated Birjand, July 8th, from Mr. E G. Foley, was t published for the information of members. In this letter, an some others which had been received from Mr. Foley, the Commi had noticed statements to the effect that the trade with Persia likely to be hampered by the fact that the Persian customs w practically controlled by the Russian Government. This p appeared to the Committee to be of such importance as to ne sitate a reference to the Government of India. But as the st ments in question were not sufficiently full to enable any represe tion to be made, they decided to defer the subject pending return of Mr. Foley.

SALE OF INDIAN TEA IN TIBET.

At the meeting held on the 2nd July, it had been decided invite the opinion of Mr. J. M. Korb, of Kalimpong, upo suggestion made by the Government of Bengal, that Miss A Taylor—a lady missionary at Yatung—might be able to assist Association in connection with the promotion of the sale of In tea in Tibet. This had been done; but the Committee had s learned that Mr. Korb had left for Europe. They now decide address Miss Taylor direct on the subject. Certain of the sam of Indian-made brick tea in the possession of Mr. Korb were necessary, to be sent to Miss Taylor later in the year. Sample Indian brick tea, manufactured on a Dooars garden, were to sent to Captain Kennion, I.S.C., British Joint-Commissione Ladak, in accordance with the decision come to at the last meet

BRITISH EXHIBITION AT ST. PETERSBURG.

Considered the report of a speech made by the Hon'ble Mr. G Acworth at the recent Annual Meeting of the United Planters' A ciation of Southern India. In this speech Mr. Acworth comm ed at some length upon the action taken by the Indian tea A ciation in connection with (*a*) the distribution of the funds ra by the voluntary levy; (*b*) the proposed tea cess, and (*c*) question of the manufacture of green teas. Certain of these c ments appeared to the Committee to call for some remark; they decided to address Mr. Acworth regarding them. The C mittee also discussed a letter, dated the 9th August, from Secretary, United Planters' Association of Southern India regard to the proposed British Exhibition at St. Petersb This letter contained a copy of a resolution which had been ad ed at the Annual Meeting of the Southern Indian Associat proposing that Indian tea should be adequately represented at Exhibition. Mr. Ormerod was to be informed in reply that latest information before the Committee was that the Exhibi had been postponded. The original intention had been to ho between the months of November and February next. Bu was now understood that this idea had been abandoned; the Committee did not know when the Exhibition would be hel

THE PARIS EXHIBITION.

Recorded a letter No. 2169-7-2 of the 5th August (with enclosu from the Government of India, Department of Revenue Agriculture, stating that the balance (£1,250) of the Governm grant on account of the Paris Exhibition had been paid by India Office to the London Committee. An unexpended bal of Rs.646-12-3 on the Calcutta account of the Paris Exhibi

nd was to be re-transferred to the American and Foreign rket Fund.

TEA EXPORTS FROM CHITTAGONG.

he Committee had arranged with the Collector of Customs at ttagong to telegraph to Calcutta the quantity of tea exported the fortnightly steamers which now leave that port. The gram would be sent as soon as the export manifest of the cargo received by the Collector from the Steamer Agents. A copy each telegram was to be posted in the Royal Exchange for eral information. The figures were also to be included in the nightly message sent to London.

MARKET REPORT.

[*Per Mail advices of 2nd August* 1901.]

COFFEE.

he London Commercial Record says:—Public sales have been l only once during the week, and they will not be resumed ll Tuesday the 13th instant. The demand has shown a distinct rovement, and a good proportion of the quantity offered at ion found buyers, while privately there has also been more re to do business. The small quantity of Ceylon brought ward met with competition and realised extreme prices, and advance of 1s to 2s per cwt. was paid on Costa Rica and tral American descriptions. On a rise in the Brazilian exge and better Continental advices, the market for "futures" one time advanced about 1s per cwt., but the improvement not been maintained, and with very large receipts a flat ensued and closing prices show little alteration on those ng a week ago. Yesterday September sold at 27s 3d to 9d, December 27s 9d to 28s 1½d, March at 28s 4½d to 28s 9d, May at 29s 3d.

don ...	... Santos ...	Sept. delivery	... 27s 6d.
York	... No. 7 Rio...	,,	... 4·80 cents.
nburg...	... Santos	,,	... 27¾ pf.
re ...	... Santos ...	,,	... 34 francs.

he public market is closed for the holidays; prices firm. ures opened 3d to 4½d dearer, but afterwards this was tly lost.

nports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ..	21,097	18,645	35,714	27,365
	Home Consumption.		Export.	
	1901.	1900	1901.	1900.
Tons ...	12,395	10,294	16,958	15,158

he preceding figures exhibit— Tons.

In the Imports an increase this year of 8,349
Home Consumption an increase of 2,101
Export an increase of 1,800
Stock an increase of 2,452

he following are the results of Tuesday's auctions:—

EYLON.—*Plantation*.—3 casks 2 tierces 3 barrels sold, smalls good middling 104s, good bold 117s.

AMAICA.—22 barrels sold, good to fine ordinary greenish 32s 7s 6d, low middling grownish 40s to 43s.

OCHA.—157 packages bought in.

OSTA RICA.—238 bags sold, low middling to middling greenish 6d to 47s 6d.

UATEMALA.—873 bags mostly sold, smalls 35s to 35s 6d, fine inary foxy greenish 36s to 38s, middling 42s 6d to 44s, bold to 51s, peaberry 34s to 50s.

ERA PAZ.—Of 572 bags offered 480 bags sold, smalls 33s to low middling to middling 44s to 52s, good to fine middling 6d to 67s 6d, bold 80s to 87s 6d, very fine bold 106s, peaberry to 90s.

ALVADOR.—Of 322 bags offered 100 bags sold, low middling enish 40s, peaberry 42s.

ICARAGUA.—178 bags sold, smalls 33s, good ordinary foxy enish 33s to 34s, good to fine middling 59s to 69s 6d, bold to 92s, peaberry 87s 6d to 90s.

OLOMBIAN.—734 bags partly damaged sold, smalls 27s to 31s low middling to middling 38s to 42s, bold 40s to 52s, peaberry to 43s.

MEXICAN.—53 bags retired unsold.

ECUADOR.—70 bags bought in.

BRAZIL.—960 bags new crop Dumont Santos sold, smalls 28s to 28s 6d, medium 31s to 31s 6d, boldish 35s to 35s 6d, bold 39s, peaberry 35s to 41s.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99. Bags.
Rio ...	592,000	195,000	388,000	283,000
Santos ...	847,000	626,000	799,000	560,000
Total...	1,439,000	821,000	1,187,000	843,000
Crop...	—	10,900,000	8,971,000	8,772,000

Rio Exchange $10\frac{9}{16}$d, previous day $10\frac{3}{8}$d.

HAVRE, *August* 1.—Good average Santos August opened steady quiet at 33½f. and closed steady at 34f., September opened at 33¾f. and closed at 34½f., December opened at 34¼f. and closed at 34¾f., March opened at 34¾f. and closed at 35¼f., May opened at 35¼pf. and closed at 35¾pf

HAMBURG, *August* 1.—Good average Santos August opened quiet at 27pf. and closed steady at 27½pf., September opened at 27¼pf. and closed at 27¾pf., December opened at 28pf. and closed at 28½pf., March opened at 28¾pf. and closed at 29¼pf., May opened at 29¼pf. and closed at 29¾pf.

NEW YORK, *August* 1.—Closing prices of No. 7 Rio were as follow:—

	Aug.	Sept.	Oct.	Nov.	Dec.
August 1...	4·85	4·95	4·95	5·00	5·15
July 31...	4·80	4·85	4·90	4·95	5·15

Mark.	1st size.	2nd size.	P. B.	District.
Binny's Purchie Kadu ...	33 bot in	57 @ 40/	14 @ 50/	Coorg
Do Siddapur ...	37 bot in	51 bot in	18 bot in	,,
G. R. Evans Aali Topoo ...	13 @ 48/	33 @ 39/	7 @ 46/	,,
M. E. Co. Goomenkhan ...	3 bot in	19 bot in	3 bot in	Mysore
Do. Kelagoor ...	14 bot in	25 bot in	5 bot in	,,
Do. Abragay ...	3 bot in	15 @ 43/	4 @ 51/6	,,
B. D. G Chickilly ...	11 @ 85/	36 bot in	3 bot in	,,
Do. Sumpigaykhan ...	4 bot in	18 bot in	4 bot in	,,
Do. Attikhan ...	10 @ 58/	37 @ 42/	11 @ 50/	,,
Kengary Kulhutty ...	7 ,, 48/	12 ,, 38/	3 bot in	Nilghiri
Kulhutty W.D. ...	6 bot in	27 bot in	8 bot in	Mysore
Binny's Bunjagherry ...	19 bot in	25 bot in	11 @ 50/	Coorg
Do. Cannon Kadu ..	16 bot in	30 bot in	7 bot in	,,
Jerramiah ...	23 @ 50/6	24 @ 43/6	5 @ 52/6	Nilghiri
Clyffe	8 bot in	15 bot in	4 bot in	,,
Havekul	11 @ 51/	27 @ 40/6	7 @ 45/	,,
C. A. Waterfall ...	7 ,, 53/6	10 ,, 40/6	3 bot in	,,
Do. Mootanaad ...	22 ,, 53/	27 ,, 41/6	7 @ 45/	,,
Tiger Rock (J.N.) ...	15 bot in	21 ,, 38/6	3 bot in	,,
Woodlands	20 bot in	14 ,, 41/0	5 @ 45/	Shevaroy
Glencaimie	13 @ 56/6	10 ,, 42/0	4 ,, 45/	Nilghiri
Tulla Mulla Peak (cherry)..	1 ,, 36/	2 ,, 34/0	1 ,, 33/	Travancore
Mandalkhan No. 421 ...	79 bot in	106 ,, 37/0	36 bot in	Mysore

TEA.

INDIAN.—Supplies were heavier 13,700 packages, of which 10,500 packages were new season's, being brought to auction, compared with 9,600 packages (5,600 packages new season's) in the week before, and 13,000 packages (mostly new season's) in 1900.

There was again a desirable selection, particularly from Assam and the improved tone noticed previously was well maintained for all grades. Competition was especially strong for leafy kinds which were wanted both for the home trade and also for abroad, resulting in an advance on these being often recorded. Darjeeling sold somewhat irregularly, but on the whole satisfactory results were obtained for early pickings from this district.

For 8,800 packages on Estate account 8¼d was obtained, against 8¼d per lb. for 9,300 packages in the foregoing season.

The amount printed on importer's account was:—

1901.	1900.	1899.
43,900 packages (22,600 New Season's.)	40,500 packages (Mostly New Season's.)	23,900 packages (Chiefly New Season's.)

Ceylon.—Sales comprised 28,200 packages—16,300 packages on Tuesday and 11,900 packages on Thursday—*versus* 29,800 packages on the 23rd and 25th instant, and 42,700 packages for the corresponding time of 1900.

The market is still rather unsettled, but not much change occurred in quotations, and although there were again some withdrawals, most of them were placed afterwards. Whole leaf descriptions under 6d per lb. received more attention, the recent rise being maintained. On the other hand, medium to fine Orange Pekoes were in less request, and Broken Pekoes except the few best lines, went in favour of buyers.

The average remains as on the 25th ultimo, when it stood at 6½d per lb., and 7¼d per lb. in 1900.

Catalogues included:—

1901.	1900.	1899.
124,500 pkgs.	138,200 pkgs.	40,300 pkgs.
(Avge. 6½d per lb.)	(Avge. 7⅛d per lb.)	(Avge. 7¼d per lb.)

Java.—Nearly 1,700 packages passed the hammer without material change occurring in rates

Offered during the month:—

1901.	1900.	1899.
5,700 pkgs.	4,400 pkgs.	4,200 pkgs.
(Avge. 5⅝d per lb.)	(Avge. 6⅜d per lb.)	(Avge. 7¼d per lb.)

China.—The *Glenshiels*, with a cargo from Shanghai and Foochow, docked on the 25th ultimo. A fair business has transpired, Black leaf selling from 5d to 1s 11d per lb., and Red leaf (Soomoos) from 8d to 11½d per lb., Souchongs from 1s 2d to 1s 9d per lb. The latter are considered good, but generally speaking the crop is looked upon as being decidedly inferior.

Shipments to this country are reported to be rather under those of 1900.

Statistical Position.—With the contraction in the totals afloat from the different producing countries as shown above, and improving deliveries, this will ere long become much stronger. Recent arrivals both from India and Ceylon indicate that quality is now being considered rather than quantity, which should beneficially influence prices.

Deliveries.—The clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 30th July,	1901	... ...	15,144,853 lbs.
Do. do.	1900	... ...	14,804,806 ,,

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	10,286	3,398	13,684
Ceylon	21,099	7,106	28,205
Java	1,333	346	1,679
Total ...	32,718	10,850	43,568

Also 1,459 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated August 2nd, 1901, says:—

Quantity brought to Auction in London from 1st June to date.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1901-1902	94,234	245,977	11,458
1900-1901	60,413	235,821	7,633

15,430 *pkgs.* Indian
29,809 ,, Ceylon
1,679 ,, Java
} Total 46,918 packages were offered in public auction this week.

The total exports from Ceylon from the 1st January to the end of June were slightly above those to the same date last year. Australia and Russia both taken increased quantities.

In the six months ending June, 1901, 427,695 lbs. of Green Tea are included, of which 314,703 lbs. went to America, and 93,449 lbs. to the United Kingdom, part of this probably finding its way afterwards to the United States, and other Green Tea drinking countries.

Indian.—With good general bidding, the sale passed at prices fully up to rates current last week competition being stronger for all good Teas. New Season's Teas were represented by 10,313 packages, many of which being of fair quality were well competed for by the trade. The official wire gives shipments to U. K. for the second half of July as 9,200,000 lbs., against 11,130,000 lbs., and quantity from 1st April to 31st July as 25,098,000 lbs. aga 30,660,000 lbs. same period last year. The following averages worthy of note; Makum T Co. 1/8¼; Doom Dooma Co. "Hansu 1/3½; Jokai T Co. "Dikom" and "Panitola" 1/2½; and S kotee, 1/2¼.

Week's average of New Season's Tea sold on Garden Account, 1 7,796 pkgs., av. 8·77d. 1900, 9·316 pkgs., av 8·08d.

New Season's Tea sold on Garden Account, 1st June to date, 1 32,171 pkgs., av. 7·66d. 1900, 34,339 pkgs., av. 7·37d.

Ceylon.—Tuesday's auction comprised 16,657 packages. Bidd was again limited, and a large proportion was consequently w drawn Where sales were effected, prices were generally ab equal to last Tuesday's rates, although somewhat irregu Bidding in Thursday's sale was hardly as animated as on previous Thursday, and prices were here and there a trifle eas especially for medium brokens, common kinds, however, remain firm. The official telegram gives exports to U. K. during July 9,000,000 lbs., against 11,750,000 lbs. in July, 1900. Total Expo from 1st January to 31st July, 68,250,000 lbs., against 74,000,000 same period, 1900. Estimate for current month 7 to 7½ milli against 7,500,000 lbs. actually shipped last August.

Average for week 6·45d., against 7·29d. same week, 1900.

Ceylon Tea sold on Garden Account, 1st Jan. to date, 728,061 pk av. 6·56d. 1900, 757,168 pkgs., av. 7·25d.

Java.—Sold with good competition at firm prices, the be grades meeting with rather better attention.

Bank Rate 3 per cent. Exchange on London three months' sigh Calcutta 1/4 3/32. Colombo 1/4⅛.

COCOA.

A good supply was brought to the hammer on Tuesday, total summing to 8,536 bags; demand was for from act but about 3,050 bags changed hands, in some cases at 1s decl Of 1,938 bags Trinidad catalogued 980 bags sold—good to red 69s to 71s, middling 68s, smalls 65s to 66s 6d, showing depreciation of 1s. Of 1,716 bags Grenada, about 950 bags s at fairly steady prices—66s 6d for very fine, 63s to 66s for g to fine, and 60s to 61s 6d for common to fair. 143 bags Demer about half sold at 70s for fine. 190 bags Jamaica offered 80 bags sold at 60s 6d for fair fermented, being a decline 1s. 40 bags St. Vincent partly sold, at 65s for very fine and part of 20 bags Dominica brought 58s. Of 1,555 b Guayaquil, 480 bags found buyers at 75s to 78s for good to summer Arriba, being full up. 42 bags African bought 61s good defective, being 1s lower. Ceylon still very slow of s only 70 bags selling out of the 1,641 bags catalogued, at 57s per c for ordinary collected. The following passed the hammer unsold 3 bags St. Lucia, 240 bags Bahia, 254 bags Surinam, 163 b Samana, 33 bags Caracas, 163 bags Para, and 394 bags Ha Private transactions include 50 bags Trinidad, fine at 73s, g at 69s; 200 bags Grenada at auctions' rates; 200 bags Haiti 54s for fair ordinary; 80 bags Puerto Cabello, fine at 130s, g at 90s, and some Arriba Guayaquil at 78s 6d per cwt.

The next auctions will be held on the 13th instant.

The following are the amended stocks of Cocoa received fr the docks yesterday:—

	Actual Stock.	Stock July
	Bags.	Bags.
Trinidad	2,206	6,915
Grenada...	2,620	5,857
Other W. I.	335	395
Ceylon and Java	1,716	1,774
Guayaquil	1,196	1,694
Bahia	21	1,581
African	1,396	1,396
Other Foreign	2,142	2,150
	11,632	21,762

the difference representing the loss occasioned by the recent fir the docks.

PEPPER.

Black.—The market is dull and business has been done at lo prices. About 500 bags Singapore have been sold on the spot at 6 6 1/32d for fair, and for arrival 150 tons have been disposed of, *viz.*, n at hand at 6⅛d down to 6 1/16d May-July at 6 1/16d, August-Octo at 6 5/32d down to 6 1/16d, and September-November at 6 3/16d down to

t auction on Wednesday 283 bags Singapore were bought in at to 6⅛d, also 390 bags Penang at 5¾d, and 170 bags Aleppy at 6¼d. 257 bags Tellicherry 76 bags sold at 5⅞d for fair brown. 17 s fine bold heavy brown Ceylon realised 6d per lb.

he shipments of Black Pepper for the month of July compare ollows :—

	1st-half.			2nd-half.		
	1901. Tons.		1900. Tons.	1901. Tons.		1900. Tons.
K.—Sing. ...	150	170	150	80	110	20 40
Penang ...	20		*nil* 150	30		20
ntinent ...	190		*nil*	270		420
ited States ...	220		*nil*	300		30
Total ..	580		150	680		490

WHITE is cheaper. On the spot 300 to 400 bags have been sold 9d to 9⅛d for dull to fair Singapore, and at 8½d to 8⅝d for ang. For arrival 30 tons Singapore have been sold, *viz.*, July-gust 8 15/16d, and September-November at 9d.

t public sale on the 31st ultimo 62 bags Penang retired at per lb. 50 bags Singapore catalogued sold prior to auction.

he shipments of White Pepper for the month of July compare ollows :—

	1st-half.			2nd-half.		
	1901. Tons.		1900. Tons.	1901. Tons.		1900. Tons.
K.—Sing. ...	90	130	60	*nil*	10	60 60
Penang ...	40		30 90	10		*nil*
ntinent ..	10		*nil*	90		150
ited Etates ...	—		—	30		—
Total ..	140		90	130		210

GINGER.

COCHIN was well represented, 158 cases 811 bags 25 bales being catalogued, but there was not much enquiry, only 19 cases 135 bags selling under the hammer. Bold with some medium rather roughly cut and scraped, limed, realised 85s 6d, medium and small ditto 53s, small ditto 45s, good bright cuttings 33s, medium and small some bold washed rough 37s 6d, small and medium ditto 36s per cwt., these prices showing no alteration from previous values.

JAMAICA.—Was in good request, and the whole of the 355 barrels brought forward sold at an advance of 1s to 2s per cwt.; 61s 6d was paid for fine bright washed, 46s to 52s for fair to good bright. 40s to 45s for middling to good middling, and 36s to 38s 6d per cwt, for ordinary to good ordinary.

CINCHONA.

The exports from Java during July amounted to 1,228,000 Amsterdam lbs., against 629,000 Amsterdam lbs. last year. The total for the seven months now amounts to 6,376,000 Amsterdam lbs., against 4,729,000 Amsterdam lbs. last year. In the drug-auction, 8 serons Crown bark were withdrawn, and 37 bales Yellow bark were bought in.

QUININE.

The market has remained in the same inanimate condition throughout the week, with retail sales only including December, at 1s 2d per oz. The spot-price is quite nominal, at from 1s 1½d to 1s 1¾d. The bark-shipments from Java, which are heavy, have had a depressing effect on the speculative market.

CARDAMOMS.

The meagre supply offered and the poor result obtained, were insufficient to test the market. The following were the sales :—Ceylon Mysore, bold pale long, 2s 4d (1 case); bold medium pale, 1s 8d (1 case); small and medium pale, 1s 5d. Cardamom-seeds were 1d dearer, 2s 1d being paid for the only case sold.

(AVERAGE FOR ALL INDIA 8·40d., AUGUST 2ND.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.
lgherry ...														
Hill ...	14 p	4	3 p	4¾	6½c	4¼	...	...	4 p	3½	1	3½	...	...
avancore ...	322	6·77												
Dev H Co. A	142 p	6¼	...	..	20	7	55½c	7½	18	5¼	4	4	45½c	4 6
Sevenmally ...	120	7½	24	9½	40	7¾	...	...	35	6	...	...	21	6¾
...	60	5¾	44½c	6	16½c	4¾	...	...	...	..	...	...	...	...
rnaad ...														
hmond ..	40 p	4½	13½c	6¼	4½c	4¾	...	...	23	4	...	...	...	...

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Formerly Senior Assistant in the Physiological Department, Glasgow University, and Lecturer on Physiology to Queen Margaret College.

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PESTS AND POISONS.

The destruction of pests can often be effected by other means than poisoning, but in very many instances poison is the cheapest and most efficient destroyer. Poisons may be divided into two classes "stomach-poisons" and "contact-poisons," these terms explaining the difference between the two. When an insect eats leaves, barks or fruit, a stomach-poison may be easily conveyed into its food, but this class of poisons is useless against sucking insects, which insert a tube into the plant and do not eat the outside. For these insects contact-poisons are necessary. The Imperial Department of Agriculture of the West Indies has published lists of these two classes of poisons, as follows :—

List A.—*Stomach-poisons. Arsenical Poisons.*

1. Paris Green, mixed with twice its weight of flour, dust or lime, both finely powdered.

2. Paris Green, 1 lb. with 2 lbs. of lime, dissolved in 200 gallons of water.

3. London Purple, mixed with twice its weight of flour, dust or lime, both finely powdered.

4. London Purple, 1 lb. with 2 lbs. of lime, dissolved in 180 gallons of water.

5. London Purple or Paris Green may be used with soap, by adding 1 lb. of soap to every 50 gallons of Nos. 2 or 4.

Other Poisons.

6. Hellebore, mixed with twice its weight of cheap flour, both finely powdered.

7. Hellebore, 1 oz. in 2 quarts of water.

8. Pyrethrum (Bulhach), mixed with twice its weight of cheap flour, both finely powdered.

9. Pyrethrum (Bulhach), 1 oz. in 1 gallon of water.

10. Tobacco (refuse), as dry powder.

11. Tobacco (refuse), 1 lb. steeped in 1 gallon of water for 24 hours.

LIST B.—*Contact-poisons.*

12. *Kerosene Emulsion (hard soap).*—Dissolve ½ lb. of hard soap in one gallon of boiling water; add two gallons of kerosene to the hot liquid and immediately churn, with a syringe or force pump, till the mixture becomes creamy. This is the stock of solution. Make up to 33 gallons. Use only rain water, or soft water (*i.e.*, without lime, etc.).

13. *Kerosene Emulsion (soft soap).*—Dissolve 1 quart of soft soap in 2 quarts of hot water; add 1 pint of kerosene to the hot mixture and immediately churn, with a syringe or force pump till the whole is creamy. Add an equal amount of water, and it is ready for use. Any water may be used.

14. *Rosin Wash.*—Mix 20 lbs. of rosin, 3½ lbs. of 98 per cent. caustic soda, and 3 pints of fish oil. The rosin and caustic soda must be pounded before mixing. Cover this with about 2 inches of water and boil. When the liquid is clear, slowly add water, still boiling the mixture, till the whole is made up to 15 gallons. This is the stock solution and can be made up to 100 gallons when cold, using only rain water or soft water.

15. *Rosin Compound.*—Mix 4 lbs. of powdered rosin, 3 lbs. of powdered washing soda, and 1 gallon of water. Boil, and when all is dissolved, slowly make up to 5 gallons. Boil the mixture till it becomes of a clear brown color. This is the stock solution. Make this up to 30 gallons.

16. *Whale Oil Soap.*—Dissolve 1 lb. of soap in one to two gallons of warm water.

17. *Rosin and Whale Oil Soap Compound.*—Mix 1 gallon of water with 3 lbs. of powdered washing soda and 4 lbs. of powdered rosin. Boil till dissolved and, while boiling, make up slowly to 5 gallons.

In a separate vessel boil 10 lbs. of whale oil soap with 5 gallons of water. These may be mixed while hot to make the stock solution or, when cold, mix these two with 35 gallons of cold water, pouring both into the water together while actively stirring the mixture. However mixed, the final amount must be 45 gallons.

18. *Tobacco and Soap.*—Dissolve 1 quart of soft soap, or ½ lb. of hard soap, in 5 gallons of water, and add 2 quarts of strong tobacco decoction (No. 11).

The poisons named in list A are suitable for application to plants that are eaten by caterpillars ('worms') and other biting insects. The arsenical poisons, such as London Purple or Paris Green, are of universal application against caterpillars and other pests that destroy foliage, but it must be remembered that arsenic is poisonous to man and does not quickly get entirely washed off by rain. Hellebore, on the other hand, very soon loses its poisonous properties, and becomes harmless after some exposure to air. Pyrethrum is harmless to higher animals, but has a powerful influence on insects. It may be applied without danger of poisoning human beings or cattle. Tobacco has a special value in a few cases only, and has less claim to be regarded as a general insecticide. Those in list B are the contact-poisons for application to plants infested with mealy bug, scale insects, etc.

It would, we think, be of great interest if planters who have experimented with any of the above poisons in Southern India would jot down for the benefit of their brethren a few notes as to the effects of application and its cost. On points of this kind it may be confidently said that "two heads are better than one." Men have something to gain by relating their experiences, for they will be pretty sure to have a chance of comparing those of other men with their own, and in this manner deriving some useful hints. Methods and time of application of poisons are points in regard to which local conditions need to be taken into account. There are constant complaints of "bug" from various quarters, and we feel sure that our readers generally would be interested if they could have placed before them a few notes of experimental warfare waged against this enemy (and others) in Southern India.

BOARD OF TRADE RETURNS.

JULY 1901.

The following figures are taken from tables showing the Imports, Consumption, and Exports of certain articles into the United Kingdom for the 7 months ending July 31 in the present and 2 previous years, compiled from the Board of Trade Returns, with stock in U. K. on July 31.

Coffee.—Figures are healthier, all round, than those of 1899 but not so satisfactory as those of 1900. Stocks continue bloated.

—		1899.	1900.	1901.
Imported ...	cwts.	831,880	620,057	772,328
Home Consumption	,,	157,417	171,889	206,252
Export	,,	341,919	316,518	403,029
Stock	,,	605,000	414,000	479,000

Cocoa (Raw).—The steady growth of this trade continues and a large increase is shown in home consumption.

—		1899.	1900.	1901.
Imported ...	lbs.	33,093,709	34,223,069	35,836,763
Home Consumption	,,	21,483,215	22,946,606	26,636,009
Export	,,	6,765,164	6,454,725	6,713,011
Stock	,,	20,143,000	16,583,000	19,278,000

Cocoa (Prepared).—Here also there has been improvement, and the falling off in stock is very noticeable. It would appear as if there were not even a week's supply on hand at the end of last month.

—		1899.	1900.	1901.
Imported ...	lbs.	3,029,915	4,126,443	4,889,420
Home Consumption	,,	3,249,579	3,600,932	4,563,558
Export	,,	465,130	565,897	512,424
Stock	,,	576,000	230,000	145,000

Tea.—Consumption shows but little increase last year, and stocks are fairly heavy.

—		1899.	1900.	1901.
Imported ...	lbs.	124,348,963	130,625,459	131,471,066
Home Consumption...	,,	138,155,779	153,102,166	154,230,148
Export	,,	16,272,570	24,344,532	25,112,100
Stock	,,	68,681,000	67,201,000	73,182,000

CEYLON TEA IN NORTH AMERICA.

Mr. P. C. Larkin, of Toronto, has been writing pretty freely to the Indian Ceylon Press of late anent Tea. In a recent letter to the *Ceylon Observer*, taking exception to some of our contemporary's editorial remarks, Mr. Larkin openly declares that he has an axe to grind. He says :—"I have the good of the Ceylon Tea Industry at heart, because whatever benefits that Industry—that is, whatever benefits it on this Continent—benefits me, as the "Salada" Ceylon Tea Company does by far the largest Ceylon Tea business in America, and if the consumption of Ceylon Tea is increased I get a good deal of the increase. But if no progress is made, why, I make no progress. Therefore, if I see things going well, that is, as well as they can be made to go with the means supplied to the Commissioner by the planters, I want them to continue in that path. I don't want you to start swopping horses, when you have got a sound one, and perhaps get a spavined one in exchange. What you want in America is not a change of method, but to better realize what can be effected with ten times the money now expended."

Now, when a man expresses himself like this he commands respect ; he is not preaching philanthropy but talking business. Mr. Larkin states that Ceylon has one-fifth of the trade on the North American Continent now, and the other four-fifths can be secured if a whole-souled vigorous campaign is carried on *by Ceylon and India combined* for the next few years. Instead of a consumption of twenty million pounds annually in America, there would then be a consumption of one hundred million pounds ; and all China and Japan tea would be displaced, *and the consumption per head per annum would go on increasing.* The planters would get the benefit at once for such a campaign as he suggests would take from ten to twelve million pounds of tea additional off the London market within a year. Mr. Larkin then submits his credentials as follows :—

I am the head of the "Salada" Ceylon Tea Company, that in Canada alone we spend twenty-five thousand dollars per year in advertising "Salada" Ceylon tea, that in Canada we have warehouses in Toronto and Montreal, that we have branches in the United States in Boston, Buffalo, Detroit, and Pittsburg, and therefore I know whereof I speak. That our business is not a small one I might mention the fact that while we purchase from dozens of firms there is one firm in Colombo, who have a connection in London, from whom we have purchased during the past *seven months* 5,600 chests of Ceylon tea ; and there is another Colombo firm, also with a connection in London, from whom we have purchased in the same time 2,400 *hf.* chests of green Ceylon. There is still another Colombo firm from whom we have purchased 1,500 chests of Ceylon in the same time.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

Tea Seed Oil and Oil Cake.

The subjoined report by Mr. H. H. Mann, B.S.C., F.I.C., upon these products is published in an I. T. A. circular, dated 20th instant :—

On the 27th June I received from the Secretary of the Indian Tea Association samples of Tea Seed Oil and Tea Seed Oil Cake which had been sent, through Mr. H. St. J. Jackson, by Mr. H. Drummond Deane, of the Stagbrook Estate, South India, with a request that I should make an analysis of them and report to the Committee. This I have now done so far as is necessary for our purpose—and it is perhaps a convenient opportunity to lay before you my views as to the possible value and usefulness of both products, especially as a large amonst of seed is now produced, and must be utilised, if utilised at all, in some other way than for sowing.

The value of seed of this character almost entirely depends on the usefulness of the oil and on the possibility of getting good feeding or manurial material from the residual cake. It was attempted in 1885 to put tea seed, as such, on the London market under the name 'tanne.' Great interest, I understand, was manifested, but the seeds found no buyer, and the price asked sank quickly to a level far below the cost of importation. At the present day the seed does not come into commerce at all, except for the production of new bushes.

The following analysis by Mr. D. Hooper ("South of India Observer," 1894) of Tea Seed from the Nilgiris, previously dried, shows the composition of the material :—

	Per Cent.
Fixed Oil	22·9
Albuminoids	8·5
Saponin	9·1
Carbohydrates	19·9
Starch	32·5
Fibre	3·8
Mineral Matter	3·3
	100 0

Of these constituents, those of interest for our purpose are the fixed oil, the saponin, the albuminoids (*i.e.*, the nitrogen) and the mineral matter. Let us take these *seriatim.*

The Fixed Oil—is present in small amount compared with that in most other oil seeds, such as linseed, cotton, or castor. I am bound to say, however, that many samples appeared to contain much more oil than the seeds quoted above, but I should consider Mr. Deane's figure of 25 per cent. obtainable by hot pressure as an extreme one for practical working. If high quality oil is wished, the seed will have to be pressed cold, and not more than 20 per cent. may be anticipated. Even this, I fear, may be taken as higher than would on the average be obtained under commercial conditions.

The oil itself is a clear, light yellow, liquid, non-drying oil, approaching olive oil in character, but which always has a more or less acrid taste. The sample sent by Mr. Deane appears to be free from saponin—a poisonous substance (see below) which nearly always occurs in it, but in order to get this freedom great care has to be taken in pressing. Though when heated the poisonous properties of the saponin are destroyed, yet the small quantity which may be present would condemn it as an edible oil for use in western countries. The Chinese, it appears, have long used it for cooking purposes, and it might possibly be employed by the people of the tea districts in a similar manner if it were easily obtainable.

As a lamp oil it answers very well, and would seem to be quite capable of local introduction for this purpose. I say local introduction because burning oils are at present rather at a discount in the markets of the world compared with their former position—kerosene and petroleum products having largely taken the market in the great centres which was formerly theirs. At the same time the fact that it is satisfactory for this purpose should not be forgotten.

The oil produces an excellent soap, hard and white. For this purpose the presence of saponin would be no disadvantage, but would rather add to the lathering power of the soap. If the oil could be produced in quantity, and a supply guaranteed at a rate which would compete with the other vegetable oils, there is no doubt an opening for it in this direction.

The Saponin.—This poisonous constituent of the Tea Seed is all but entirely contained in the cake, after expression of the oil. It is a white solid, sweetish to the taste at first, but rapidly becoming bitter and acrid in the mouth, and it leaves a lasting sensation in the throat for some time. It is exceedingly poisonous, and its presence at once destroys any chance of using the cake or the seeds as a feeding stuff for animals.

The Albuminoids and Nitrogen.—To the nitrogen contained in the albuminoids the cake would owe the greatest part of its manurial value. In this respect, however, it does not for one moment compare with most other oil cakes. Compare for instance the following figures representing the average amount of nitrogen

in other manure cakes compared with that given by Tea Seed oil Cake :—

	Nitrogen per cent.
Mustard Cake	4 to 5
Linseed Cake	4 to 5·5
Castor Cake	5·5 to 6·5
Decorticated Cotton Cake	6·5 to 8
Undecorticated Cotton Cake	3·5 to 4·5
Tea Seed Cake	1·92

Thus, if castor cake were worth 2 rupees per maund in Calcutta, calculating on the basis of the nitrogen alone, the tea seed cake would only be worth about 12 annas per maund.

The Mineral Matter.—In other points the Tea Seed Cake is likewise inferior for manurial purposes. Comparing again the following figures for mineral matter and phosphoric acid in several manure cakes, this will be clearly seen :—

	Mineral Matter per cent.	Phosphoric Acid per cent.
Mustard Cake ...	8 to 10 ...	2 to 3
Linseed Cake ...	4 to 6 ...	1·5 to 3
Castor Cake ...	9 to 10 ...	2 to 3
Cotton Cake ...	7 to 8 ...	3 to 4
Tea Seed Cake ..	3·3 to 4·07 ...	0·58.

Taking these various points into consideration, it will at once be seen that as a manure the cake produced by pressing tea seed is of very inferior character, and would hardly pay for carriage over very long distances for this purpose,—nor can it compete in any market with cakes produced from other oil seeds. On the other hand it is quite good enough to use locally, provided the net cost does not exceed 8 to 12 annas per maund on the garden.

It (the cake) is however supposed to have insecticidal properties ; and might be useful for this purpose. In the paper above quoted, Mr. Hooper suggests spraying the bushes with a decoction of the seeds, or dusting the plants with a powder made by grinding them up. Such a decoction is likely to be serviceable against red spider, but exactly of what value it is can only be determined by trial. Spread on the ground round the bushes the cake would be likely to keep away some types of caterpillar, and other pests which spread by creeping from bush to bush, or which make their home in the ground during the day. A strip covered with the cake between the tea aud the jungle would probably keep out many of the pests which creep the surrounding land into the tea.

The utility of the cake itself as an efficient substitute for soap is very doubtful. Though it lathers well, on account of its saponin content, yet this does not necessarily mean that it has great cleansing properties. Nevertheless it has been used for many years in China instead of soap, and it would probably be of *some* value for this purpose. One more use is made of the cake in China. It is there stated to be very effective as a poison for fish.

On the whole, therefore, while I think there would be a market for the oil if it could be obtained in quantity and fairly cheaply, it must, for the present, be a local one, and the material could hardly compete with oils already in general commerce, unless it be for the production of superior soaps. As a lamp oil it has distinct advantages which should recommend it for local consumption. The press cake is useless for feeding, and forms an inferior manure, though one quite good enough to apply to the land and also to cart for some distance, provided the cost on the garden does not exceed 8 to 12 annas per maund. It would probably be useful as an insecticide—both as cake against certain caterpillars, and as a decoction which might replace that of a wild fern now used in Dibrugarh against Red Spider.

The analysis of the cake supplied by Mr. Deane was as follows :—

Moisture	11·99
Oil	10·48
* Albuminoids	12·00
Carbohydrates, etc.	58·80
Woody Fibre	2·66
† Phosphoric Acid	·58
Lime	·11
Alkaline Salts, etc.	2·78
Sand	·60
	100·00

* Containing nitrogen ... ... 1·92
† Phosphate of Lime ... ... 1·26

* * *

The General Committee of the Indian Tea Association (Calcutta) have issued under date 20th August, 1901, their Monthly Return of Sailings and Daily Customs Entries of Tea from Calcutta, and also a Return of Exports of Ceylon Tea for four years up to 5th August, 1901, as follows :—

Exports of Indian Tea from Calcutta.

	1901. Lbs.	1900. Lbs.	1899. Lbs.
Sailings to Great Britain in July ...	18,750,378	17,617,808	15,612,704
Sailings to Great Britain from 1st April to 31st July ...	24,763,829	26,575,918	29,671,480
Sailings to Australia and New Zealand in July	994,506	404,419	902,077
Sailings to Australia and New Zealand from 1st April to 31st July	1,199,412	891,976	1,238,302
Sailings to America in July ..	76,791	782,910	271,811
Sailings to America from 1st April to 31st July	96,951	817,020	816,282
Sailings to other places in July ...	1,005,705	929,941	856,449
Sailings to other places from 1st April to 31st July	2,240,997	1,536,522	1,475,335
Total Sailings from 1st April to 31st July	28,301,189	29,821,436	32,701,399

		Lbs.
Daily Customs Entries for Export to Great Britain from 1st April to 31st July	1901 ...	25,111,630
Do. do.	1900 ...	30,615,467

Exports of Tea from Ceylon.

Total Exports from 1st January to 5th August			1901 ...	87,534,381
Do.	do.	do.	1900 ...	92,092,615
Do.	do.	do.	1899 ...	77,591,226
Do.	do.	do.	1898	75,630,154

Statement showing the Exports of Tea to Sundry Ports during the month of July, 1901.

FOREIGN PORTS.

	lbs.	
Trieste	120	
Copenhagen	1,100	
Marseilles	6,690	
Bremerhaven	24,311	
Hamburg	48,308	
Naples	349	
Odessa	104,630	
Christiana	40	
Constantinople	7,895	
Zanzibar	495	
Mombassa	840	
Natal	1,424	
Cape Town	5,925	
Algoa Bay	610	
Suez	27,985	
Demerara	30	
Aden	7,404	
Jeddah	58,540	
Bronne	200	
Hong-Kong	11,755	*
Shanghai	20,444	
Bushire	26,663	
Batoum	2,970	
Singapore	6,470	
Alexandretta	2,000	
Beyrouth	6,382	
Bussora	223,806	
Caiffa	900	
Jaffa	550	
Smyrna	8,578	
Trebizonde	117,709	
		725,123 lbs.
Bombay	252,527	
Kurrachee	1,500	
Other Indian Ports	26,555	
		280,582 „
Total ...		1,005,705 „

* It is understood that the bulk of this tea consists of transhipments for the United States and Canada.

* * *

LETTER FROM MR. FOLEY.

The following letter from Mr. E. F. Foley, who is travelling in Persia, has been received by the Indian Tea Association. The letter is dated Birjand, July 6th :—

I have been to the bazaar here and have visited shops of both large and small dealers in tea, of which there are purchasers here, and obtained samples of the different kinds of both black and green teas. The best tea procurable here from the bigger merchants is a white-tipped Pekoe, similar to a good Orange Pekoe in leaf. The price at which it is sold is 30 *krans* per *man* of 3½ lbs., or 1¾ seers Indian, equal to Rs.2-5-6 per lb. When I showed our samples to our caravan leader at Quetta who afterwards had tea with me and who is a resident of this town), he, of his own accord, valued our Orange Pekoe at 30 *krans* per *man*. This was confirmed by an Afghan trader whom I met on the desert journey and who was on his way to Meshed *viâ* Herat with 22 camel-loads of black tea (Dehra Dun) purchased at Bombay, and 15 camel-loads of country (Punjab and Sind) indigo. I gave him samples of Orange Pekoe and Pekoe, one-lb. tins, each, with labels. He valued the samples at 30 and 25 *krans*, and pronounced them to be superior to his tea from Bombay, which he said would sell at 20 *krans* per *man*.

The white tip teas sold here are from Java. They are in high favour, and are preferred to the yellow tips. They come *viâ* Bunder Abbas in four-lb. tin canisters and ten and twenty-lb. wooden boxes covered with China oil paper with flower patterns on geometrical lines; and all are labelled, or rather have stencilled on them, "made in Java" or the "produce of Java." The plantation mark that I have met with is chiefly "Srinagar" and two or three others. Relatively, these teas are inferior to ours, but the excuse is that our teas have not white tips—though acknowledged good in flavour and aroma. The latter they test by breathing on the sample and then smelling it, a test which my samples have stood, and have been acknowledged to be "nosy" and "good." I have also been told that, in the course of time, as our teas become known, they will be adopted for general use, as the white tip teas now are and at as high a price. The black teas that come here are very poor, though fair in appearance. Leafy or "Tilai" teas are preferred, and sell at a better price than "Kalmi" or wiry, which are very often stalky. Persians as a rule don't care about green tea, and what is brought here goes on to Herat and the villages bordering on the Perso-Afghan frontier. My object has been to try to persuade the merchants here to take our teas from us at Quetta and offered to deliver it there on anyone taking 100 *mans*, Birsandi, or about 3401 bs. or say four chests at 9, 8, 7 and 6 annas, *kran* 7, 6, 5¼ and 4½ per *man* of 3½ lbs. For those taking less than 100 *mans*, the price would be one *kran* higher per *man*. The cost of carriage to this place will not exceed Rs.10 per 80 lbs., or 2 as. per lb., or about 1½ *kran* per *man* of 3½lbs. This still leaves an enormous margin of profit. I have tried my best to impress on them this, and the advantage of their taking the tea at Quetta. Failing that, the only other recourse would be for us to establish our agencies here, and to bring up the tea ourselves and to sell it direct, which would mean taking the tea trade entirely out of their hands; and that they could not possibly compete with us as we were the growers and producers—calling their attention to the pictures on the labels of the tea-garden and factory scenes. Besides, as our tea would be overland, it would be preferred to that from Bunder Abbas. which had to be brought by sea and subject to the sea air. The matter of white tips was one of manufacture only; and that it was as easy for us to turn out white tips as yellow. The reason why we did not make white tips was that, for the English, American and Australian markets, yellow tips were preferred, and that white tips were almost valueless there

I have no doubt that by the time I return, several of these merchants will make up their minds to take delivery of both tea and indigo at Quetta. These merchants have been awaiting the return of the caravan leader I started with, and are awaiting his verdict as to the facilities or otherwise of the new Nushki-Seistan route, as this is the first caravan from here that has gone through to Quetta and back. The man has returned and his verdict is favourable. He has reported the same to the Hushtal-ul-Mulk, or the Governor of the Province, with whom I have been accorded an interview, and whom I have tried to impress with the importance of allowing his subjects to trade with British India by the new route, which I said I had by experience found practically easy, with water and rest-houses, and with provisions for man and beast every 25 to 30 miles, and every protection from robbers, by having local levies to patrol the stages and to accompany caravans if necessary; but this was not necessary, the road being as safe, if not safer, than in Persian territory. The chief obstacle to increasing the trade by this new route is the Russian opposition to it, who, by holding the customs in their hands, can give endless worry and trouble and the general influence they have over the Persian Government, the latest being to try to get the Persian Government to establish quarantine stations at Seistan and on the Herat border. Unless the British Government can induce the Persian Government to accept clean bills of health with merchants and travellers from India, furnished at Quetta or Nushki, it will always be possible for the Persian Government or Russians to paralyse any trade by this route by keeping caravans and travellers unnecessarily long at any station before granting "pratique." A high (Persian) official from Teheran was down lately to see about establishing quarantine. I may add that the fact of the Persian Customs being collected by the Russians has given the Indian traders an idea that the Russian Government is all powerful here and that Persia is practically Russian, and British influence *nil*. They have experienced trouble in getting their goods through the customs, and some here were prepared to return to India rather than be subject to gross impositions, and their invoices looked upon as suspicious and not to be relied on. Then it is also insisted that all traders coming into Persian territory should give up their arms. This they flatly refused, and would prefer to return to India than to travel defenceless in a country where nearly every man goes armed, and where there is so little law and justice from the Persian Government. They were told that they or their relatives would get compensation for any loss of life. To this their reply was that no compensation would be of any use to them after they were killed; and that certainly they would not travel unarmed and so not be able to defend themselves, though they were prepared to guarantee these arms were purely for self-defence and not for sale and would, if necessary, take out passes for them from the Persian Government, or that the British Government should grant them passes which would be accepted in Persian territory. Here they wanted to stop my gun going any further though it had been passed by the Customs officer at Seistan

Birjand is a large town containing from 25,000 to 30,000 inhabitants, and has large and populous villages in its immediate vicinity, and right on to Meshed and the whole of the Western Afghan border the country is thickly populated. All of the people are tea drinkers, and most of them can afford to purchase it except the poorest. The samovar, or tea kettle, is continually in use; and wherever I have been, even to the shops of the merchants, I have been entertained with tea and very often with Russian cigarettes. The trade of Birjand is chiefly with Bundet Abbas, to which caravans go once a year only. The Persian merchants send their goods there, carpets, wool, dried fruits, etc., which are sold through Agents, and foreign goods purchased and sent up. In this business there is no credit, the Agents receive, I am informed, a remuneration of 2 per cent. In the local bazaars there is a system of six months' credit, for which, instead of interest, a higher rate is paid for the goods purchased. As far as I have seen, the people are well off, well dressed, and well fed, and seem to have sufficient to buy both necessities and luxuries. With regard to trade with foreigners, I was informed by our Consul at Seistan that a new Perso-European court has been established for adjudicating cases of breach of contract and indebtedness between foreigners and Persian subjects, the Persian Government undertaking to pay awards when decreed against their subjects, from whom they would recover it the best way they could. If so, the danger of credit would be minimised to a great extent. When I get to Meshed I shall learn more regarding this from our Consul-General. I shall also make it a point to see the Russian Consul-General at Meshed, to obtain from him all the information I can regarding the over land trade to Russia proper and trade with Russian Turkestan where, as in Afghanistan, green tea chiefly is used. To test the market here, I am leaving with our British representative or native Agent, Umardeen Khan of the firm of Mahomed Suleman of Seistan—the first British subjects to start business in these parts—samples of tea large enough to test the market here right up to the Afghan frontier and Herat itself, where I have arranged to send samples of both black and green tea to the native Agent of the British Government. At Herat, green tea is chiefly used, of which I have a fairly large quantity forwarded to me by the Manager of the Punjab Bank, Quetta, from

the Kangra Valley. The small quantity of tins of 4 oz., each sent to me by the Manager of the Kangra Valley Tea Co. (green tea) I am taking on to Meshed with me. Some of these as well as black tea samples have already preceded me from Seistan, being forwarded on by post by the Agent of the great Meshed merchant to his principal.

As far as I see, unless a few of the biggest merchants take up the business of buying at Quetta tea and indigo chiefly, and which would then be practically a monopoly in their hands—which is a great inducement to them—the only other recourse will be to send up the tea and indigo and to appoint agents or to establish agencies at all the chief places, Seistan, Birjand, Meshed, Kiman, Ispahan, and Teheran. The fact of the teas being land-borne to all those places will always be a great factor in their favour, and will give them a pull over Ceylon tea, which must come by sea till the Adams Bridge railway is completed. Here at Birjand, there is only one man (whom I have not been able to see) who could take up the entire Birjand and Kirman business. At Meshed there are at least three that I have heard of, all of whom I shall interview and obtain their views. The price we may look to at present for our teas will range from 10 *krans* to 25 per *man* according to quality, from Annas12-6 to Re.1-15-3 per lb. and for every superior Orange Pekoe as much as 30 *krans* per *man*, or Rs.2-5-6 per lb. Several people have been to me to buy small quantities of tea, but I have refused to sell, as I paid no duty or customs as the samples were not for sale; but I have never sent any one away without a small sample free. As every village and town that I stopped on my way to this—sixteen different places—I had either the landlord and his friends, and as many others as chose to come, to tea. I stayed at the houses of all sorts and conditions of people, from the Persian gentleman to the farmer and peasant, by all of whom I have been received courteously. From Seistan the whole way the fame of this tea has spread, and with a little push would soon establish itself in Persia, as it has always been liked and preferred to most of the teas hitherto used by them.

To-day, before leaving, I shall send twenty-one canisters of Orange Pekoe and Pekoe to the Governor here, same as given to his brother the Governor of Seistan, and which was so much liked that the Governor wanted to purchase the whole half chest—regardless of price, which at Seistan was 20 *krans*—for much inferior tea—Dehra Dun *viâ* Bombay. Seistan itself is not much of a business place; the population of the whole of Seistan is small and scarcely equal to the town of Birjand and its neighbouring villages. Any tea used in Seistan before was merely that brought by private individuals from Kirman of Birjand. No tea was sold in Seistan till two years ago, when it was introduced by Mahomed Suleman, the then subsidised traders of the British Government. The chief Government servants and some of the nobility have also received samples from me, and, on my return, I expect to hear their opinion.

NOTES.

India's Tea Exports. 18,750,378 lbs. of tea were shipped from Calcutta during July.

Indian Tea for India. A further 33,600 lbs. of tea have been given to the Tea Expansion Committee.

Vanilla in Reunion. In 1899 Réunion exported 81 tons of Vanilla, in 1900 the total reached 95 tons. This represents a value of about £150,000.

German Quinine, etc. The exports of "quinine, quinine-preparations, etc.," from Germany, during the five months ended May, amounted to :—

	1901.	1900.	1899.
Kilos.	88,700	89,500	102,300

Coffee in Constantinople. A large stock of Santos coffee remained in hand at the beginning of 1900 from the previous year, and fluctuation in price prevented speculation in this article. The ruling price wa £1-15-6 to £2-1s. per bag of 110 lbs.

Coffee in the U. S. The *American Grocer* says :—"Coffe on the basis of 4·70 to 4·75 cents fo No. 7 Rio is attractively cheap ;" also :—"A new coffee com pany has been formed in Toledo, Ohio, known as the Toled Coffee and Spice Company. Capital, $200,000."

Tea in the U. S. The last tea sale indicated, says th *American Grocer* of 24th July, strong market for British grown tea ; steady for greens The bulk of the offering was Formosa, which sold from 10 to 28 cents in bond. Next auction July 31.

The great Secret. A bold cross-heading in a Colombo contemporary tells us just what we wanted to know. It says "consumption is caused by expectoration." If we could but believe it to be true as regards Tea and Coffee, we should know what course to recommend to producers. But we have our doubts.

Tea in Turkey. The British Consul reports that attempts to import Indian tea which failed in 1899 as already reported, succeeded in the following year 300 chests and ½ chests were received in Turkey during 1900, received weighing each 40 to 80 lbs., at 7d. to 10d. per lb. 150 cases also of China tea were imported fetching 8d. to 1s. 10d. per lb.

Rubber in Mozambique. The British Consul reports that although but a small quantity of rubber is shown in the Mozambique returns for past years there can be no doubt but that there is a considerable rubber trade on the mainland. That this industry is not systematically worked, is owing to the unsettled condition of the natives on the mainland, and the little that is collected is obtained in such a crude manner that the value is greatly reduced.

Tea at Wenchow. Tea formed some 45 per cent. of the export of 1900. A falling-off noticeable is attributed not so much to failure in the crops (though these were affected by the floods) as to the lack of capital and reduced number of dealers, and to an increase in the liking. A great deal, however, left by junk for Hong-Kong and South China, and it appears that the area of cultivation continues, even if slowly, to increase.

Calcutta Tea Sale. The Calcutta Tea auction held last Friday was the largest held this season, 24,000 packages being offered. All districts were well represented. The quality with the exception of Dooars tea was not so good as at the previous sale. The sale passed off with a quiet tone, and prices were very irregular, weak medium teas being hard to sell, except at much lower rates. Common kinds closed easier. There was a good demand for Bombay and the Persian Gulf for suitable teas.

Chinese Currency. In his report on the trade of Swatow for the year 1900 Mr. Consul Scott remarks that the "tael" is not a coin at all, but merely a quantity of silver unalloyed, weighing 1⅓ oz. avoirdupois. Its sterling exchange has, he says, year by year been fluctuating and falling. In 1890 the "Haikwan tael"

stood at 5s., but in 1900 the value of silver had so depreciated that the same "tael" weight would only realise some 3s. Unfortunately, Mr. Scott says nothing of the fluctuations of the local copper currency during the same period.

Cocoa in Dutch Guiana. The production of cocoa in Dutch Guiana during 1900 was considerably below the average of the six previous years. Disease, which had not appeared to any extent in 1899, not only reappeared, but spread to other districts, but fortunately again disappeared towards the end of the year. So far neither the cause nor the cure has been discovered, but an expert whose duty it would be to enquire into the causes and life history of the disease was to visit the colony recently. The total production for the year was 2,183 tons; the average price in Paramaribo being 75c. (1s. 3d.) per kilo.

The Pan-American Exhibition. As a part of the food exhibit "Equatorial Pan-America" is a realized dream of tropical trees, plants, vines, foliage and flowers too gorgeous for adequate description, and must be seen to be appreciated—nestled as it is within decorated glass, ornate grills and sparkling waters, suggesting the "Dolce far Niente" of vacation time in Caribbean Seas. This educational exhibit extraordinary consists of live trees, plants, vines, and shrubs selected from plantations and botanical gardens of tropical Pan-America, including allspice, pepper, cinnamon, clove, nutmeg, ginger; a miniature coffee plantation; a miniature tea plantation; with kola, mate, vanilla, tonka, cacao (from which chocolate is made), sago and arrowroot. So says the *American Grocer*.

The Russian Tea Duty. The Imperial Russian Consul in Bombay explains that there has been a change in the duty imposed on green tea entering Russia. The customs duty for green tea imported into the Russian Trans-Caspian Province and to Bokhara used to be roubles 14-40, 10-20, or 6, according to its quality. A new order of the Russian Minister of Finance, dated the 24th March, 1901, old style, abolishes this difference, imposing a uniform duty of twelve roubles (about Rs. 19) per one pound (about 36 lb.) on all kinds of green tea imported into the Trans-Caspian Province or to Bokhara, irrespective of the country of produce of such tea, as also of the route chosen by the importer *i.e.*, either over the land frontier *viâ* Persia, Afghanistan and China, or by transit *viâ* Batoum, Baku and Krasnovodsk.

The London Tea Market. Reuter reports that the market for Ceylon tea is generally firm. Pekoe Souchongs are quoted at 4½d (same as last week) but the average for the week is 6¾d (an eighth of a penny up). 28,000 packages of Ceylon tea were offered for sale and 26,000 were disposed of; while of the 35,000 packages of Indian tea offered, 29,000 found purchasers, at an average of 9d per lb. (¼d up). Cabling to Colombo on 23rd instant, Messrs. Gow, Wilson & Stanton report that the market generally is steady and that for medium liquoring Pekoes and Broken Pekoes as well as for Common Pekoes and Boken Pekoes is also steady. The price of fair liquoring Ceylon Pekoe Souchong is 5¼d (the same as last week) and the average price of Ceylon tea sold on garden account this week was 6¾d (an eighth of a penny up). The average of the corresponding week last year was 6⅞d.

The American Tea Campaign. At the half-yearly meeting of the Ceylon Chamber of Commerce on 23rd ultimo. Sir W. W. Mitchell proposed and Mr. F. M. Mackwood seconded:—"That in the opinion of this Chamber it is not desirable to continue expenditure in America on the existing scale by the 'XXX Committee,' and they recommend that such expenditure be modified and a portion of the funds diverted towards efforts being made in other directions." The Hon'ble Mr. Figg, Messrs. T. B. Campbell, A Lampard, D. Skrine, A. Forsyth, F. M. Mackwood, A. R. A. Heath, G. B. Leechman, and Sir W. W. Mitchell carried on an animated discussion on the matter and the motion was eventually lost by 11 to 5 votes. It was thought that sufficient had been said on the matter to draw the special attention of the Thirty Committee. We give a brief report of the discussion on another page.

Coffee in London. The *Produce Markets' Review* of 3rd instant says:—The week commenced with a very strong tone, a good demand from the Continent being helped by an advance in the Brazilian exchange and dearer prices on the terminal market. Since then, however, the position has somewhat altered, the exchange has again fallen, and, receipts being about double those of last year, quotations have given way, and are again almost at the lowest point of last month. This has, however, had little effect on actual Coffee, and a good general business has been done at decidedly higher prices. The demand has principally been for Central American sorts, and, as a consequence, there is little left in Costa Rica under 40s. Guatemala from 40s to 50s is also 1s to 2s dearer. Auctions were held on Tuesday only, and as there will be none next week there will probably be a quiet time which will allow new arrivals to accumulate before the market re-opens.

Tea Production a Success in the U. S. "We are now succeeding admirably in the production of tea in the United States," says Secretary of Agriculture Wilson. "It is only a question of a short time when we will be able to raise all the tea demanded for use in this country. The two tons of tea grown at Summerville, S. C., last year so well satisfied the New York investors interested in the industry that they immediately formed a syndicate and bought 6,000 acres of land in the State, upon which tea will be grown. The Department of Agriculture last year sent tea plants to every Gulf State in the Union, from the Carolinas to California, for experimental raising. We have just heard from South Carolina that imported machinery in use there is able to make green tea from the black product in one hour. We do not yet manufacture such machinery in this country, but we will get to that later. Then there is no question concerning the availability of labour when we get to growing our tea on a large scale. There is any number of young people who will seek employment as pickers of the leaves, as wages will be good. We are now importing plants from China, Ceylon, and Japan, and we purpose raising the highest grade of the product in this country."

Indian Tea in London. The market continues firm, says the *Produce Markets' Review* of 30th ultimo, and there was good competition for the larger quantity brought forward at the public sales. The medium and finer qualities, which are now getting more plentiful, have

been readily bought at firm to advanced prices; but, as the prospects are favourable to a more liberal supply in the near future, present rates are not likely to be long maintained. It would appear from the advices from Calcutta that the production of the finer Teas is likely to be largely in excess of last season. Should this be the case, coupled with a probable material curtailment in the quantity of the commoner kinds, the prospects of the owners of gardens generally are not likely to prove more favourable than last year. The principal aim should be, as far as practicable, not to produce an excessive supply of any particular grade, but as far as possible to furnish this market with Teas for which there is the largest demand, and by doing this the fluctuations in prices would be minimised and at steadier market would prevail. The statistics for the past month compared with July last year, as will be seen below, are somewhat more favourable. The imports were 4,707,000 lbs. against 5,005,000 lbs., while the stock is now only 9,400,000 lbs. larger, and in the previous month it was upwards of 12,000,000 lbs. in excess of the former year, while the deliveries were 8,292,000 lbs. and 7,529,000 lbs. respectively. The quantity brought forward at the public sales amounted to 15,430 packages, 3,894 being withdrawn, and for all grades excepting the common descriptions, which were occasionally weaker in price, a firm tendency prevailed.

GENERAL ARTICLES.

THE AMERICAN TEA CAMPAIGN.

INTERESTING DEBATE IN THE CEYLON CHAMBER OF COMMERCE.

On Friday last Sir W. W. Mitchell, in moving the motion—"That in the opinion of this Chamber it is not desirable to continue expenditure in America on the existing scale by the XXX Committee, and they recommend that such expenditure be modified and a portion of the funds diverted towards efforts being made in other directions,"—which stood in his name, said that he did not wish to complain about Mr. Mackenzie or the apparent want of success that had attended his efforts, but he objected more especially to the large expenditure involved. They may be told that a large sum was spent on advertising, but he thought that work could be done through an American resident advertising agent which would not cost much. They had to rely solely upon themselves for the monies that were required to push Ceylon tea in other countries. Useful work was being done on the Continent, but more money was needed and where was that to come from? It was also said that money was required for pushing tea in Russia. There was an important exhibition coming on next year and they should do their best to support the proposal to put forth a first-class effort to make Ceylon tea known through the usual means adopted. He understood that the question about expenditure in America would shortly come under the special consideration of the Thirty Committee. He was sure none of them there would attempt to dictate to the Thirty Committee or give offence in any way, but none the less it was their duty to give expression to their views on that subject. The present was a very opportune moment to refer to the matter, and he hoped what transpired there that afternoon would be of service to the Thirty Committee.

Mr. F. M. Mackwood seconded. He thought the business in America was costing them too much.

The Hon. Mr. W. H. Figg was opposed to the motion. He was of opinion that Mr. Mackenzie's policy was a right one, and that it was approved by the Thirty Committee.

Mr. D. W. H. Skrine was also against the proposal. He thought that if they took away Mr. Mackenzie they would have no one to put in his place.

Mr. Lampard, too, objected to the proposal for the reduction of expenditure. He thought that the money spent in advertising in America was, from a business point of view, extremely small. They had money and it stood to reason they should spend money largely, in the largest field which existed. With the judicious advertising, and a larger sum spent in advertising in America than was now spent, the island would benefit in an increased ratio.

Mr. A. Forsyth supported the motion. He held that the spending of such large sums in America had done no good.

Mr. A. R. Heath was neither for nor against the motion, but thought that the buyers should be consulted as regarded the best way of spending money in advertising, etc.

Mr. G. B. Leechman said he was glad so much light had been thrown on the subject. If the resolution was passed, he thought it would simply be regarded in a very, very general way, calling attention to the importance of the subject. The Thirty Committee would no doubt give their best attention, and he would leave the matter absolutley in the hands of the Thirty Committee, and especially the six members who represented the Chamber.

THE MOTION LOST.

Sir W. W. Mitchell having replied, the motion was put to the Meeting, and lost by five votes to eleven.

TEA-DRINKING IN GERMANY.

That the French will ever depart from their national beverage, coffee, seems impossible, but it is remarkable that in Germany a taste for tea is fast increasing. According to reliable accounts, tea-drinking is at present confined to the wealthy classes of the Fatherland.

Tea that is in any way palatable is extremely high in price, and is at present sold retail at from 6 to 10 marks (5s. 11d. to 9s. 10½d.) per lb These teas are mostly caravan teas imported from Russia. There is an opportunity for an enterprising British firm to make an opening for Indian and Ceylon teas in the markets of Germany.

The amount of tea consumed at present in Germany is not great, owing to the fact that the prices charged are beyond the pockets of most German families, but a tea with a reasonable price ought to command a ready sale. The difficulty would be to find a satisfactory agent. A good English commercial traveller who can speak German fluently is hard to find who would be willing to engineer what would be at first a small and somewhat uphill business.

The duty charged on teas is 50pf (6d.) per lb., and allowance per chest is made for wood and lead wrapper. Thus a good tea could well be introduced into Germany at a retail price of 3 marks (2s. 11½d.) per lb., or even less with a considerable profit to the merchant. The tea at present sold in Germany at 3 marks per lb. is not fit to drink, and it is doubtful whether it is tea at all.—*Home Paper*, August 16th.

THE INVESTIGATION OF PLANT DISEASES.

The importance of agriculture to the United States of America has led to the organisation in the various States of the Republic of special experimental stations devoted to the investigation of agricultural problems peculiar to the districts in which they are situated. From these stations bulletins giving an account of investigations undertaken, and the results obtained, are issued at irregular intervals, and are supplied to persons interested. In this way a great deal of useful information is placed at the disposal of farmers and others, and thus promotes profitable cultivation of land. The Ohio Experiment Station has devoted, during the last ten years, a considerable amount of time to the systematic investigation of various plant-diseases common in the State; a summary of this work was compiled by the Director as a part of the exhibit of the United States Department of Agriculture at the Paris Exposition of 1900, and has now been published as Bulletin No. III of the Station. The objects of these investigations were to obtain accurate information regarding various vegetable parasites, and the measures to be adopted to destroy them successfully on a commercial scale. Where possible the co-operation of farmers in the district was secured in experiments with fungicides, so that no doubt should exist as to the practical value of the remedies proposed.

The first enquiry undertaken was on the prevention of the destructive disease known as "apple scab." This fungus attacks both the leaf and the fruit of the apple tree, retarding the growth of the

latter and rendering it unsightly in appearance. Spraying with solutions of copper-salts was found to give good results, and the best preventive was found to be a mixture prepared by adding milk of lime to an aqueous solution of copper sulphate, and known technically as Bordeaux mixture. As instances of the efficacy of spraying with this liquid it may be mentioned that the market value of sprayed over unspray apples of the same variety, grown in the same orchard, varied from 50 to 100 per cent. Spraying experiments for this fungus have been undertaken at intervals since the investigation was first commenced and have been uniformly successful.

Similar results have been obtaining in the treatment of the "anthracnose" fungus which attacks raspberries and the "shot-hole" fungus of plums and cherries. Experiments on the "brown-rot" of the plum have not been so successful, although it was shown in this case also that the spread of the disease is to a large extent checked by spraying with copper-salt solutions. This disease, however, is favoured by wet weather, which also renders spraying useless, so that the eradication of this fungus is a particularly difficult matter.

The peach seems to be particularly liable to a variety of diseases and, as it is extensively grown in Ohio, it has naturally been the subject of experimental work by the staff of this station. The diseases of the plant may be grouped under four heads:

(1) Diseases due to unfavourable soil.
(2) Injuries due to atmospheric conditions.
(3) Fungoid diseases.
(4) Diseases caused by parasitic animals.

Of these the diseases under the third head are usually most serious and comprise those known as "yellows," "crown gall," "rot," and "leaf curl." The second of these has become very serious in recent years. It appears as small excrescences on the stem of the tree, which dies before it attains fruit-bearing age. So far no remedy has been found, and the only safe method for avoiding the infection of healthy trees is the destruction of all the affected plants. The other diseases mentioned have been successfully treated by spraying with Bordeaux mixture, although in some cases this treatment only begins to be really effective in the second year.

The destruction of the minute worms which attack plants grown in forcing houses has also been made the subjeet of special study, and the occurrence of excrescences on the roots of tomatoes, roses, cucumbers, violets, begonias, and other plants has been traced to these organisms. In such cases steaming or freezing of the soil used in the forcing house are the best remedies. The bulletin is profusely illu-trated with figures of the various parts of the plants attacked by disease, so that recognition of any form of fungus should not be difficult.—*Imperial Institute Journal.*

RETAILING PRICE OF COFFEE.

The following extract from an American paper shows how consumers are victimized :—

"Although for the last five years a period of depression in prices for green coffee has been experienced, resulting from over-production in Brazil, the cost of the better grades of coffee to the average consumer has not been reduced to any extent; in fact it will be found that the average consumer is paying his grocer the same price for his "Java and Mocha" as he paid five years ago, which is generally between 30 to 35c per lb.

In a vague way must consumers of the better grades of coffee know that the coffee sold them by most grocers as Java and Mocha is anything but what it is represented.

During the first year or so of depression in prices for green coffee many queries were received from the coffee consumers, asking for an explanation of the report of depression and lower prices for coffee, as they were unable to obtain coffee from their grocers at a cheaper cost. One subterfuge or another, however, was resorted to to quiet the inquisitive ones. The one most generally resorted to was the statement that the decline in prices was confined to Brazil grades of coffee, which the consumer informed was not the grade of coffee sold him and that Java and Mocha were bringing just as high prices as previously. For a time this was true, but for the past year or so the prices for Java coffees in the green have been gradually sagging; but the prices for coffee charged by the average retailer have not been reduced.

The fact that practically all retailers of coffee throughout the country sell only "Java and Mocha" to their customers who want the best grades of coffee calls to mind strongly the miracle of the multitude being fed from the five fish and twelve barley loaves.

The deliveries of all kinds of coffee in the United States for the past five crop years have been as follows: 1896-97, 5,088,594 bags; 1897-98, 6,036,311 bags; 1898-99, 5,682,636 bags; 1899-1900, 6,035,623 bags; this year, which ends June 30, 1$01, promises to show a slight falling off from last year, the deliveries to May 1 being about 450,000 bags smaller than for the same period last year. Of these deliveries Java and Mocha does not supply over 2½ per cent. and this is a liberal estimate. The fact of the matter is that the better grades of coffee sold by the average grocer are anything but what they are represented; they may claim to sell Java and Mocha, but it will be found that it is either West India growths, *i.e.*, Maracaibo, Central American, Bogota, Mexican, and Porto Rico, or the better grades of Brazil coffee, particularly Santos.

The margin of profit that is being made after the green coffee leaves first hands can be easily figured. As previously mentioned, the average retailing price for the better grades of coffee which are usually sold as "Java and Mocha" is anywhere from 30c to 35c per lb. The first cost of these coffees in the green at the present market runs principally from 8c to 12¾c. Coffee costing 8c green is equivalent to about 10c roasted and 12½c green it is equivalent to about 15½c roasted. The margin of profit in actual Java and Mocha coffee where prices are maintained above 30c per lb. is also large. The first cost of Interior Padang coffee, which is the standard grade of Java coffee, is at psesent from 17c to 19c green, which is equivalent to about 20 3/4c to 23c roasted. Mocha is quoted at 15c 17c green for the average run, and these prices are equal to about 18 1/4c to 20 3/4c roasted.

As to quality of coffees, exporters claim that there are no reasons why coffee should not be sold on a true basis. The better grades of West India growths and in fact of Santos, the state, are just at desirable in their cup qualities as Java and Mocha. With the average consumer, however, educated to believe that there is no coffee equal to Java and Mocha, and consequently pays an extreme price for coffee which, if purchased on its true basis, could be obtained at a much more reasonable figure."

BRAZILIAN "RUBBER FARMS" FOR SALE.

We have before us descriptions of several "rubber farms" in the Amazon river country that are for sale. Some of them are offered by the proprietors, and others by banks at Pará, which, having made advances to the owners of the "farms," have taken over the properties in default of payment. We do not know the merit of these particular opportunities for investment, but the fact that they exist suggests several points of interest.

In the first place, the rubber gathering business probably is better organized than most of us hitherto have supposed. It appears that the 50,000,000 pounds or more of rubber annually exported from the Amazon is not gathered mainly by half-savages, roaming in vast forests, tapping at random such rubber trees as they may chance to find. It would require more than such haphazard methods to form the basis for the business of the banks and mercantile houses of Pará and Manaos, the hundred or more steamers on the Amazon, and the rubber-carrying ships on the Atlantic which transport not infrequently a cargo of rubber worth $1,000,000 or more.

On the contrary, each of the "rubber farms" is described as consisting of a definite number of *estradas* (parth, or roads), marked out so as to give ready and certain access to the particular rubber trees to be tapped, the approximate number of trees also being

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

given. This preliminary work of road-making is not done for a single season, but is meant to be permanent, so that, when a plentiful supply of prolic trees is once located on a navigable stream, they may be visited season after season, with an assurance of a yield that will prove profitable. From one description we quote: "This farm was marked off five years ago, for which service was paid 40 contos of reis (equivalent to-day to $10,000)." The number of trees on this estate is estimated at 20,000. There are also said to be on the farm wooden buildings, cattle, etc., besides which four steam launches are owned. Doubtless on an estate where the business of rubber gathering has been prepared for with so much forethought and at such expense, we might to-day see a force of workers established all the year round, but for the fact that the annual rising of the rivers scatters the rubber hunters for a certain period. As it is, the crop season, during which the trees are tapped daily, is something more than six months in the year

It may be asked why, in the face of such preparations and the presence of rubber in paying quantities, the owners of these farms should want to sell. The reason given is the financial depression from which all Brazil is suffering. Any manufacturer who buys Pará rubber is prepared to believe that somewhere, between the forest and the factory, good profits are made on it. The owners of many of these farms have profited largely, but their money has been made too easily for any thought to have been taken for the morrow. Hence the beginning of each new season finds most of them with nothing but their *estradas*, waiting to be worked. They must send for workers, and provide for them until the proceeds of the year's crop come to hand, all of which makes necessary advances from merchants or bankers who are generally at a distance. Whatever may be the prime cause, money is now a scarce article in the rubber country, the rate of exchange is most unfavourable, and credits have become contracted to an extent which leaves the weaker operators helpless. It is quite possible that the number of persons in the rubber gathering business, and the number of estates, affected by the Brazilian financial crisis will be so great as to curtail seriously the production of rubber during the coming season.

All of which leads to the thought that, if the Pará rubber already produced has come to an important extent from systematically marked out farms, visited year after year by workers under the same control—albeit the general management of these estates may have been wasteful and improvident—there may be a good opportunity for the investment of capital by outsiders, on a basis of cash capital instead of advances of goods and credit, in very large tracts of rubber lands, to the profit of the investors, while rendering the supplies of rubber more stable and the ultimate cost to the manufacturer lower.—*India Rubber World.*

NEW TREATMENT FOR COCOA CANKER.

P. O. D. writes to the *Times of Ceylon*:—A friend writes me as follows:—"I have just seen a letter from a Ceylon Cocoa Planter describing a new method, which is very interesting. The whole of the *outer bark*, up to about 4 feet. from the ground, is shaved off. The tree then exudes a lot of sap. This dries up, and the canker is killed, and the new bark that forms is so hard and smooth that it is said to be canker-proof. 'The whole of the trees' (*diseased* trees, I presume, but this was not stated) have been treated in this way on—Estate. The name of the estate is given, but I don't know whether I am at liberty to quote it or not. The result has been so great a freedom from disease that the planter whose letter I saw has tried the method on a portion of his own cocoa, and so far with good effect. He says there may be danger of the trees becoming hide-bound. I suppose that, if so, some remedy may be used."

Now, sir, what more can cocoa-planters possibly want? We have at last discovered a man who has not only killed the canker, but has clothed his trees in bark he believes to be canker-proof. Yes, sir, their is one thing cocoa-planters would be interested to know. They would like that man to own up in order to erect a monument (say, close to the Borron Memorial Hall) in grateful recognition of his invaluable discovery. Modesty has, no doubt, withheld him hitherto from rushing into print. Now the recipe is out, it is no longer a trade secret, and modesty need no longer be out of place on Matale Common.

CEYLON AND ITS CHIEF PRODUCTS.

The following are extracts from the Report of the Ceylo Chamber of Commerce for the six months ended 30th Jun last, as follows:—

The Tea Industry and Over-production.—During the first s months of the year a determined attempt was made to improve th position of the Tea Industry by reducing the output. The sugge tion was first put forward here by the Chairman of the Planter Association, and almost simultaneously in London by Mr. Ruthe ford at a meeting of members of the Indian and Ceylon Associatio held at Winchester House, on Wednesday, 23rd January, when th report of a Select Joint Committee was adopted and the proposal t restrict the output of Tea in India and Ceylon during the curre season was approved. On the 14th February the Select Joi Committee issued their final proposals with a form of undertakin for signature, and the means to be adopted to secure the desire reduction in yield were the restriction of the plucking area, fine plucking, the manufacture of Green Teas and the appropriation Tea for the exploitation of the native markets in India and Burma together with a sliding scale whereby estates producing fine qualities of Tea were subject to a less restriction of output as com pared with those producing common Teas. The Committee furthe urged that no further Tea clearings be planted out either in Indi or Ceylon beyond those in hand that could not be stopped. Thi circular was systematically distributed to all estates in Ceylon, an the Chamber in Colombo did their part in bringing it to the notic of the various Estate Agencies and Companies, but in the seque it was not found possible to secure the promise of more than total reduction of 7,000,000 lbs. against India's 10,000,000 lbs., an the scheme accordingly fell through. The agitation, however cannot be looked upon as fruitless, for it is known that large num bers of Estates and Companies, although not willing to formall bind themselves to do so, are actually working on the lines indi cated, and had it not been for this and a somewhat less favourabl season, the export figures to 30th June last, *viz.*, 78,414,020 lbs would probably have exceeded the figures of the previous yea which amounted to 78,474,630 lbs.

Reduction of Tea Duty.—On the 14th December last the India and Ceylon Associations presented a Memorial on the subject o the tea duty to the Chancellor of the Exchequer which set out very strong case in favour of its early reduction, if not of its entir abolition, and there seems every hope that the Memorial will hav its due effect whenever a reduction in taxation in the Unite Kingdom is practicable.

Tea Trade in the United States of America.—An interestin report on this subject emanating from the Foreign Office, whic has reached us through the Ceylon Association in London, will b found in the Appendix.

During the past six months the direct trade between America and Canada with Ceylon has been disappointing, and shipments during the period under review, show a falling off of over on million lbs.; but, taking a fair proportion of the shipments t China, as being for the Eastern side of America, it will be foun that the figures are more encouraging, although too much import ance should not be attached to the exports to China, owing to th large quantities of dust teas that have been shipped there by bric tea manufacturers for the Russian trade *viâ* Siberia.

Further, the available figures of direct shipments to the Unite States of America and Canada are somewhat misleading, as it ha been found that much of the tea shipped *viâ* London has bee manifested as for the home trade.

To avoid these figures appearing as shipment to the Unite Kingdom, it is advisable to draw the attention of Shippers an Steamer Agents to the fact that greater care should be exercise in declaring on Bills of Lading and Manifests both the Ports o destination, and whether the teas shipped are Black or Green.

Another point which should not be lost sight of, and which bear directly on shipments of Ceylon Teas to the United States o

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Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant th appointment of "Purveyors to Her Majesty The Queen and Empres of India" from the year 1837 until the time of her death, have no had the honour of being appointed by Royal Warrant "Purveyors t The King."

America and Canada, is the gradually falling market experienced in London during the period under review, which, coupled with the closer proximity of that market to the American and Canadian markets, has enabled the London trade to offer teas at very low rates and thus capture much of the American business that might otherwise have passed through local channels.

Under these circumstances and without London figures available, it seems fair to presume, although direct shipments have fallen off, they have been amply increased from the United Kingdom—thus relieving the London market of surplus stocks to the ultimate benefit of the Ceylon producer.

Green Teas.—Reports generally point to a growing demand at a price, and for this trade there is evidently a great future both in the United States and Canada. The industry at present is undoubtedly in its infancy, but, with strict attention to manufacture and avoidance of indiscriminate consignments, the results of which invariably prove disastrous to shippers, there is no reason to doubt that this trade will in the near future be established on a firm and sound basis.

In connection with the above remarks regarding indiscriminate consignments, your Committee would draw attention to the various letters on the subject of Green Teas which have appeared from time to time during the last few months in the local, American and Canadian papers.

The inference to be drawn from these letters is that the supply of Green Teas has been insufficient, but it is also noticeable, that whilst raising this outcry for larger stocks there, is a total absence of any quotation of price. Though it is a well-known fact that at the time of this outcry Green Teas were available both in Ceylon and in countries of consumption, it was impossible to obtain remunerative prices owing undoubtedly to the apparent combination amongst buyers and the anxiety amongst sellers to quit consignments, which resulted in cutting prices

Such a policy, it is obvious, is suicidal to the prospects of successful trading and is calculated to throttle any industry in its infancy.

Shipments of Inferior Teas to U. K. and Australia, Inspection of Tea Exports.—Attention has been directed to certain shipments of very inferior teas which have gone forward to the U. K. and Australia, and there has been considerable discussion as to the best means of preventing such teas leaving the island. As a means to this end the appointment of Inspectors has been advocated, but, apart from the very serious obstacles in the way of any really complete and thorough examination of all teas exported, there is the difficulty which at present appears insuperable of deciding upon a standard, the shipment of teas below which should not be permitted, and meanwhile the matter can only be left to the natural laws of supply and demand, and the discretion of exporters. It has also been suggested that Government should be asked to assist with legislation, but those who advocate such a course appear to forget that it is most unlikely that steps would be taken calculated to interfere with the liberty of the individual.

TRADE : FIRST HALF, 1901.

Tea.—*Quality* at the commencement of the year was poor and some very low prices resulted. In March matters began to improve and have been fairly well maintained. During June, the month in which usually the poorest teas are offered in Colombo, the quality was better than at the same time in 1900.

Quantity.—Shipments in January were heavy, resulting from shipping space not being available earlier and thus displacing about 1½ million pounds, which should have gone forward in December, 1900. Since March shipments have fallen off, and the six months at the end of June close with a reduction of one million lb. exports to United Kingdom. The total exports show a slight decrease for the six months.

1901. .78,414,020 lbs. against 1900. .78,474,630 lbs.

The locally-offered quantities increased to 25,437,460 lbs. against 23,565,603 lbs. in first half of 1900. The buying for foreign markets is making satisfactory progress, chiefly for Russia, Australia and China (Brick Tea).

The average price for the first six months is 31·28 cents, as compared with 33·84 cents in 1900.

Cinnamon shows a falling-off both as regards exports of Quills and Chips, probably due to the over-supply during the previous year and consequent slackness of demand.

The figures are :—

	lbs.		lbs.	
Quill ...	789,822	against	1,073,963 in 1900	for the first six months.
Chips ...	649,845	„	822,972 „	

Prices have slightly receded, but must still be considered very fair for the producers.

Cocoa has come to the front by doubling last year's figures and figures and exceeding both 1899 and 1898:—

	cwt.	
1901	28,532	first six months.
1900	16,627	
1899	25,263	
1898	27,912	

and prices appear also to have been satisfactory.

Cardamom exports are somewhat reduced.

	lbs.
1901	248,252
1900	313,221
1899	261,562
1898	252,583

After the United Kingdom, India seems to be our best customer for the spice.

THE PROMOTER OF THE JAPAN TEA TRUST.

The *Japan Daily Herald* of the 23rd July has the following :—

We are indebted to one of our subscribers for some authentic and interesting particulars of Mr. Corbin's career, which are contained in a recent number of the *Chicago Tribune.* The fact of Mr. Corbin figuring as the principal promoter of the projected Tea Trust, which is proposed to be brought into being in connection with the Japanese and American tea trade, is, we think, a sufficient justification for finding room for the Chicago paper's narration. We accordingly subjoin it. We recommend to our readers interested in the tea trade to "read, mark, and inwardly digest it." We subjoin the account given in the paper in question of what it calls Mr. Corbin's "somewhat meteoric career."

MAN WITH VALET IN BANKRUPTCY.

ASSETS ARE PUT AT $150.—AGAINST THIS CLAIMANTS ASK HOW $70,000 WAS SPENT IN TWO AND A HALF YEARS.

A Japanese valet in attendance on him at his apartments in Fifth avenue, New York, an athletic trainer visiting him mornings while he occupies a parlor floor room at the Wellington in this city, and personal expenses of about $70,000 in two and a half years, are some side lights in the career of Edwin Corbin, promoter.

After a somewhat meteoric career, Mr. Corbin is seeking relief from his debts in the bankruptcy court, and it was in connection with his examination before Referee Frank L. Wean recently that most of the above interesting facts came to light. Mr. Corbin stated before the master that his assets amounted to $150 worth of clothing.

Although he admitted in his testimony that his time for the last ten years had been spent about equally between Chicago, New York, and London, Mr. Corbin claims Chicago as his residence. This is the reason he gives for filing his petition here. He did this early last February. That Chicago is his home is being contested, however, by certain men who are anxious to learn what became of the $70,000 which, together with $17,500, was spent by Mr. Corbin in endeavouring to promote the lake fisheries' trust, which was subsequently organised under the name of the A. Booth Packing Company.

TELLS OF MONEY ADVANCED.

Concerning the money handled by him Mr. Corbin testified that $10,000 had been advanced by Americans and $50,000 by Englishmen interested in the deal. His evidence also showed that these people were out the sums they advanced because of a failure to carry the deal through. This was due, he says, to the refusal of Americans interested to grant an extension of the option held by Mr. Corbin when it expired June 1st, 1898. It also appears in his evidence that he secured $20,000 from one of these Americans. He gave his note for this sum, but the note was subsequently returned to him. In addition to this Mr. Corbin received $7,500.

Altogether Mr. Corbin received $87,500, and of this sum it is said that all but $15,000 was spent for personal expenses. When pressed by the attorneys for details he said it had been used for

living expenses including hotel bills and travelling expenses for himself and others interested in the combination. The $15,000 was expended, he said, in paying the expense for examination of books of the various concerns which were to be included in the deal.

Mr. Corbin's discharge is being contested for two reasons, that he has not a residence here such as is required under the law to give the courts jurisdiction, and for the additional reason that he is charged with having property concealed which was not scheduled in his list of assets. George W. Plummer, attorney for one of the contestants, is working on the latter proposition.

Mr. Corbin at the Wellington yesterday admitted his identity. He was anxious that nothing should be said in the papers regarding the bankruptcy proceedings and declared they were entirely regular. He said in explanation of his heavy expense account that it included expenses incident on crossing the ocean seven or eight times, bringing appraisers and expert accountants over here, and other necessary and heavy expenses in connection with the promotion of the deal.

Mr. Corbin's connection with the lake fisheries deal, which came in for considerable newspaper mention at the time, began in November, 1895, in an effort to consolidate all the prominent lake fishery establishments. He secured options on the properties and gave his time to the work in hand until June 1st, 1898, when his options expired as stated before.

In his testimony, Mr. Corbin stated that he had no money, stock, or bonds, and that his only property consisted of $150 worth of clothes. He said he was admitted to the Cook Country bar in 1887 and always considered himself a resident here, but admitted that he had had no office in this city for the last seven years, or that he had practiced his profession anywhere during that time.

OTHER CLAIMS IN THE CASE.

There were other claims besides the $60,000 of the Americans and Englishmen referred to, one for $9,000 by Charles Hodge of Houghton, Mich, a friend and business associate of Mr. Corbin. Through George W. Plummer he secured judgment against Mr. Corbin here and was preparing to do the same in New York when Mr. Corbin came to Chicago early in the present year and filed his petition in bankruptcy. He has been examined twice by the attorneys for the contestants, and in addition to the points already indicated he swore that although about 40 years of age he had never voted but once, and then for Grover Cleveland.

Mr. Corbin is a man of fine appearance, a good dresser, good talker, and thorough man of the world.

TEAS, COFFEES, SPICES.

The coffee plantation consisting of assorted trees from Ayautla plantation at Oaxaca, Mexico, is at the Pan-American Exposition. This, in connection with the tea plantation, which is housed in the greenhouse at the Horticulture Building, forms one of the most unique exhibits ever made.

The tea plants vary in appearance of both the stalks and leaves to a greater extent than the ordinary uninitiated visitor will be prepared to see. This is accounted for in a great measure by a system of hybridizing conducted by Dr. Shepard at the Agricultural Experiment Station in South Carolina. This work has made the cultivation of a tea plant in North America possible, as existing varieties were found to be so difficult of cultivation as to render practical tea culture out of the question by using known varieties.

Another exhibit directly connected with this one of teas and coffees is the collection of spicy flavor-bearing shrubs that Mr. Fuller has gathered from the West Indies; consisting of black pepper, cinnamon, nutmeg, cloves, vanilla, mate, betel, pimento, tonks, turmeric, kola, cassia, sago, and cassava; the last named being a root that is grown extensively in Brazil, the West Indies and even Florida, from which we get tapioca and similar starchy food preparations. It is extremely interesting to see the originals of these productions that we have been accustomed to so long, and to know how they are grown, the mode of preparation, etc.

What Mr. Fuller calls his hottest proposition is his red pepper corner, a collection that consists of a good many varieties of different odd shapes, sizes, and colours, though Mr. Fuller says they are all red peppers.

A handsome picture representing the South Carolina tea plantation is a feature of the tea exhibit; this is the only tea plantation in North America and represents the first successful attempt at tea growing within the borders of the United States. The plants on exhibition in this garden represent nine different kinds that are all hybrids of the following varieties: Darjeeling, Kangra, Ceylon, Dragon's Pool, Amoy, Assam, Japanese, and Formosa.

The Vanilla vines look more like house plants of the Elastica varieties which are seen tied to supports in urns, flower pots, etc. They grow to a considerable height in their native soil and climate, where they are trained to climb over trees, stumps, posts, etc. These plants, with the crop of beans here shown, give a very good idea of the manner in which our vanilla flavouring is produced.

Cassava is a new starchy proposition in the southern parts of the United States, the products of which are very little known beyond the finer preparations of arrowroot and the ordinary tapioca, though it is extensively used in South American countries, both as food and drink; the drink part being considerably the stronger of the two; in fact, when it is properly fermented, it is altogether too strong for indulgence on the part of any one except the natives who are accustomed to its use; probably nothing in the bill-of-fare in Brazil will send a Northern man to the hospital any quicker than indiscreet indulgence in this peculiar liquor. In this respect though the Pan-American has drawn the line and visitors will hardly be subjected to an influence of this nature. The aromatic and flavor-bearing miniature plantation consists of thirty large and over one hundred small trees, shrubs, and characteristic growths representing these different, and to us very odd products in addition to the tea and coffee plantations.—*American Grocer.*

AMERICAN AND CANADIAN TEA MARKET.

Mr. P. C. Larkin, of Toronto, when in London recently, favoured the *Home and Colonial Mail* with a call, and frankly spoke his mind on the subject of the American and Canadian markets for Indian and Ceylon tea, and the course to be adopted if business is to be rapidly developed.

Mr. Larkin, who is evidently enterprising to his finger-tips, related briefly his experiences in introducing Indian and Ceylon teas to the notice of the American and Canadian consumer, who are reached through the branches of the Salada Tea Company, which he controls in both countries. He told how the work was slow at first, but he quickened it by giving publicity in all kinds of ways to the merits of these teas. How the sales increased, and how he caused them to increase more rapidly by spending more and more on advertising. Having built up a business in "black," Mr. Larkin tried his hand with "greens," and partly at his suggestion planters have manufactured green teas, which, in his opinion and that of all experts, entirely eclipse the Chinese and Japanese makes, and bid fair, if planters will only maintain the standard of excellence, to hold the market and entirely rout the enemy. "But it is slow work this capturing a market," and here Mr. Larkin was most emphatic; "it means enterprise and the expenditure of money. The money will all come back many times over through the enhanced price of tea in London if planters and their representatives will set about the work of securing and developing trade on the North American continent, not by mild spurts, but by quick, systematic, and sustained effort, which will achieve lasting results and open up a large, steady, and continuous demand." Of Indian and Ceylon greens Mr. Larkin spoke enthusiastically. "They are simply splendid, and nothing can stand against them, but how on earth are people to learn of their merits unless they are informed by newspaper and other forms of advertisement? Publicity is the requirement. India and Ceylon have, since the introduction of green tea, the very article that is wanted to suit the consumer, but rapid development is necessary, and that rapid development can only take place if planters recognise the difficulties those who are pushing their teas have to contend with, and the only effective way of overcoming them." We asked Mr. Larkin, *apropos* of the statement of the United States Secretary of Agriculture, that the Gulf States would soon supply the entire American market, what he thought of the home-grown tea. He smiled a sarcastic sort of smile which expressed much, but then said quickly, "All the more reason for speed in pushing the trade in Indian and Ceylon teas, so that immediate and tangible results follow. Do the work thoroughly, speedily, and cleverly, and there is a sure and safe market." And Mr. Larkin took his leave.

BRAZILIAN NOTES.

(From the *Brazilian Review*.)

Exchange, *July 13th*, 1901.—Ninety days' Bank rate on London opened on Monday the 8th, at 11$\frac{3}{16}$d., declined to 10$\frac{15}{16}$d. on the 9th, and closed this evening steady at 11d.

Entries at Rio and Santos took a big jump last week, being 80,685 bags over those of the preceding week and 131,242 bags more than for the corresponding week last year. It is not, however, to be concluded that entries will be maintained in the same ratio to last year's, because at present peculiar circumstances are in action to stimulate arrivals, which last year were unusually tardy. Not only is the crop itself much earlier than last year's, but the weather is excellent, the roads in capital condition and, above all, the scarcity of money and credit such that planters have no choice but to hurry their produce to market almost anyhow to obtain funds for current expenses. We have lately returned from a visit to one of the largest plantations in Minas and have been deeply impressed by the innumerable difficulties with which even wealthy planters are now struggling. Not only is money to move the crop practically unobtainable at any price, but planters are almost all in arrears with their workmen and with the greatest difficulty keep things going at all. Disputes are of daily occurrence and more than one planter has already handed over his property to his plantation hands in despair. Under such circumstances it is not to be wondered at that even on the larger estates the coffee is badly picked, badly dried, hurried to market anyhow, and sold for what it will fetch. If this is the case even with the larger and wealthier planters what must be the state of the smaller fry who constitute the majority?

Still, somehow or other, the coffee will come down. If the planters have no money to pick, it will be picked and dried by the "colonos" themselves and sold on the plantation to shippers' agents, who are buying freely and are said to pay better prices than can be got from *commissarios*.

Shipments (embarques) were also much larger, being 21,871 over the previous week's and 77,612 more than last year. Declared sales at Rio and Santos aggregated 130,000 bags as against 89,000 the previous week and 133,000 last year. During the past week a fair business was doing in this market on the basis of 6$800 to 6$900 for No. 7. The quality of receipts has also improved, the coffee being better dried and of higher grades. Prices here are still over New York parity, being about 5$\frac{1}{2}$ cents c.f. and comm., whilst sales at New York are reported as low as 5$\frac{3}{8}$ cents.

CACAO-GROWING IN THE SOUTH PACIFIC ISLANDS.

22 CWT. CACAO PER ACRE IN SAMOA.

Mr. H. J. Moors writes to the *Ceylon Observer* under date :—

APIA, SAMOA, *May 21st*, 1901.

In your issue of March 1st this year and on page 615 is an article styled "Cacao: Pollination and 10 cwt. to the acre."

I regret to say that none of us in Samoa have sufficiently followed your valuable Journal to understand properly what the term "Pollination" means. We suppose it means that the pollen from the male flowers is to be introduced into the female flowers by hand, in a manner somewhat similar to that employed in fertilising. Vanilla. Would you be so kind as to explain the term to us? [Yes: to apply pollen to a stigma.—ED. *C.O.*]

The culture of cacao has but begun in these islands and less than 500 acres are now planted. Within the next six months we look to get in an additional 200 acres and such arrangements are being made that we believe a very large area will be set out in 1902, probably over 1,000 acres for that year.

Next year about 150 acres will be in full bearing—that is lands cultivated by foreigners. It is also likely that an additional 100 acres of native cultivation may also be in good bearing as well. As we are cultivating cacao quite differently from the manner stated in "Pods'" article, I have thought it might be of some interest to recount for you our experiences, and the results so far obtained.

Mr. "Pod" speaks of cultivating trees so close that 300 may be set out on a single acre. And he fears that the Ceylon soil will not stand such a drain as 5 cwt. of cacao per acre per annum. And he calculates that 15,000 pods will produce about 5 cwt. of cacao—about 30 pods to the lb. In Samoa we are planting our trees spaced so that we get from 120 to 150 trees to the acre, and some people think this too close. Last year they averaged 6 lbs. per tree of cured merchantable cacao of the highest quality, and this year's first crop has already averaged close upon 6 lbs. per tree, so that, with the October crop yet to come, it is pretty safe to say we will get from 8 to 10 lbs. cacao per tree. Mr. "Pod" seems to be well satisfied with a yield of from 2$\frac{1}{2}$ to 3 cwt. per acre, per annum, but thinks that pollination may double this yield. We are not resorting to this expedient here to get still more favourable results.

We have both the Criollo and the Forastero varieties, and their crosses, in all our fields and all thrive equally well. So far we have had no disease or post to fight, and we hope we may escape such difficulties. Manuring is not thought of yet, but in time we may have to resort to it, though we see no present signs of so doing.

As this enterprise is of a comparatively recent date in Samoa—the life of the cacao tree in these islands is as yet undetermined; but with our trees spaced 18 feet apart, we think they should last reasonably well. When the seasons have been particularly dry, we have noticed that a good few pods turn black just before maturing. No one here has been able to account for this. This year we have had showers quite constantly and the percentage of black pods is very low. Some have said that our trees were not able to mature so many pods as were being produced, and nature, in order to relieve the tree, destroyed in this way a part of the produce. Possibly in Ceylon the same phenomenon has been observed and most likely you can tell us its cause; may be you can also name its cure. [Is it not evident that drought in Samoa is to blame?—ED. *C.O.*]

I have seen very many trees this year with from 150 to 200 well-matured cacao pods on them *for the April crop*—and it is to be noted that the tree will keep right along, bearing slowly till October—when another sizable crop will be harvested, probably about one half as large as that produced in April.

On a tree just four years old, within a mile and a half of Apia, I have this April personally counted 270 fine well-matured cacao pods, and the cacao from this orchard, being cured, distinctly showed that 16 pods were sufficient to make a pound of merchantable cocoa.

We have here cacao trees but two years and five months old which are now full of young cacao pods, but it is my belief that, although many cacao trees will bear soon after they are three years old, a paying crop cannot be counted on until the fourth year.

As to the price we have had for our cocoa I may say that, though the buyers have found some fault with our methods of curing it, still what we have sent away has brought, in San Francisco, from 16 to 18 cts. per lb. and the bulk of it, which has gone to Hamburg, has realized of late 93/6 per cwt., with the promise of a better price as soon as we could deliver in quantities sufficiently large to induce the manufacturer to make up our variety of cacao by itself. Mixed with other cocoas it loses its identity.

We see no reason to apprehend that the price will fall—in fact all of our information leads us to believe we may even get more before long. We cultivate either variety indifferently. If one raises the Forastero cacao he gets larger pods, but not so many as if he attempted the Criollo. There is no difference in the cost of cultivation and little in the gathering and curing.

If we are raising from 8 to 11 cwt. here in Samoa per acre against your 2$\frac{1}{2}$ and 3 cwt. in Ceylon, the conditions here must be infinitely better than with you

I may say that very many people believe we have here the most perfect cacao conditions in the whole world. Others say that "Mr. Pod" is surely under-estimating the usual yield in Ceylon. Will you, Mr. Editor, kindly inform us which opinion is right? [Samoa has undoubtedly far richer soil than Ceylon.—ED. *C. O.*]

The Cacao outlook has been such as to attract a great deal of notice here in Samoa, and nearly every storekeeper, and trader, is getting into it for all he is worth.

Previous to the discovery of our capacity for production, lands back from the sea—no matter how good—were almost unsaleable.

Four years ago, 3,000 acres, almost adjoining Apia, were sold to the French Catholic Mission for $2 per acre U. S. gold.

Similar land farther away was sold during the early part of this year for from $2·50 to $4 per acre. Just now this land could be easily resold at from $6 to $20, and to my mind is still remarkably low. We have here to pay our labourers much more than you pay to your coolies, but we expect, I think, more work out of them.

Just now we are paying $8 per month and feeding the people at a cost of $4 more per man:—$12 in all. You will please understand that we are up till now using English money, and that we reckon 4 shillings to the dollar, and therefore our dollars are about twice as expensive as those mostly in the East Indies. [Rupees in East Indies at 1s 4d each, and 10 rupees a month is high for a working coolie.—ED. *C.O.*]

Still with the high rate we are paying we expect to make profits up to, and in fact much past, 20 pounds sterling per acre, per annum, after our cacao trees are past their fourth year.

All of our land is covered with dense forest which has to be cleared out, and this expense runs into about 8 or 10 pounds per acre, including seed and planting. Some retain part of the forest for shade and so get their land in cheaper. I am using both methods myself and cannot yet say which I prefer. All readers of your esteemed Journal who reside here will be glad if you will kindly comment upon these statements and if you will answer the few questions propounded.

The British Consul at Apia is well versed in the culture of cacao as practised here—and he will cheerfully corroborate any of the above statements I have made.

APIA, *July 6th*, 1901.—Somehow the above letter, dated away back in May, has remained here unsent. Since it was written we have got our April cacao cured and away before this. On the 4th instant at the usual jollification held at the U. S. Consulate, Mr. R. H. Carruthers of this place announced that his cacao for the earlier part of the year had turned out 17 cwt. to the acre. Now there is no more reliable man in the world that this gentleman, an accomplished British Barrister.

The October crop is yet to come and I make no sort of doubt but that Mr. Carruthers will be able to harvest, at the very least 5 cwt. more per acre, thus making 22 cwt. for the year for each acre. The trees are seven years old, planted 15 feet apart at an elevation of 450 feet and just two miles from the sea shore. A little breadfruit shade has been left. No disease has so far attacked any trees here: a little trouble we have had with white ants, and with a sort of fungus. Borers also in rare cases attack the tree, but do not seem to be able to kill it.

The only difficulty so far as I can see is that we have at times a number of black pods, and we do not rightly know why they get so.

The bees probably assist at the pollination in some way.

Land seems every month to enhance upon older values. Shortly, I expect, when we begin handling easy cacao moneys, there will be a little excitement over our prospects.

IF SMITH HAD EXPLAINED.

My wife says, and she says it with a snap, that never, *never* again will the Smiths get an invitation to eat at our house. And when she once makes up her mind to anything, she sticks to it like shoemaker's wax to a bit of woollen cloth.

You see the Smith's, man and wife, were old and intimate friends of ours. We lived within a stone's throw of each other for many years, and were as thick as treacle. As to our worldly estate, we were about on a level, in very moderate circumstances.

Between two and three years ago Smith's employers sent him to America on some business errand; he would not tell us what. A fortnight since he turned up at home and gave out that he had made a trifle of money for himself while he was away.

Last Tuesday we had them to dinner; the best dinner my wife could get up. And it was a good one, if I do say it myself. Yet, socially, it was a failure. In the old times Smith had the appetite of a cab-horse. Now he picked and winced over the very dishes that used to be his favourites. As my wife pressed him to taste this or that, he thanked her politely, but he dindn't eat. Mrs. Smith apologised for her husband, and said he had been ailing somewhat since his return from America. So the dinner ended in disappointment, and the Smiths went home early.

"Poor Smith is ill," said I. "No" said my wife, "he isn't ill. He's proud. He thinks his old friends aren't good enough for him; that's where it is. He's rich, and we are poor, and——." The worried woman here broke down and cried, and I went out for consolation smoke.

And yet bless your soul!—wait a moment, however. If Smith had been perfectly frank and said, "I am not the man I was. I lived high in America, and I'm all gone to pieces with inflammatory dyspepsia, and this splendid dinner will half kill me if I eat it." If he had said that we should have pulled through without a break. Why didn't he say it?

Here is a lady who does not hesitate to tell us her experience with that wretched ailment. Miss M. J. Barton is her name, and her home, 56, Sorby Street, Sheffield. In a written statement dated September 19th, 1900, of which the following is the sum and substance, she says that it is now rather more than two years since her health began to fail. At first, she thought it was only some trivial ailment that would soon pass away, for beyond loss of appetite and a feeling of langour and weariness, there did not seem to be much the matter with her.

So she struggled on with her work as do countless thousands of brave women every day, hoping to be right again in a short time.

But alas! her hope was short lived, for Indigestion, that demon health-destroyer, had got her in its iron grasp and would not set her free. Instead of getting better, she became worse.

Her tongue was now always foul and nasty, and after taking food—no matter how little—she experienced such a sense of fulness and tightness in the chest that she could scarcely breathe. "It seemed," she says, "as if some heavy weight was resting on my chest and pressing in my ribs." Indeed her chest became so sore and painful that she could scarcely bear anything to touch it, and was almost afraid to walk about, the slightest jolting hurt her so.

This feeling of weight and oppression in the chest is one of the most distressing and common symptoms of Indigestion. Like the red flag of the railway signalman it counsels caution and warns of danger ahead What untold pain and misery might be avoided if only we heeded these danger signals of nature, but there, what's the good of moralising. We *don't* take warning, therefore suffer in consequence. Miss Barton did for she goes on to say:—

"At times, I suffered intensely from wind spasms, and was constantly vomiting sour water. Sleep no longer refreshed me, for it only came in smatches and was disturbed by horrible dreams. Deprived of proper rest at nights, and afraid to eat much because of the fearful pains that were sure to follow, small wonder I got so weak and thin, that at last I was forced to give in and take to my bed, where I stayed for six weeks. During that time I vomited a quantity of blood.

"The doctor said I was suffering from Indigestion and an ulcerated stomach. His medicine enabled me to get down stairs again, but did not cure me, for I still suffered great pain after eating, and was always tired and weary.

"In this condition I remained for several months, despairing of ever being well again, but providentially I was led to try Seigel's Syrup, and to that medicine alone is due my present good health. Now I can eat heartily and enjoy my meals without fear of pain, and feel brighter and better in every way than I have done for over two years."

Why Mr. Smith didn't mention his illness at our dinner, I don't know. He admitted it afterwards to me. Still my wife hasn't forgiven him. "Happy," says Homer, "are those who died under the high walls of Troy." Happier yet, say I, are those who live and can eat what is set before them.

MARKET REPORT.

[*Per Mail advices of 9th August* 1901.]

COFFEE.

The London Commercial Record says:—No auctions have been held this week, but privately some fair sales have been made at quite late rates. "Futures" of Brazil have fluctuated, but close a trifle dearer than last week; yesterday September delivery sold at 27s 9d, December at 28s 3d, March at 28s 9d and May at 29s 6d per cwt.

London ...	... Santos ...	Sept. delivery	... 27s 9d.
New York	... No. 7 Rio...	,,	... 4·95 cents.
Hamburg...	... Santos ...	,,	... 28 pf.
Havre ...	... Santos ...	,,	... 34¼ francs.

Auctions are still suspended; privately not much doing. Brazil futures opened 3d to 6d per cwt. up and continued firm all day. New York 5 to 10 points up.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99. Bags.
Rio ...	724,000	256,000	479,000	359,000
Santos ...	1,124,000	851,000	1,047,000	720,000
Total...	1,848,000	1,107,000	1,526,000	1,079,000
Crop ...	—	10,900,000	8,971,000	8,772,000

Rio Exchange $10\frac{3}{16}$d, previous day $10\frac{7}{32}$d.

Havre, *August* 8.—Good average Santos August opened firm at 34f. and closed steady at 34f., September opened at $34\frac{1}{4}$f. and closed at $34\frac{1}{4}$f., December opened at $34\frac{3}{4}$f. and closed at $34\frac{3}{4}$f., March opened at $35\frac{1}{2}$f. and closed at $35\frac{1}{2}$f., May opened at 36pf. and closed at 36pf.

Hamburg, *August* 8.—Good average Santos August opened steady at $27\frac{1}{4}$pf. and closed steady at $27\frac{3}{4}$pf., September opened at $27\frac{3}{4}$pf. and closed at 28pf., December opened at $28\frac{1}{2}$pf. and closed at $28\frac{3}{4}$pf., March opened at $29\frac{1}{4}$pf. and closed at $29\frac{1}{2}$pf., May opened at $29\frac{5}{8}$pf. and closed at 30pf.

New York, *August* 8.—Closing prices of No. 7 Rio were as follow:—

	Aug.	Sept.	Oct.	Nov.	Dec.
August 8...	4·90	4·95	5·05	5·10	5·20
August 7...	4·90	4·90	4·95	5·00	5·15

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	20,401	18,161	36,230	7,639
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	12,772	10,551	17,601	15,671

The preceding figures exhibit—	Tons.
In the Imports an increase this year of ..	8,591
Home Consumption an increase of	2,221
Export an increase of	1,930
Stock an increase of	2,240

COCOA.

No public sales have been held this week and the transactions reported privately are of very little moment. For next Tuesday's auctions the supply so far advertised is very small—3,400 bags.

PEPPER.

Black.—On the spot very little business has been done; the value of fair Singapore is 6d per lb. For arrival sales are limited to 15 tons Singapore, September-October (s.) at 6d per lb. at which there are further buyers.

To-day Pepper very quiet. 6d per lb. is about the value of Singapore in any position.

White.—Quotations are nominal in the absence of business. Singapore on the spot is quoted at $9\frac{1}{8}$d, and Penang at $8\frac{1}{2}$d per lb., the arrival value being $9\frac{1}{8}$d and $8\frac{5}{8}$d respectively for September-November (s.)

CINNAMON.

For arrival several hundred bales of Ceylon usual assortment, have been sold to arrive at 9d and $8\frac{3}{4}$d per lb. c.i.f., also some No. 2 at $9\frac{1}{8}$d per lb. c.i.f. all August-October (s.) to London.

CINCHONA.

The exports from British India for the month of April amounted to—

	1901	1900.	1899.
Lbs.	318,593	529,278	307,309.

The auctions to be held at Amsterdam on August 29 will consist of 5,232 packages Ledgeriana, hybrid, officinalis, and calisaya, and 112 packages succirubra, weighing 567,809 kilos. The stock in first hands at Amsterdam on July 31 consisted of 2,173 packages Government bark and 7,667 packages private bark, including the above quantity. A supplementary catalogue will be published in a couple of days.

QUININE.

On August 2 the German makers reduced the price of sulphate by $\frac{1}{2}$d per oz. to 1s $4\frac{1}{2}$d for 1,000-oz. lots. Howards' quotation for quinine remains unaltered, but there price for salts has been reduced in conjunction with that of other makers. Whiffen's quotation for quinine has also been reduced to 1s $4\frac{1}{2}$d. Previous to the holiday, a large spot transaction took place in second hands at 1s $1\frac{1}{2}$d. without guarantee of make or condition. Since then, however, the market has been considerably firmer, and to-day there are buyers at 1s $2\frac{1}{4}$d, but no sellers under 1s $2\frac{1}{2}$d for spot for favourite brands, and 1s 3d for December. October delivery is not inquired for at the moment.

INDIA-RUBBER.

There has been a good business in fine Pará, with sales of hard cure spot at 3s 7d, and forward at 3s $7\frac{1}{4}$d to 3s $7\frac{1}{2}$d, soft cure spot at 3s $6\frac{1}{4}$d. Negroheads are quiet; Cametas sold at 2s 1d to 2s $1\frac{1}{2}$d. Peruvian ball and slab in demand; sales of good ball at 2s $4\frac{3}{4}$d to 2s 5d, and buyers forward, slap 1s $10\frac{3}{4}$d to 1s 11d and buyers.

Only small auctions to-day and little demand.

Pará 24 packages, Mollendo 20 cases retired.

Peruvian.—20 packages offered and 8 sold, scrappy negroheads rather poor 2s 5d, fair ball (1 case only) 2s $4\frac{3}{4}$d, slap 1s $10\frac{3}{4}$d per lb.

Colombian.—37 packages sold, scrap, part white and softish 2s $2\frac{1}{2}$d. scrap and strip heated and mixed 1s $9\frac{1}{4}$d, ditto very heated 1s 8d.

Central American, etc.—12 packages sold, good scrap 2s $4\frac{1}{2}$d, pressed strip part clean some mixed 1s $7\frac{1}{2}$d.

Mozambique.—52 bags offered and 10 sold—Lamu ball, greenish middling 2s $0\frac{3}{4}$d, ditto rather mixed sandy 2s.

Assam 72 packages, and Penang 25 packages retired.

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SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 13th instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad. *September 2nd.—Weather*—56 days with no glimpse of sunshine and temperature 62° to 70° was the record till last Wednesday, when the sun put in an appearance, and has been shining brightly ever since. *Works*—Weeding, handling and borer. *Plant diseases*—Coffee looking grand. *Labour*—Abundant. *Health*—Good. *Interesting item*—The mail service seems in an almost disorganized condition throughout all the Hassan district.

Coorg. POLLI BETTA, *3rd Sept.—Weather*—With the exception of ·20 inch of rain last Thursday the whole of last week was rainless; and previously from the 14th ultimo the aqueous precipitations were very light, sunshine preponderating. This weather has put quite a gloss on the coffee leaves. Signs of leaf disease are not wanting, orange coloured specks are showing up here and there, and, although it will not be severe, owing to light crops, it will be fairly general a little later. *Labour*—Abundant. *Health*—Fair.

THE TEA CAMPAIGN.

THERE has been a very interesting discussion in the Ceylon Chamber of Commerce. The result was briefly stated in our last issue, but the real interest of the proceedings lies in the remarks that were made, not in the resolution that was rejected. In India, as well as in Ceylon, there are men who are sceptical as to the wisdom of a continuance of the American campaign on present lines. There are some who think that the States have been conquered, there are others who would attack Russia, and reserve almost every unit of force for that purpose. Yet, again, there are men who, like Mr. STANLEY BOIS, the Chairman of the Ceylon Chamber of Commerce, urge that no

effort should be spared—that efforts should not in any way be relaxed—to push and exploit in foreign countries in order to correspondingly relieve the London market. It will be noted that there is a double object in campaigns of this kind : (1) to open up new markets, (2) to relieve a congested market in London and try, by creating a scarcity, to run prices up to scarcity level. There is not one man, we think, who fails to see the desirability of this course. It is necessary, however, that each man should judge for himself how far the game is worth the candle. Unless, for instance the benefits derived by tea planters in Ceylon, greatly exceed the amount of cess collected year by year, the imposition of the cess cannot but be regarded as a blunder. Obviously a great deal depends upon the manner in which the funds raised are employed, and those who criticise the operations of the American campaign hold chiefly that methods are wrong and that expenditure is out of proportion to results, rather than that the market has really been captured and may now be left to make its purchases without further persuasion.

It is but fair to state that during the last two or three years there has been some little want of unanimity on the part of the "Thirty Committee" in reference to annual expenditure in America for the purpose of pushing teas. There was at one time a strong feeling that the annual allotment of £10,000 should be cut down to £6,000 ; but eventually the larger amount was allowed to stand. Sir W. W. MITCHELL, who caused the question to be re-opened, took special exception to payments made to persons or firms not disclosed to those who provide the funds. This money is in reality paid to dealers on proof that they have spent so much on advertising Indian tea. Sir W. W. MITCHELL objects to these subsidies yet proceeds to say that he thinks that all the good that has been done has been done through advertising. By all possible means continue that, he remarks ; but in his opinion it can be most effectually done through an American resident advertising agent, who might be paid by commission for carrying out the work adequately according to American methods which required to be thoroughly understood, because advertising there is practically a science. On the other hand, planters have always desired to be represented by one of their own number acquainted with processes of manufacture, etc., because they have felt that such a man is best fitted to push British-made teas in rivalry with China and Japan leaf. Sir W. W. MITCHELL appears to think that Mr. RENTON is doing excellent work on the Continent of Europe and ought to have more funds placed at his disposal, while in the United States the return upon outlay is disappointing. He has not put forward a single figure in support of this view. Mr. F. M. MACKWOOD, his seconder, has given some figures about the States, but it is probably too early for any to be given to show the result of Mr. RENTON'S work. What Mr. MACKWOOD says is this : that two years ago they shipped from Ceylon, either direct or through London, 7,600,000 odd lbs. of tea ; but up to that time the cost of exploiting the American market was Rs.8,11,000 odd, which had been voted out of the cess. In 1899 they increased their exports by 600,000 lbs., and last year there was another increase of about 900,000 lbs., so that, in two years, their exports to America had increased 1,500,000 lbs. and the machinery cost them Rs.3,00,000. In other words, the whole of the increase cost Ceylon, through the cess, 20 cents per lb., and he did not think that even the most rabid supporter of the present expenditure would claim that the one million-and-a-half lb. was due entirely to the efforts of their Commissioner.

If matters are to be criticised on this basis, a lot of Ceylon tea must have been 'golden tips' in the matter of cost to the producer during the earliest years of the campaign in America, when money was being poured out freely to sell teas, and teas were sold only to a small extent. Certainly 20 cents expended on each pound of tea is too large a sum, but it seems to us that Mr. MACKWOOD'S own figures show a reduction from 25 cents in one year to 16·6 the following year, and are not, therefore, so discouraging as he thinks. In the absence of any suggestion that the levy of the tea cess should be discontinued the point really at issue is how best to expend the money. This needs careful consideration. While not advocating constant changes of plan, to the detriment of experiments started, we would certainly urge that circumstances change year after year, developments take place, facts come to light. Every year, therefore, the position in respect to every market attacked ought to be thoroughly considered. The chief aim at the present time should be to decide how far the Russian market is worth special attack. Sir W. MITCHELL advocates advertising in the States and leaving the Russians to send their own representatives to Colombo to buy teas. Why he thinks the one market should be treated so differently from the other, he does not explain. Now that the Ceylon Chamber of Commerce has discussed the subject of the employment of tea cess funds, the "Thirty Committee," will, no doubt, go into it with renewed zeal and energy. The result will be awaited with no little interest.

TEA AT CANTON.

The British Consul-General reports regarding the year 1900 that not only was there again a heavy falling-off in quantity, but the Tea trade was unprofitable, and the outlook for the future can only be described as dismal in the extreme. He says he can only hope for the sake of those engaged in this once great trade that the views of those to whom he applied for information are too pessimistic, although it must be admitted that ample justification is found in the figures supplied. In the case of tea the returns of the Imperial Maritime Customs do not represent the trade at all, as most of the tea leaves the district for transhipment to sea-going steamers in Hong-Kong by native craft. The figures supplied by his informants for comparison are as follows :—

YEAR.	QUANTITY. Congous. Lbs.	Scented Caper. Lbs.
1891-92	1,883,957	8,979,238
1893-94	1,308,880	5,926,547
1899-1900	214,316	3,653,803

Such figures, they justly remark, do not need much comment. Much as the gradual disappearance of the Canton tea trade is to be deplored, there seems to be no mystery about it. Canton Congous and Scented Capers are not now wanted : few people drink them, and foreigners cannot offer remunerative prices to the native producers. These latter now, instead of making Congous for consumption by foreigners, unless Congous are actually ordered, manufacture Pouchong tea instead. The trade in Pouchong tea is entirely in native hands, and it goes to all countries to which Chinese have emigrated, and is consumed by them only. As in this Pouchong tea business so it is in other trades, and

where there are Chinese at both ends of a trade route there is little or no chance for traders of any other nationality; they thrive where other merchants could not pay expenses.

The Canton scented teas are essentially teas for blending. They are being driven out of the market by Indian and Ceylon teas, and no one would be surprised if the demand for those teas ceased altogether. It seems very probable that this may be so; meantime it does not appear that anything can be done to save the trade. It is understood that it is divided between three or four firms, and that there really is not profitable business enough for one.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

The Indian Tea Association (Calcutta) has issued, under date 29th August, 1901, the following particulars with respect to the present season's crop of Indian tea, *viz.*:—

	Manufactured to 15th August, 1901.	Balance to be made to end of season 1901.	Total.
	lbs.	lbs.	lbs.
Assam ...	29,549,019	40,775,333	70,324,352
Cachar ...	9,996,256	14,292,421	24,288,677
Sylhet ...	11,581,497	19,839,723	31,421,220
Darjeeling ...	4,330,034	3,178,390	7,508,424
Terai ...	1,525,254	1,605,040	3,130,294
Dooars ...	11,430,509	18,524,426	29,954,935
Chota Nagpore	80,600	73,000	153,600
Chittagong ...	319,562	551,837	871,399
Kangra Valley ...	2,200,000	820,000	3,020,000
Dehra Dun ...	1,153,794	670,000	1,823,794

2. To this total of ... ... 172,496,695 lbs. must be added:—

1. Kumaon (Estimate) ... ... 300,000 „
2. Gardens from which no returns have been received, including private and native gardens (Estimate) ... 11,500,000 „

Total ... 184,296,695 lbs.

3. Shipments to America, the Colonies, and other Ports are estimated at 25,000,000 lbs., and local and trans-frontier consumption at 9,000,000 lbs. There will, therefore, remain on this basis about 150,000,000 lbs. for export to Great Britain.

A GOLD CURRENCY FOR BRAZIL.

It was announced a couple of months ago that the Brazilian Government proposed to ask Congress for authorization to reduce the par of exchange to 24d. per milreis, and, if this were granted, to issue coins for ten milreis, equivalent to £1 sterling. The gold to be purchased with the guarantee fund in London. A Brazilian correspondent now writes optimistically as follows:—

Steady progress has been made with this scheme, and the President will, before long, be in a position to announce that it has been carried to a successful issue. What this will mean for Brazil is almost beyond conception, as the rapid fluctuations in the exchange only have prevented European capital from flowing freely into Brazil for the development of the country's almost unlimited resources, and engineers from Belgium, Holland, Germany, and this country are even now in Brazil, studying the questions of all sorts of works from railways downward, which their employers wish to execute.

The present Government has done much already to steady the rate of exchange by its crusade against gambling transactions, and the creation practically of a gold currency will be the culmination of the Campos Salis present highly successful Presidential administration. The finances of the Government were never in a better position, in spite of the low prices for coffee, the chief article of export of the country. Though the rise in the price of coffee, which is certain to follow a restricted cultivation, must by itself improve the exchange in the near future, the Government scheme (referred to above) will once for all keep the exchange at the price on which this scheme is based.

NOTES.

No Cacao in Sumatra. A correspondent of the *Ceylon Observer* writes from Sumatra that, with ideal soil and ideal climate, nobody will look at Cacao there.

Amsterdam Bark Market. The principal catalogue for the Dutch cinchona auctions of August 29th. It shows that 5,918 packages were to be offered, containing 525,898 kilogrammes of bark.

Secret Sales. The London correspondent of the *Times of Ceylon* considers that the Secret Sales scheme is only scotched, not killed, and will come up again, sooner or later, in some other form.

Ramie. The Selangor Ramie Estate has practically discontinued cultivating that product for the present, on account of want of demand for the fibre. Ramie is indigenous in the Peninsula.

Coffee in the Federated Malay States, 1900. Owing to the continued large supplies of coffee from South America, the price for this product rules so low in the European markets that none but the best situated and best cultivated estates can even earn sufficient to cover working expenses.

No Middlemen. The planters of the Juiz de Fóra district are about to start an agency in Europe for the sale of their coffee direct to consumers and do away with intermediaries altogether. We wish them luck, says the *Brazilian Review*, but doubt if, in these hard times, without money or credit they will be able to wait.

No Middlemen again. An Aberdeenshire correspondent writes to the *Observer*:—I still think planters starting shops themselves the best game. I know of two planters, both hard nuts, who have done so, and their tea goes straight from their estates to their shops, and, although you are all crying out about low prices, they are quite pleased with their profit, *and live up to it*.

The London Tea Market. Reuter reports under date 29th ultimo that the market for Ceylon tea is generally firm, fine teas being very firm and in some cases rather higher. Fair Pekoe Souchongs are quoted at 4¾d. (a farthing up) and the average for the week is 6⅞d. (an eighth of a penny up). 26,000 packages of Ceylon tea were offered for sale and 25,000 were disposed of; while of the 26,000 packages of Indian tea offered, 23,000 found purchasers, at an average of 8⅜d. per lb. (⅝d. down).

Coffee in Sumatra.

Thus a correspondent of the *Ceylon Observer*, writing under date O. K. Sumatra, August 11th :—We are just now picking two crops here, coffee and caterpillars. We have the same pest that Selangor suffered from two or three years ago, but I am not nervous about it, as I think we have taken it in time. One estate was eaten to besoms before any one knew that caterpillars were in the district ; but this gave the alarm, and no ragged bushes are to be seen.

Japan Tea in the U. S. and Canada.

The *Hong-Kong Weekly Press* of 17th July gives the following figures showing export of Japan tea to United States and Canada :

	1900-1901. lbs.	1899-00. lbs.
Yokohama	13,240,755	13,099,668
Kobe	—	—
Hiogo	6,498,079	7,154,042
	19,738,834	20,253,716

Tea Growing in Louisiana.

From the thirteenth Annual Report of the Agricultural Experiment Stations of the Louisiana State University and A and M College, for 1900, we learn :—*Tea Plants.*—In co-operation with the United States Department of Agriculture, this Station is growing over six hundred tea plants, with a view of testing practically the raising and curing of tea leaves. The success of the industry in South Carolina has stimulated the Department of Agriculture to try it elsewhere in the South.

Tea in Norway.

A correspondent writes to the *Ceylon Observer*:—Is making its way here, and is regularly drunk by Norwegians at 8 o'clock supper daily, everywhere. I saw plenty of Ceylon tea in the Bergen shops. As I was only one day in passing through Bergen, I had not time to inquire for Palliser (Radella) if he is still there. I think he got a grant to push Ceylon tea in Bergen. The Norwegian housekeepers are excellent makers of *coffee*, but the rising generation, when they find it takes more trouble in the preparation, may take more to tea.

Indian Tea Crop Prospects.

The following telegram, with reference to the tea crop in the various districts, has been despatched by the General Committee of the Indian Tea Association here to the Committee of the Association in London, *viz.* :—Assam—Outturn last month good. Cachar—Outturn last month about normal. Deficiency remains. Sylhet—Outturn last month about normal. Deficiency remains. Dooars—Outturn last month about normal. Terai—Outturn last month very poor. Darjeeling—Season will probably close early. Deficiency remains.

Indian Tea Exports.

The following figures of tea exports taken from the Culcutta Customs daily entries are issued by the Indian Tea Association :—Quantity of tea entered for export to the United Kingdom for the second half of August, 1901, 12,058,066 lbs ; quantity entered during the corresponding period of last year 13,708,420 lbs.; total from 1st April, 1901, to 31st August, 1901, 47,015,337 lbs. ; total from 1st April, 1900, to 31st August, 1900, 55,807,059 lbs. ; quantity shipped from Chittagong, second half of August, 1901, 2,055,650 lbs. ; total shipment from Chittagong to 31st August, 1901, 3,021,330 lbs.

The Calcutta Tea Market.

The Calcutta tea sale on Friday comprised about 20,000 packages, or 5,000 less than at the corresponding auction of last season. The issue of the crop estimate, as usual, had a depressing effect on the market, and prices declined all round, Broken Pekoes particularly being affected. About 3,500 packages were withdrawn owing to sellers' limits not being reached. The *Indian Daily News* observes :—"Why growers continue annually to issue crop estimates, which can have no effect but to spoil their market, is a mystery to us. We have raised our protest frequently against this custom, and do so again. The tea industry has surely enough difficulties to contend against without planters putting this rod in pickle for their own backs."

Indian Tea manufactured.

The following has been issued by the Indian Tea Association :—"The tea manufactured to August 15th is :

	lbs.
Assam	29,549,019
Cachar	9,996,256
Sylhet	11,581,497
Darjeeling	4,330,034
Terai	1,525,254
Dooars	11,435,109
Chota Nagpore	80,600
Chittagong	319,562
Kangra Valley	2,200,000
Dehra Dun	1,153,794
Total ...	72,171,125"

Indian Tea in London.

In consequence of the holiday the market has been practically closed for the greater part of the week, says the *Produce Markets Review* of 10th ultimo, and but moderate transactions have taken place. The inquiry generally continues quiet, due in a great measure to the comparatively small and poor selection, and this is mainly attributable to the slowness with which the new teas are coming forward. Although the report of the crop is more favourable, there is a considerable deficit in the export from Calcutta compared with last season, which will probably soon be reduced, should the improved conditions of weather continue. This decrease, however, may be partially attributable to the finer plucking of the leaf, but as the increased area of cultivation is yearly coming into full bearing it is by no means improbable that the aggregate outturn will be quite equal to that of last season.

Cocoa in Costa Rica.

Some progress has been made in the cultivation of cocoa in Costa Rica. In order to encourage the industry, a law was passed in 1894, offering a premium of 26c a tree for plantations containing upwards of 500 trees, of at least three years growth, provided that they were in good condition. In virtue of this law, applications for the premium have been made to the Minister of Public Works representing 400,000 trees, but the report of the Commission appointed to inspect the plantations and count the trees has not yet been published. In order to protect this industry, the import duties were raised in April to 30c per kilo., for coffee in bean and 50c per kilo. on ground cocoa. Those who have embarked in

this industry are well satisfied with the results so far obtained; the production is already, most sufficient to supply the Home consumption, and when the existing plantations come into full bearing it is probable that cocoa will figure conspicuously among the exports.

Rubber in the Federated Malay States.

During 1900, the European planters, with the pluck and determination which characterised the planters of Ceylon in former days, under somewhat similar adverse circumstances, have manfully turned to other forms of cultivation, rubber (Pará and Ficus Elasticus) and coconuts being most in favour, while still maintaining, in the greater number of cases, the upkeep of their coffee etates and waiting for better times. A large area has been planted with Pará Rubber, which thrives well. Three years hence we should know what will be the result. The climate and rainfall of the Federated Malay States is all that can be desired for tropical agriculture, Indian labour is becoming cheap, fairly abundant and good, and the policy of the Government in investing its large mining receipts in the construction of roads and railways has afforded facilities to planters which probably are not to be found in most tropical Colonies. An expert in the subject of gutta percha and rubber has been obtained from Kew, and his knowledge will doubtless prove of great value to the planters. Amongst other things he will superintend a Government experimental garden.

Coffee in London.

As there have been no auctions during this week it is difficult, says the *Produce Markets' Review* of the 10th ultimo, to fix the actual alteration that has taken place in values, as the business transacted privately is not always reported. The Continental demand has continued good for the lowest and medium grades of Central American, and virtually everything under 43s has now been cleared off the market. Dealers' stocks must have been so considerably reduced during the last fortnight that it is highly probable that when the auctions recommence on Tuesday there will be keen competition and higher prices will be paid. In the terminal market heavy receipts have checked any rapid upward movement, but quotations have daily hardened The statistics on the 1st instant are much what were expected; the increase in the world's visible supply of 42,000 tons is no doubt due to the early arrival of the New Santos and Rio crops, and the large total of 445,000 tons must act as a check on any considerable upward movement in these descriptions, but may not be able to stop an advance in mild kinds, which are unreasonably low and not too plentiful.

Bulgarian Exports of Attar, etc.

In 1900 Bulgaria exported £32,794 worth of attar of roses to the United Kingdom. £2,545 worth to Austria-Hungary, £15,135 worth to Germany, £40,987 worth to France, £26,924 worth to Turkey, £5,226 worth to Russia, and £23,993 worth to the United States, the total quantity covered by these values being about 459 metric tons, against 49 in 1899, and 58 in 1898. Reporting on the Vice-Consulate of Eastern Roumelia, Mr. McGregor says:—"The rose harvest was excellent and abundant, yielding about 900,000 meticals, or 4,300 kilos. (9,460 lbs.). Prices varied from £27 to £32 per kilo. (2⅕ lbs.) for the best qualities, while inferior oil fetched from £20 to £22. About 5,346 kilos. were exported, of which 1,174 went to the United Kingdom, 1,548 to France, 568 to Germany, 849 to the United States, and 886 to Constantinople. There can be no doubt, as the figures above quoted prove, that notwithstanding all regulations to the contrary, the introduction of geranium oil and palma rosa for purposes of adulteration is still carried on to a great extent, and this is the more to be regretted as the 'synthetic attar of roses' now produced in Europe, although inferior to the pure, natural oil, may prove a serious rival to the adulterated article now so largely exported. This ought, in their own interest, to be borne in mind by the Bulgarian rose distillers."

Quinine in London.

In their circular dated August 12, Messrs. C. M. & C. Woodhouse remark that the stocks of quinine are in excess of last year, but when the stocks of bark and quinine in London are taken together and reduced to equivalent of ounces quinine the total is rather below last year, *viz.*:—

1901	1900	1899
oz.	oz.	oz.
4,436,000	4,456,000	4,183,000

The shipments from Java for first seven months show an excess of 1,710,000 Amsterdam lbs. over 1900, but only of 426,200 Amsterdam lbs. over 1899; whilst exports from British India for only four months show a decrease of nearly 900,000 lbs. But the chief feature of interest in the statistics appears to be the large increase in consumption in the United States—assuming for proximate purposes of comparison 1 lb. of bark as equal to 1 oz. quinine (in bark analysing 6¼ per cent. this would be accurate). The imports of bark and quinine into U. S. A. for year ending June 30 were as follows:—

	1900-1901 (11 months)	1899-1900 (12 months)	1898-1899 (12 months)
	oz.	oz.	oz.
Total ...	7,960,000	7,421,000	7,260,000

The returns for June are not yet published, but assuming them to be only equivalent to 500,000 oz. they would show an increase of 1,000,000 oz., and if the assumption (as stated previously by Messrs. Woodhouse) is correct that the total production of bark in the world was equivalent to about 12,500,000 oz. quinine, only 4,000,000 oz. to 5,000,000 oz. would be left for consumption of the rest of the world without again drawing on stocks.

Cinchonine Derivatives.

The *Chemist & Druggist* says:—In 1867 Caventon and Willm obtained a base by the action of potassium permanganate on cinchonine, which they termed hydrocinchonine. They considered that this base was already existent in the cinchonine used for the experiments, and that it had resisted the action of the oxidising agent. Much discussion arose over the point, and different views have been held in regard to the matter. At all events, the base was looked upon as of great rarity. According to Jungfleish and Léger (*Jour. de Pharm. et de Chim.*, 1901, 313), by the action of dilute sulphuric acid on the alkaloid cinchonine, they have obtained, together with other products, a base presenting great resemblances to the old compound, hydrocinchonine. They have called this body cinchonifine, and regard it as an isomer of cinchonine. Except that the combustions do not agree well enough, the resemblances to cinchonine are sufficiently strong to have warranted the assumption that the two bases are identical. The following details will accentuate the points of resem-

balance and difference between the two compounds. They are both alike in crystalline appearance, forming fine prismatic needles; and they behave quite similarly towards the usual organic solvents. The melting-point of both compounds is 278°C. The specific rotatory power of hydrocinchonine is 198·6°, and for cinchonifine 199·5°. The optical rotations of the sulphates are almost identical in the two cases. A difference, however, is observed in the behaviour towards potassium permanganate. Hydrocinchonine is only oxidised very slowly by this compound, but cinchonifine reduces it even at the ordinary temperature. Another marked difference lies in the fact that cinchonifine sulphate crystallises with two molecules of water, whilst hydrocinchonine forms crystals with either three or twelve molecules of water.

GENERAL ARTICLES.

A GREAT TEA FIRM.

R. TWINING AND COMPANY.

In what may fittingly be called "the aristocracy of trade, Messrs. Twinings hold a high and honoured place. Established so long ago as 1710, in the reign of Queen Anne, by Mr. Thomas Twining, the business has ever since remained in the hands of his family and descendants. Not only so, but the premises occupy the identical ground which, with wise forethought, was purchased by the founder of the firm a hundred and ninety years ago. We question if any other firm in London can show such a record. For very many years Messrs. Twining combined the business of bankers with that of tea merchants, but, in 1893, the banking department was taken over by Messrs. Lloyds, two of the partners transferring their services at the same time, and the remaining partners, four in number, applied their undivided attention to the further development of the tea business. With what success they have done so, all the world knows. Not only have they fully maintained the high renown of the firm, but they have immensely enlarged the sphere of their operations, and it can now be said without exaggeration that they command the bulk of the high-class tea trade in this country. There are but few West-end hotels and clubs that are not supplied by Messrs. Twinings, and the list of their private patrons reads like the roll of the British aristocracy. It would be out of place to mention names, but we have been privileged to look over the old books of the firm, and we can state from our own personal knowledge that many titled families have been on their books continuously from the early years of the eighteenth century up to the present day. At the same time Messrs. Twinings supply tea at prices suited to every class of the community, ranging in value from 1s. 4d. to 6s. 2d. per lb.

These old ledgers, by the way, are interesting reading. Engrossed in a beautiful clear handwriting, they speak of days long past, when the beverage that is now in universal use in palace and cottage was the luxury of the rich. Referring to the year 1718 we found that the price of hyson was then forty shillings, and of bohea eighteen shillings, while cowslip tea was invoiced at twenty shillings per pound. After this, coffee at five shillings per pound seems cheap by comparison. Snuff is a frequently recurring item, and cost our ancestors five shillings per pound, which is rather cheaper than nowadays. Arrack, which we take to be Jamaica rum, was also a favourite article of consumption, and could not be considered dear at sixteen shillings per gallon.

When Mr. Thomas Twining, whose portrait, painted by Hogarth, hangs over the mantlepiece of the firm's private office, started business in the Strand, the tea trade was quite in its infancy. Although introduced into this country in small quantities about fifty years previously, it seems to have been regarded at first as a medicine rather than as a beverage. Mr. Samuel Pepys in his "Diary" recorded that he went home and found his wife "Making of Tea, which Mr. Pelling, the apothecary, tells her is good for her cold." In the reign of Charles II. its rarity and costliness may be judged from the fact that two pounds of Tea was considered by the East India Company a sufficiently handsome present to offer His Majesty. Even in 1708, or twenty-eight years after the firm was established, no more than six vessels were employed in the t trade between England and China. It may fairly be said, ther fore, that the history of the firm is the history of the tea trade this country.

According to the custom of the day, when Thomas Twinin opened his tea-shop near Temple Bar, he hung his sign ov the door. He chose for that purpose "Ye Golden Lyon," which name the house soon became known. The sign now hol an honoured place in the warehouse, and is treasured as a valu heirloom. "Ye Golden Lyon" speedily became a noted rendezvo of wits and men of *belles lettres*, and ladies of fashion came here their sedan chairs to sip the enlivening beverage.

The history of the firm since its earliest days has, in a wor been one of continuous progress and prosperity, and it never he a higher position than it does at present. The firm supply som thing like a score of Royal and Imperial households in this countr and the Continent and we are glad to note that they have just bee appointed teamen to His Majesty the King. In this connection is interesting to note that Edward VII. is the fifth consecutiv monarch of England from whom they have held this appointmen and they also supplied the Court in days prior to the issue of Roya Warrants.

The portraits which adorn the walls of the private office sho the features of eight generations of partners, and it is impossibl in looking upon their life like faces to doubt that the indomitabl spirit of enterprise and integrity that animated all their action and built up the prosperity of the firm inspires the ninth genera tion with the same motives and resolves. The present partner have shown that they are worthy of such an ancestry, and whe the time comes for their portraits to take their place side by sid with those that have preceded them, they likewise will take thei part in inspiring future generations of partners with the sam feelings of honour, fair-dealing, and laudable ambition.—*Cour Circular*.

THE ROMANCE OF TEA.

Let us deal first with some of the uncouth names to be found i our grocer's list. Hyson will probably be found to figure amon them. This is a corruption of two Chinese words, one of whic signifies "before the rains;" while the other, Hi-chun, is the nam of a young girl, which, being translated, signifies Flourshin Spring. About two hundred years ago this girl suggested to he father an improved method of sorting his tea. He adopted it, muc to his advantage, and his tea having become famous, he gratefull called it after his daughter. To this day members of the sam family are selling this same tea, and the "chop" or brand of thi particular kind of Hyson is Li Yihhing—*i.e.*, Li's Extra Perfume But this is a name which we must not look for in the grocer's lis until the public knowledge of tea and its various qualities becom very much greater than it is at present. Oolong is a name we ma look for with more confidence. This word means Black Dragon owing to the fact, that one Su was the first to bring to notice th peculiar excellence of a tea plant in which he had discovered black snake coiled up. Congou is a name commonly applied to tea suitable for breakfast. It simply means "well-worked. Applied to Ceylon tea it used to mean tea made from the lower an coarser leaves of the plant, as opposed to the Golden Tips, whic sufficiently indicate the young buds growing higher on the mai stem. This Golden Tip tea is most allotted to the Court and t high Chinese officials. The writer was once favoured with a cu of a very special brand of the Ceylon variety. After first being handed round to be inspected and admired in its dry form, it wa infused with the aid of a sand glass, and then poured off to b drunk, it is needless to say, with no allaying milk. Comet Por could not have been produced with more ceremony, and th feeling of respectful awe with which the golden beverage wa imbibed has survived the memory of its exquisite flavour It is not perhaps generally known that the flower petals o roses, olea fragrans, tuberose, orange, jessamine, gardenia, an azalea are largely used to perfume the teas we drink, thoug the name Orange Pekoe might, perhaps, have suggested thi fact. The Chinese call this tea by a name meaning superio perfume, while the pure Pekoe is called Lau-tsze's eyebrows. I should be explained that Pekoe means "white hair," and is applie

to the young tea-leaves, owing to the fact that they are covered with a fine white down. Most of this tea is sent to England or Russia, where it constitutes the bulk of the famous caravan tea sent overland. Lau-tsze was the founder of the Taoist religion, but as he was born about a thousand years before the earliest mention of tea, we may presume he never realised the virtue of his own eyebrows as a beverage. . . . . It is not, perhaps, generally known that no less a person than one of the Chinese Emperors has laid down instructions for the proper infusiou of it. You are to take, he says, clear spring water, and heat it to the extent that would be sufficient to turn a cray-fish red. You pour this on the leaves and forthwith drink it. Whether these directions are generally observed in China we are not aware. The native-made tea that one gets in the Far East generally seems slightly insipid until the palate has grown used to its delicate gradations of flavour. Stewing and the abominable habit of "cosying" are, of course, unknown; though in Thibet tea of a coarse quality is literally made into soup with milk and butter, vinegar and pepper being added when procurable.—*Evening Standard.*

RUBBER ON THE NILGIRIS.

In his latest Administration Report of the Government Gardens, Nilgiris, Mr. Proudlock says :—

RUBBER.—The Pará rubber trees (*Hevea brasiliensis*, Muell. Arg.) which were planted in November, 1898, are growing rapidly. The tallest tree was measured on the 22nd March, 1901; it was 18′8″ in height and had a girth of 7½ inches at one foot above the ground. This species yields the most valuable kind of rubber hitherto discovered.

The Central American rubber trees (*Castilloa elastica?*), which were planted in September, 1898, are doing well. The tallest tree, measured on the 22nd March, 1901, was found to be 12 feet in height and the stem was 14 inches in circumference at one foot from the ground

Of the plants of *Kickxia Africana?* (one of the most valuable species of West African rubber trees) that were planted in December, 1899, the best tree was found to be 8′10″ in height on the 22nd March, 1901. This may be considered as very satisfactory growth.

The Ceara Rubber.—*Manihot Glaziovii*, Muell. Arg.—Much attention was given to this species during the year at Kullyar, at Burliyar, and also at Nellacotta and at Pandalur in the Wynaad. It may be mentioned here that the practical study of this rubber tree has been carried on by the Curator for several years now as opportunities occurred, but chiefly in the intervals between his official duties.

One of the main outcomes of these observations is that trees of the same age and size have been found to differ from one another remarkably in their yield of rubber. A large tree, girthing 3′ 10″ at four feet from the ground, was tapped at Pundalur in February 1901, and it yielded only about a tea-spoonful of latex. This tree was cut down and brought to Ootacamund as a specimen of a perfectly useless ceara rubber-yielding tree. On the other hand, a few good rubber-yielding trees have been met with and noted at Kullyar, at Nellacotta and at Pundalur. Cuttings of one of the best rubber-yielding trees at Kullyar were taken and planted in Burliyar in January, 1900; and a few of the plants raised from them are now over 14 feet in height.

In February, 1901, cuttings were taken from the best latex-yielding tree at Nellacotta, and also from the best tree at Pundalur, and have been placed in one of the glass houses in the Ootacamund garden in order to get them to grow. Later on, it is intended to plant them out at Burliyar or elsewhere, with the object of testing them, and to propagate them if they are found to be as good rubber-yielders as the parent trees.

What has been accomplished by the Dutch in Java in connection with the selection, propagation and improvement of cinchona trees, which now yield surprisingly high percentages of alkaloids, and also by the Vilmorins of Paris in connection with the production of new varieties of the sugar beet-root which yield high percentages of sugar, might also be done in connection with rubber trees with probably equally encouraging results in course of time.

It will be observed that only a small beginning has been made to discover the best rubber-yielding tree or trees in each of the plantations named, and to propagate them by cuttings. This should, however, also be done in the case of all plantations or groups of the trees in the district or even beyond it. The yield of latex by the progeny of the best trees, planted in order in one garden, would, in turn, have to be compared; and by working on the lines of intentive selection, propagation and cultivation of only the very best latex-yielding trees it is reasonable to hope that, in course of time, a variety of the tree yielding a really paying percentage of rubber may be evolved.

These principles will no doubt also apply to all other species of rubber-yielding trees.

For the sake of convenience it may here be mentioned that, in February, 1901, the Curator tapped a tree of *Plumeria acutifolia, Poiret*, at Gadbrook, Nellacotta, Wynaad, and obtained a small cake of rubber from it. A report on the quality and value of this rubber will be obtained in due course.

THE TEAPOT IN INDIA.

BY SIR EDWIN ARNOLD.

(*Daily Telegraph*, Aug. 3rd.)

In a recent speech upon the Assam labour question Lord Curzon made a suggestion which may prove to be the beginning of a new social era in India. Full of ideas as is the accomplished Viceroy, I am inclined to think that the most brilliant and fruitful of them all was set on foot when his Excellency asked why India could not be induced to drink her own tea. Why not, indeed? we may well inquire. It is known that she grows the best tea in the world, and Assam, indeed, is the original mother-country of the little bush which has become so famous and necessary. Yet, as a matter of fact, hardly an ounce of tea, black or green, is consumed by Indian natives; it is still as strange and foreign to them as it was to Mr. Pepys when, on Sept. 28, 1660, he wrote in his diary: "I did send for a cup of tea, a China drink, of which I had never drank before." That was the beginning of the "cup that cheers" in England, and it was about the same time when the chairman of the East India Company, writing to Calcutta, added the famous postscript to his letter, "Tell our agent to buy and send hither six pounds of the best tay he can gette." And now what a business it is! India and Ceylon between them do an enormous trade, which has quite outpaced the tea-gardens of China, and could and will be greatly extended. Japan and the Celestial Empire are her principal rivals; but Japan drinks a great deal of her own and sends all the surplus to the United States, the world in general, which in this case really means Russia, America and England, being supplied, the first-named entirely from China and the others from the general market. Now it would be an excellent thing if India would take to the drinking of tea. That it may become

A UNIVERSAL AND POPULAR BEVERAGE

is proved by Japan, where, taken without milk or sugar, its use is constant and pervading. Many other nations have special drinks. The South American takes his "maté"; the African his "pombe"; the Polynesian "kava," and so on. But the Hindoo has always been contented with simpler water. I hardly know of any other potable among them except the liquid in which rice has been boiled, which has they call "conjee," and sometimes, perhaps, milk and water, with a little spice in it. The Hindoo housewife does not make stews nor soups—forbidden these things by her creed and very rarely does she provide anything like a vegetable broth. Most of the household food, such as chupattis, grain, etc., is cooked on sheets of iron, the saucepan coming very little into the domestic cuisine. The Hindoo housewife knows nothing of cocoa or chocolate, and has never even tasted that coffee of which her Mohammedan sister partakes. But what an excellent thing it would be if Lord Curzon's idea should make her a tea-drinker! Taken as the Japanese take it, pure and simple, without cumbrous paraphernalia, tea-drinking would well suit the population. First of all it would, as in Japan and China, lead to the general habit of boiling all the drinking water. That one custom would save lives by hundreds of thousands, for the peasants, once habituated, would take cold tea with them to the fields, and avoid for themselves and their children the terrible evils of the village tank. Next, tea, though only slightly nourishing, prevnts waste of tissue, and helps food to assimilate; so that the trifle spent in a cheap but good leaf would be well repaid. Thirdly, it is a social cup, conducing to conversation and family peace, and would

be a great boon to the patient, gentle womanfolk who have such few pleasures.

Of course, there must be no question of five o'clock fashions and elaborate tea equipages. A kettle, a teapot, and some cups should comprise all the machinery necessary. Milk and sugar are innovations introduced by the West; and spoons, plates, and cream-jugs are not in popular knowledge. Every morning the Hindoo household sends forth a mother, an aunt, or a sister to the village-well, where the chatty of copper, brass, or baked clay is filled to the brim, corked with a tuft of convolvulus or lemon-grass, and carried back to the hut for the day's consumption. The cooking stove is a hole in the ground with a few stones, the fuel charcoal or cow-dung cakes. Everything is primitive, and will remain so. Yet, if once Lord Curzon's good idea should strike root into the soil, I hardly know what boon could prove greater than tea-drinking established as

A HABIT AMONG THE HINDOOS.

Beside the countless lives saved by boiling the water, the homes made pleasant by the little social graces which cluster round the teapot, and the pride and comfort of a little luxury embellishing daily life, it would be a stupendous lift for the tea industry of the land. Accordingly the Viceroy's suggestion has been intelligently taken up. An official crusade for the propagation of the tea-kettle has actually been started. We learn from a high Indian authority: 'A tea distributing agency has been formed, and Messrs. Andrew Yule & Co., have undertaken the work of distribution for three years without remuneration except out-of-pocket expenses. The Tea Association has given a grant of 40,000 rupees. The large agency houses, headed by Messrs. Finlay, Messrs. Muir, Messrs. Yule, Messrs. MacNeill, Messrs. Octavius Steel and others, have agreed to contribute three-quarters of a million pounds of tea annually. With the present low prices, the native consumption is expected to reach 15,000,000, or 20,000,000 pounds. If this is achieved, nothing more is likely to be heard of over-production. Special efforts will be made to cultivate a taste for tea-drinking among the native passengers on the railways, who exceed 160,000,000 annually. An average consumption of one ounce would give 10,00',000 pounds consumed in a year on the railways alone, without counting the consumption of the general population."

Mark how splendid is the outlook of all this! Talk of storms in a teacup; here is promise and potency of golden profits for the planters, enhanced revenue for the Government, and health and pleasure for population of 250,000,000,

ALL ENSHRINED IN A TEA-CHEST.

If the notion took root, Assam and Cachar might safely double their tea-gardens; the Indian potters might make a little fortune in each district by turning out such utensils as native taste would demand, and although sobriety is a virtue which few Hindoos have to learn, the use of tea is everywhere seen, and above all in Japan, to be the greatest friend of temperance and gentle manners. There is a whole gold-mine in the idea of supplying Indian railway travellers with hot and cold tea in place of the untempting and rather perilous water jars now on offer at all stopping stations. Cold weak tea is probably the best and safest beverage for thirsty throats; and if Lord Curzon's suggestion led to nothing more than a growing habit of boiling drinking-water, it would be a result worth any efforts. Only too much must not be hoped for. The Hindoo is beyond all men cautious, conservative, and caste-ridden. The tea he uses would have to be specially grown, prepared, and guaranteed, and the Brahmans and higher classes must first be won to the teapot. Perhaps something classical might be found in the scrolls of Hindoo mythology which would sanctify and recommend the tea-leaf, as has happened in the case of the sweet basil. In front of almost every Hindoo door will be seen a square earthenware pot remarked with rude figures in coloured chalk, and containing a dwarf shrub. This is the holy Tulsi—the plant consecrated to the protecting deity; and the Indian housewife would as soon forget to grind the day's grain in the little stone-mill as to pour the morning water over the Tulsi plant on her doorstep. My good friend,

SIR MOUNTSTUART GRANT-DUFF,

who, like King Solomon, knows the Eastern flora from the cedar to the hyssop, could find, I am sure, something charming and authoritative about that plant which, indigenous in Assam, has borrowed its name of "Tcha" from China, and is least of all known in the land where it grows best and most naturally. If, then, Lord Curzon can teach India to drink tea he would, in my judgment, deserve for ever to rank among her greatest benefactors, and it is a policy which I am sure all English women will appreciate and support.

THE PROSPECTS OF COFFEE.

The accounts of the Dumont Company for the past year conclu sively prove two points, says the *Brazilian Review*—that whe properly managed, coffee estates can yet be made to yield handsom profits, and the advantage of efficient over the careless and un scientific methods that have generally prevailed. By strict atten tion to economy and the introduction of the most modern machiner the quality of the output of the Dumont has been so improved a to command an average price of 40s. 2d. per cwt., more than 12½ % better than the average quotation for "Santos, good average" fo the same period.

After paying all working expenses, including the maintenanc and renewal of road, buildings and machinery, difference o exchange, and every item incidental to a great plantation, a ne profit of Rs.1.390:687$ remained over sufficient to pay a dividen of 10 % on a capital of nearly Rs.14.000:000$ for which, if no less, a similar estate could probably be bought to-day. No doub there is the problem of possible higher exchange to be faced wit the corresponding increase of cost and simultaneous fall of sterlin prices. But such conditions can be but transitory, whilst th returns of the Dumont Company show that with exchange abou 10d. sterling prices might go to 20s. per cwt., or half what the were in 1900, without leaving loss on efficiently managed estates.

However planters may grumble, the future of coffee is all right If the present owners cannot work at a profit there will not b wanting others with more energy and more capital to put th industry into shape and make it pay once more.

The future of coffee lies in co-operation and the introduction o more economical methods, the improvement of quality and mor attention to grading. By the concentration of a dozen or so smal plantations into one property the present wasteful and inefficien administration must be economised and replaced by scientific treat ment and every advantage taken of the hydraulic power so abund antly provided in many districts by Nature, by which the cost o handling and transport on the estate might be reduced at least t half. The slow and costly "terreiro" process will have to be give up and the coffee be dried mechanically, probably also by electricity In fact coffee planting is yet in an almost primitive state. Th creaking wooden-axled bullock cart is still the common means o conveyance, and drying as primitive as in the year 1. Somethin has been done in the way of pulping and hulling machinery, but a far as cultivation itself is concerned everything is primitive.

At present plantations are going almost for the asking in som districts and offer a splendid opportunity to men of energy imbue with modern notions of the superiority of machinery and science t brute force and rule of thumb, for lucrative investment of capita

GLAZED COFFEE IN OHIO!

After a long and wearisome trial, in which considerable exper testimony was produced on both sides, the jury in the case of th Food Commissioner of Ohio against Arbuckle Brothers, to preven the sale of glazed coffee within the State, brought in a verdict i favour of the prosecution, thus sustaining the Food Commissioner The case will be appealed.

It seems strange that while the Supreme Court of Ohio hold that the duties of the Dairy and Food Commissioner are mandatory the present Commissioner served two terms and his predecessor through their respective terms without discovering that glaze coffee was an adulterated article within the meaning of the statute During all that period, no consumer in Ohio ever complained of th quality or price of "Ariosa" coffee; ever doubted that they receive full value for their money. Fourteen million pounds were sold i Ohio last year, and it is fair to presume that had it been in an way unwholesome or its sale in the slightest degree tainted wit fraud, complaints would have been general, whereas popularit and general excellence is certified by its great sale.

Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant th appointment of "Purveyors to Her Majesty The Queen and Empres of India" from the year 1837 until the time of her death, have no had the honour of being appointed by Royal Warrant "Purveyors t The King."

In February last Dairy and Food Commissioner J. E. Blackburn notified Arbuckle Brothers that "'Ariosa' coffee, as now prepared, is, in my opinion, an adulteration under the laws of Ohio;" and that "it is not a compliance with the law to simply label the article 'Compound' when coffees are filled, coated, and glazed to make them appear better or of greater value than they really are, and to retain water that has been added to increase weight."

While Commissioner Blackburn's action may be defensible under an extreme technical interpretation of the laws of Ohio, nevertheless it seems unjust and calculated to bring food laws in general into contempt.

The coffee in question is a low-priced article coated with a substance which preserves aroma and acts as a clarifying agent. It has been unrestrictedly sold in Ohio ever since the food law was passed sixteen years ago. No complaint has ever been made that glazed coffee is unwholesome.

In a report on coffee prepared by Chief Chemist Wiley, of the United States Department of Agriculture, and a witness for the defence (Bulletin No. 13, p. 913-914), he says: "The glazing of coffee, according to König, is objectionable, not that the glazing material is unwholesome, but because coffees so treated retain an excess of moisture in the roasting process." Analyses presented led to the conclusion that "the large percentage of moisture retained by the glazed coffee and the decided increase in the soluble matter adhering to the beans must certainly prove of considerable profit to the roaster, without advantage to the consumer."

The price at which "Ariosa" coffee has been sold is proof that there was no fraud in its sale, and that any advantage gained by the use of water was given to the consumer. Competition, always a safeguard of the people against the sale of fraudulent or unwholesome foods, may safely be relied upon to prevent extortion.

If the sale of coffee roasted by the use of water is contrary to the Ohio law, and Commissioner Blackburn enforces the act, it would drive nearly all coffee out of the State, or compel the adoption of the dry roast process, which is not regarded with favour by coffee roasters.

The Ohio law, as it now stands, is defective; lacks elasticity, in that it makes no provision for exceptions to a statute that is exacting in its requirements; and therefore it may, as in the Arbuckle case, be made a vehicle of persecution.

A rigid compliance with the law may, in many cases, work injustice to the people as well as those charged with its violation. Many wholesome articles of food are, technically, adulterated when tested scientifically, but their sale is permissible, as they are in no way detrimental to health. For instance, ground mustard, French peas colored with salts of copper, mixed mollasses, syrups, cheap jams and jellies.

Under the laws of New York these articles can be freely sold. The State Board of Health may, with the approval of the Governor, from time to time declare certain articles or preparations to be exempt from the provisions of the act, provided they are not unwholesome. No such proviso is contained in the Ohio law, and hence such suits as that against the sale of glazed coffee.—*American Grocer.*

"TEA" AS A MEAL.

An earlier suggestion, says *Notes and Queries*, of the use of the word "tea" as descriptive of a meal than its employment in "The Vicar of Wakefield" (1776) is to be found in "Moll Flanders," published in 1722 (though solemnly declared by Defoe to have been "written in the year 1683"), the heroine severely blaming a female friend for spreading a story "when she had not the least ground other than a little tea-table chat." Congreve, moreover, in 1700 had employed a similar phrase, Mirabell, in "The Way of the World" (IV., i.), defining "genuine and authorized tea-table talk" as "mending of fashions, spoiling reputations, railing at absent friends, and so forth," Mrs. Millamant in the same scene declaring her intention to be "sole empress of my tea-table." This would indicate a separate meal, though it might cover only what the same author had six years previously declared in "The Double Dealer" (I., i.), when the ladies were described by Mellefont as "at the end of the gallery, retired to their tea and scandal, according to their ancient custom after dinner."

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange, *July 22nd*, 1901.—Ninety days' Bank rate on London opened on Monday, 15th instant, at 11d. and closed on Saturday, 20th instant, at 10 5/16d.

The market is getting used to surprises, but a slump of a penny in 11 days just when there seemed some reason to expect, at any rate, greater firmess, has completely demoralised it and given rise to a spirit of hopeless pessimism that will be difficult to conquer.

In our last number we foresaw the possibility of renewed weakness on occasion of the monthly liquidation, which, however, came much earlier than expected and in a much more violent form than there seemed any reason to anticipate. As far as can be judged, the violent slump that commenced on the 8th instant originated in urgent orders from Europe to remit, not unconnected with late bank failures and the monetary stringency in Germany. Fantastic reports were current as usual regarding the amount thus taken, but whatever it was, it proved enough to set the ball rolling in a most perilous manner. At one time, indeed, the market was prey to a regular and somewhat ridiculous panic, because if indeed, as we point out elsewhere, there is good reason for serious misgivings, at the moment, with coffee pouring in at an almost unprecedented rate and bills beginning to be more abundant, the prospect seemed more hopeful than for some time past. It is true the market was heavily oversold, but so it was this time last year and to a much greater extent, and yet after the big initial fall there was no such panic as is now witnessed. It is possible that a great deal of the money lying in the banks is for European account, and on the prudence of its holders, in all likelihood, depends the immediate course that exchange will now take. Should they, too, take fright and demand immediate remittance, there is no knowing how low rates may drop because although the supply of ready bills is improving, it is yet

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[w. 1-10-98 —t.f.o.]

very far from sufficient to meet any extraordinary demand or to do more than supply the day to day wants of the market for the present.

The value of *embarques* or shipments at Rio and Santos during the past week was very large, £412,000 as against £260,000 the previous week and £300,000 last year, whilst declared sales were also considerable, 193,000 bags as against 130,000 the previous week and 129,000 last year.

Since 1st July the value of the coffee sailed was £737,228 as against an almost identical amount £737,927 last year.

Coffee.—Entries during the week showed an increase of 57,412 bags compared with the previous week and of 179,800, or 114 %, compared with the corresponding week last year. Entries since 1st January at Rio and Santos were up to 19th instant, 790,695 bags as against 445,936 last year, an increase of 77 %.

Embarques or shipments were also large 284,010 as against 177,940 the previous week and 125,149 last year, whilst declared sales were 193,000 bags as against, 130,000 the previous week and 129,000 last year.

In spite, however, of the very heavy entries, stocks have increased very slightly from 743,515 bags at Rio and Santos on the 12th to 766,408 on the 19th instant compared with 551,671 bags on the corresponding date, 20th July, 1900.

The 5th number of the *Boletim da Agricultura* to hand says that during the month of May the average temperature at São Paulo was 16° ·1 as compared with the general previous average 16° ·3; the maximum having been 27° ·4 on the 7th and minimum 7° ·5 on the 26th of that month. The prevailing winds were somewhat unusual, being E. or N. instead of from S.-E. or N.-W. as usual. The quantity of rain fallen during the month did not exceed 64 m/m, being 18 m/m less than normal and 101 m/m less than in May, 1888, but 61 m/m more than in May, 1899. Nearly half the rain fell during a single day, the 14th, between 11 A.M. and 1 P.M. In the course of the month there were only 6 wet days, the normal being 12; but there were 18 cloudy against the normal of 22.

At Campinas average temperature was 17º ·18C or 0° ·29 less than normal. The highest temperature was 29° ·6 on the 9th and the lowest 12° ·8 on the 15th. The prevailing wind was N. N.-W. whereas 63°E is the usual during May. Only 31· 8 m/m rain fell, being less than half the normal quantity. Rain fell only on 3 days against the normal of 5, and 1 day was cloudy as against previous average of 4. The Inspector of the first district reports that harvesting has been generally commenced though somewhat delayed in some districts by irregular ripening. A good deal of *café chocho* or hollow berries is noticeable, especially on the older plantations. At S. Antonio da Cachoeira the crop will be smaller than last year's on account of the damage done by the heavy hailstorm that fell in this district.

From the 4th district the Inspector reports harvesting to have commenced in May on most of the plantations A good deal of *café chocho* is noted in trees in the São Carlos and Ribeirão Bonito sections. On some plantations picking was delayed by lack of hands.

From the 5th district (Sorocabana) the Inspector reports the conditions to be generally good. At Botucatú the trees are very loaded; at São Manoel some of the trees seem so overloaded as to be unable to support the weight of the fruit. At Tieté the trees also look very well, but a good deal of *café chocho* is to be reckoned on. The appearance of *café chocho* is attributed to the weakening influence of successive heavy crops whereby the trees are unable to supply the necessary nourishment to all the fruit. The production of the Botucatú, Avaré, São Manoel, and Pirajú districts will exceed last year's because a large number of new trees come into full bearing this year.

Blight.—It is reported that *Requiema*, a kind of blight that leaves the trees leafless and with a scorched appearance is common in S. Paulo. After the *requiema*, trees are very weak and bear poorly for two or three years after. The report goes on somewhat suspiciously to add that taken in conjunction with the Chôcho or hollow coffee, this is likely to seriously affect the volume of the current crop!

Direct Trading.—Another Association, this time at Cataguazes in the State of Rio, has been organised amongst the planters of the district to start an agency at Hamburg or some other city for direct consignment of coffee by associates and sale of same. All the capital is to be paid in coffee at the rate of 10s. per 15 kilos. According to the agreement, each planter undertakes to subscribe 20 % of his crop and consign another 20 % to the Society's agents; the remaining 60 % he may dispose of as he please. This Society is called the *Sociedade Agricola e Commercial de Minas*.

THE AMERICAN TEA CAMPAIGN.

Mr. R. V. Webster writes to the Colombo Press :—

Mr. Mackenzie in his report to the "Thirty Committee" date New York, March 20th, 1901, writes:—"I did not go to Chicago thi time, because I met down here all the men I wished to see." Wha more proof can be required to show the absurdity of continuing th tea campaign in America on present lines. That the funds from th Tea Cess, spent in America, have been devoted to our Advertisin Agent's chosen disciples, to the detriment of the unfortunate cess payer, (who is anxious to see Ceylon tea throughout the length an breadth of the land, not merely confined to the few stores controlle by our Advertising Agent's chosen disciples), must be clear to thos who have the privilege of reading our Advertising Agent's privat reports. It is little wonder that nine-tenths of the tea merchant in the United States of America have a bitter feeling against th Ceylon Tea Planters in general, and take no interest in the sale o the teas they grow; and so long as our advertising funds ar restricted to the chosen friends of our Advertising Agent they ar not likely to change. No doubt our Advertising Agent will cr poverty, but then why does he continue to pay a third of th advertising? If funds are limited, and over applied for in th United States on the one-third basis, why not offer to pay a fourth and so on from time to time, reducing the assistance as firms com forward.

Mr. Mackenzie has been working the tea campaign in Americ for about seven years; it would be very interesting to those wh perforce have to contribute to the Cess fund to know how man cities in the United States and Canada Mr. Mackenzie has visite during the seven years? If, during the seven years, he has eve visited the Western States, or any cities in the West of Canada?— which I have been informed he has not. How many firms he ha honored with a call, (I don't think that would be a difficult matter) and last but not the least important, how many months—durin the seven years he has been our paid Advertising Agent fo America—has he resided in that country?

THE WORLD'S TEA AND COFFEE CONSUMPTION.

[From the *Journal of the Society of Arts.*]

Nearly half a billion lbs. of tea were consumed in the year 190 in countries other than the sources of production. The Unite Kingdom is the world's greatest importer, having taken for con sumption during the year 1900, in round numbers, 250,000,000 lbs of tea, as against 116,500,000 lbs. imported for consumption b Russia, 83·3 million lbs. by the United States, 7,500,000 lbs. b the Netherlands, about 6,500,000 lbs. by Germany, and nearl 2,500,000 lbs. by France. A comparison of the tea consumption o the past year with that of earlier periods discloses the fact that te is becoming more popular as a beverage in European countries though little more than holding its own in the United States where coffee is the favourite beverage. The five Europea countries—United Kingdom, Russia, Netherlands, Germany, an France—took for consumption in 1890, 274,000,000 lbs. of tea, an in 1900, 383,000,000 lbs., an increase of 40 per cent. The Unite States, on the other hand, has not materially increased her con sumption of tea during that period, 83,000,000 lbs., according to recent United States report, being the consumption for both th initial and final dates of the period under consideration. Th relative popularity of tea and coffee in the United States and th United Kingdom may be seen from the *per capita* consumption o those articles in the two countries. For the year 1900 the relativ *per capita* consumption in the United States was 9·8 lbs. of coffe and 1·1 lb. of tea; in the United Kingdom, 6 lbs. of tea and ·71 lb of coffee. The net imports of tea into the United States hav remained almost stationary since 1890, having been 83,494,956 lbs. i that year, and 83,303,177 lbs. in 1900, and for the fiscal year 190 are expected to be approximately 90,000,000 lbs. Into the Unite Kingdom the imports of tea for consumption have increasd fro 194,000,000 lbs. in 1890 to 250,000,000 lbs. in 1900. The net import of coffee into the United States have increased from 490,000,00 lbs. in 1890 to 749,000,000 lbs. in 1900, while into the United King dom 28,000,000 lbs. were imported for consumption in 1890, an 29,000,000 lbs. in 1900, the growth being almost imperceptible

The following table shows the exports of tea from the four principal countries of production in 1898, 1899, and 1900:—

COUNTRIES.	1898. 1,000,000 lbs.	1899 1,000,000 lbs.	1900. 1,000,000 lbs.
China	205	217	184
*India	157	175	189
*Ceylon	119	138	149
Japan	41	46	43

The following table shows the relative consumption of tea and coffee during the year 1900, in each of the countries named:—

COUNTRIES.	Tea. 1,000,000 lbs.	Coffee. 1,000,000 lbs.
United Kingdom	250	29
Russia	117	18
United States	13	749
Netherlands	8	86
Germany	7	352
France	2	180

The relative consumption of tea in the United Kingdom and the United States is shown in the following table, which compares the imports for consumption in the United Kingdom, with those in the United States, in each of the years from 1890 to 1900 inclusive:—

Year.	*Imports of Tea for Consumption into* United Kingdom. 1 000,000 lbs.	United States. 1,000,000 lbs.
1890	194	83
1891	202	82
1892	207	90
1893	208	88
1894	214	92
1895	222	96
1896	228	93
1897	231	113
1898	235	68
1899	242	73
1900	250	83

An interesting feature of the development of the tea trade, so far as the United States is concerned, is the increasing proportion which India and Ceylon supply of the imports into that country. The exports of tea from India to the United States increased from 228,000 lbs. in 1895 to 1,414,000 lbs. in 1899, and those from Ceylon increased from 183,000 lbs. in 1895 to 2,060,000 lbs. in 1899.

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION.

At a meeting of the General Committee held on the 27th August, the following gentlemen were present:—Messrs. H. S. Ashton (*Chairman*), A. Tocher (*Vice-Chairman*), H. C. Begg, H. W. Boyd, W. Brown, A. C. Lawrie, R. Magor, and R. R. Toynbee. Mr. R. H. A. Gresson was unavoidably absent.

Considered a letter, dated the 15th August, from Mr. H. Drummond Deene, Stagbrook Tea Estate, Peermaad, Travancore, with reference to the manufacture of green teas. With the letter was forwarded a summary of Mr. Deane's process of manufacture. The Committee were asked to give a copy of this summary to any planter who seriously proposed to take up the business of green tea making. It was also stated in the letter that Mr. Deane would willingly afford further advice to any purchaser of one of his steaming machines. The Committee had read the summary with interest, and they agreed to comply with Mr. Deane's wishes respecting it. Considered a letter, dated the 20th August, from Mr. T. Kinney, Editor of the *Journal*, forwarding a sample of brick tea bought in Thibet. The brick was packed in sheepskin, and was sold at the rate of Rs.2-5 per seer, or about Re.1-2 per lb. Mr. Kinney enquired if it resembled the bricks made by Indian planters. The Committee examined the sample, which—with the exception of its covering—closely resembled the bricks manufactured for Thibet on gardens in the Darjeeling District. Mr. Kinney was to be informed accordingly.

REGULATION OF SUPPLIES FOR LONDON.

The attention of the Committee had been drawn by members of the Association to the question of regulating supplies for the London market. It was, the Committee believed, recognised that the tendency to concentrate supplies upon the London market, during a few months in each season, had greatly developed during the last two or three years. This concentration was, in their opinion, mainly due to improvements in communications between the producing districts and the sea-board. The extension of the Dooars Railway, and the opening of new bridges on the Northern Bengal Railway, had considerably accelerated the passage of teas from the Dooars. And the keen competition between the Assam-Bengal Railway and the Inland Steamer Companies (in consequence of which tea was carried in mail boats at cargo-steamer rates), together with the establishment of a direct service from Chittagong, had sensibly diminished the time formerly occupied in the transit of teas from Cachar and Sylhet. There could be, the Committee thought, no doubt that if, during the present season, the effect of these improved transport facilities was in no way restricted, the London auctions would be over-burdened at an early date. The questions therefore arose (1) as to whether it was desirable, by regulating supplies, to avoid or to diminish this risk; and (2) if such regulation were deemed to be desirable, as to the form which it should take. In the course of the discussion which ensued, it became evident that the majority of the firms represented on the Committee were of opinion that regulation here would have a good effect upon prices. But a minority were not convinced of this. They held that it was questionable whether the news of tea being held back would not have a more depressing effect upon the market than would be caused by permitting shipments to go forward in the usual course. In these circumstances it seemed to be clear that no system of regulation in India was practicable. The Committee consequently decided to submit to the London Branch of the Association a statement of the position, and to enquire if any scheme of regulation in London was contemplated.

DECLARED VALUE OF TEA EXPORTED FROM CALCUTTA.

Considered a letter, No. 4297, of the 24th August, from the Collector of Customs, Calcutta, with reference to the values declared by shippers for tea exported from Calcutta. Figures were quoted in this letter with the object of showing that the declared values were higher than the average price realised in London or Calcutta. And an enquiry was made as to whether it was the general practice to include in the declared value the equivalent of the charges incurred up to time of sale in London. The Association was also asked to suggest some feasible methods by which greater accuracy could be secured in future. The Committee were of opinion, judging by the figures given in the letter, that the declared values were somewhat high. And they decided to circulate copies of the letter to the members of the Association with a recommendation that greater care should be exercised in future. The permission of the Collector was, however, to be obtained before publication. They believed that it was not the custom to include in the values the charges incurred up to time of sale in London and they agreed to inform the Collector accordingly.

POSITION OF INDIAN TEAS IN CEYLON.

Considered information received from Colombo in reply to an enquiry which was made by the Committee as to what would be the position of Indian teas in Colombo if the duty were reduced to 5 per cent. *ad valorem*. The information was to the effect that so long as a duty was levied, at however low a rate, Indian teas could never rank in Colombo on equal terms with Ceylon teas. The reason for this was that dutiable teas were stored in the bonded warehouse, and could not be removed except by the payment of duty, or on their being shipped. This prohibited the dealers from using such teas for blending purposes; and prevented their sharing to a full extent in the general competition. The only possible means of putting all teas on equal terms would be to abolish the import duty. And if Indian teas were admitted free it was thought locally that teas from China, Japan, and Java should receive similar treatment. Any proposal to remove the duty would not be favourably received in Ceylon. This information coincided with the opinion previously formed by the Committee, and they agreed to address the Government of India on the general question as early as possible. The letter was to follow the lines prescribed in the proceedings of the meetings held on the 16th July and the 13th August, 1901.

* Year ended 31st March.

MARKET REPORT.

[*Per Mail advices of 16th August* 1901.]

COFFEE.

The London Commercial Record says:—Auction sales were resumed on Tuesday, and a moderate quantity has been brought forward. A steady trade demand has been experienced and prices for the most part shew an advance of 1s to 2s per cwt., and for fancy colory qualities of Central American extreme rates have been paid. There have been some fluctuations in the market for "futures," but the closing prices show little variation from those current at the date of our last report. We quote:—

London ...	... Santos ...	Sept. delivery	... 27s 9d.
New York	... No. 7 Rio...	,,	... 4·85 cents.
Hamburg...	... Santos ...	,,	... 27¾ pf.
Havre ...	... Santos ...	,,	... 34 francs.

The public sales went off at steady prices for all descriptions. A good supply was offered and mostly sold.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	19,935	17,702	36,577	27,953
	Home Consumption.		**Export.**	
	1901.	1900.	1901.	1900.
Tons ...	13,048	10,767	18,138	16,228

The preceding figures exhibit— Tons.

In the Imports an increase this year of	8,624
Home Consumption an increase of	2,281
Export an increase of	1,910
Stock an increase of	2,233

CEYLON.—*Plantation.*—70 casks 3 tierces 11 barrels and 30 bags partly sold, bold common to extra bold brownish 92s to 111s, low middling brownish 46s, middling 54s, peaberry 48s.

EAST INDIA.—869 bags were offered and mostly sold: *Mysore*, small common grayish 33s, middling dull greenish and grayish 48s to 52s 6d, common bold to good ditto 53s to 64s, peaberry 57s; *Coorg*, small common faded greenish 34s, low middling to middling dull ditto 40s to 45s, bold ditto 50s, peaberry 49s 6d; *Neilgherry*, small common dull greenish 34s to 34s 6d, small fair grayish 36s 6d to 37s, low middling 39s to 40s, middling 43s to 44s 6d, peaberry 45s 6d to 49s 6d; *Nelliampathy*, fair bold dull grayish 53s; *Wynaad*, good colory peaberry 55s.

NYASSALAND.—39 bags offered and mostly sold, pickings 22s to 37s 6d.

JAMAICA.—Of 160 barrels and 13 bags about half sold, low middling to middling bright greenish 40s 6d to 48s 6s, peaberry 42s.

COSTA RICA.—504 bags offered and sold, small common brownish to good greenish 36s 6d to 44s, ordinary rough grayish 35s to 36s 6d, fine ordinary brownish to low middling dull colory 42s to 44s 6d, middling to good middling dull greenish colory 52s to 63s, good bold ditto 73s 6d, peaberry 53 to 55s.

GUATEMALA.—Of 3,400 bags, and about two-thirds sold, small common brownish mixed to fair dull colory 32s to 36s 6d, middling dull greenish to colory 44s to 45s 6d, bold fair colory 52s 6d to 56s 6d, peaberry 50s 6d to 56s 6d.

VERA PAZ.—780 bags offered, and 770 bags sold, middling bright gray 47s, good middling to fine middling hard gray and blue 60s to 72s 6d, bold good to fine ditto 76s 6d to 96s, peaberry 51s to 91s.

NICARAGUA.—1,266 bags offered and mostly sold, ordinary to good ordinary dull foxy pale and greenish 33s to 33s 6d, low middling to middling dull pale and greenish 41s 6d to 48s, good middling dull greenish 52s to 53s, fine middling blue 67s to 69s 6d, bold good to fine ditto 72s 6d to 85s 6d, very fine 102s to 102s 6d, peaberry foxy to very fine blue 37s to 92s 6d.

SALVADOR.—850 bags offered and 678 bags were disposed of, small fair dull colory 36s 6d to 37s, good ordinary to fine ordinary bright foxy pale 35s to 38s, middling dull colory 44s to 46s, bold fair to good ditto 50s to 55s 6d, peaberry 47s to 50s.

MEXICAN.—1,230 bags offered and about a third found buyers, small common faded greenish to good colory 32s 6d to 40s 6d, fine ordinary to low middling faded greenish 38s to 43s, middling colory 47s to 48s, good bold ditto 60s, peaberry 43s to 55s.

COLOMBIAN.—3,267 bags offered 2,631 bags partly damaged sold, small fair greenish 30s to 32s, fine ordinary dull greenish 38s 6d to 39s 6d, low middling dull brownish to middling bright pale greenish 41s to 46s, bold common brownish green to good greenish 45s 6d to 53s 6d, peaberry 37s to 45s.

HONDURAS.—18 bags sold, middling dull green 46s.

GUAYAQUIL.—104 bags were bought in.

VENEZUELA.—110 bags taken out.

ECUADOR.—67 bags sold, bold bright pale 29s 6d.

HAWAII.—193 bags sold, fine ordinary dull mottled greenish 38s to 38s 6d.

DUMONT SANTOS.—Of 1,678 bags washed 1,439 sold, small pale greenish 27s 6d to 28s, medium ditto to brownish green 31s to 32s, bold to extra bold ditto 36s to 39s 6d, peaberry 32s to 40s.

RIO.—50 bags, quay terms, were bought in.

SANTOS.—50 bags washed, quay terms, sold, good pale greenish 36s.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99. Bags.
Rio ...	839,000	338,000	568,000	442,000
Santos ...	1,409,000	1,094,000	1,255,000	881,000
Total...	2,248,000	1,432,000	1,823,000	1,323,000
Crop...	—	10,900,000	8,971,000	8,772,000

Rio Exchange 10¼d, previous day 10$\frac{5}{16}$d.

HAVRE, *August* 15.—Good average Santos August opened steady at 33¾f. and closed, September opened at 34f. and closed, December opened at 34¾f. and closed, March opened at 35½f. and closed May opened at 36pf., and closed.

The market closed after the first Call.

HAMBURG, *August* 15.—Good average Santos August opened quiet at 27½pf. and closed steady at 27½pf., September opened at 27¾pf. and closed at 27¾pf., December opened at 28½pf. and closed at 28½pf., March opened at 29¼pf. and closed at 29¼pf., May opened at 29¾pf. and closed at 29¾pf.

NEW YORK, *August* 14.—Closing prices of No. 7 Rio were as follow:—

	Aug.	Sept.	Oct.	Nov.	Dec.
August 14...	4·85	4·85	4·90	5·00	5·10
August 13...	4·85	4·85	4·90	4·95	5·10

East India offered in Public Sale this week.

August.	Mark.	District.	Size A.		Size B.		P. B.	
14	Subbarayas	Coorg ...	35	43/6	28	40/	13	49/6
	Crofton	Neilgherry	14	not sold	22	40/	6	49/6
	Madanaad	,,	8	,,	20	39/	6	45/6
15	Curzon	,,	27	55/6	37	43/	9	52/6
	Arcood	,,	6	not sold	17	not sold	3	not sold
	Kulhutty	,,	7	,,	10	,,	2	,,
	W. 1M. I, 1H. ...	Coorg	8	55/6	17	44/6	3	,,

TEA.

INDIAN—Shipments are coming to hand more freely, the total offered at auction aggregating 25,100 packages, against 13,700 packages in the week preceding the holidays, and 30,400 packages a year ago.

The market re-opened with a fair demand, chiefly concentrated on good liquoring leafy parcels suitable for outside quarters, which brought quite up to prior rates. For the less desirable lots, however, considerable irregularity prevailed, and valuations were not always obtainable. Quality of many of the early made Dooars was of a useful description, and they were taken up readily, while high prices were paid for the best Assams and Darjeelings, notable:—Assam; Suddia Road Co., BOP 2s 8¼d; Hansura and Samdang, BP 2s 6½d, BOPs 2s 2½d; Beesakobi, BOP 2s 2½d, BP 2s 1¼d; Makum Co., OP 2s 1½d, BOP 2s; Hapjan, BOP 2s per lb. Darjeeling: Rungmook, OP 2s 2⅓d, BP 1s 10d; Dooteriah, BOP 2s 0¾d, OP 1s 11d; Ging, OP 1s 9⅓d per lb.

For 22,000 packages on Estate account 8¾d per lb. was obtained, opposed to 8⅞d per lb. for 25,700 packages, and 7¾d per lb. for 40,300 packages in the two preceding seasons respectively.

CEYLON.—Catalogues comprised 29,900 packages—18,800 packages for Tuesday and 11,100 packages for Thursday—contrasted with 28,200 packages on the 30th ultimo and 1st instant, and 44,700 packages twelve months since

There was a better tone and more general bidding. Common to medium Pekoe Souchongs and Pekoes being wanted, both by dealers and shippers, often showed a rise of ¼d per lb., in some cases ½d per lb. Broken Pekoes also received more attention and were steadier, while the attractive lines tended upwards. Full liquoring Broken Orange Pekoes at time registered a distinct advance on previous sales of the same mark, partly due to superior flavour.

The average is 6⅝d per lb. On the 1st instant it was 6½d per lb. and 7⅛d per lb. for the corresponding time in 1900.

JAVA.—About 1,200 packages of direct import passed the hammer with good spirit, quotations being well upheld.

Deliveries.—The clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 13th August, 1901	5,665,388	lbs.
Do. do. 1900	5,847,955	,,

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	20,616	4,515	25,131
Ceylon	26,764	3,118	29,882
Java	1,134	50	1,184
Total ...	48,514	7,683	56,197

Also 900 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated August 16th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1901-1902	120,996	276,591	12,642
1900-1901	91,568	279,799	10,145

26,702 *pkgs.* INDIAN
30,614 ,, CEYLON
1,184 ,, JAVA
} Total 58,500 packages were offered in public auction this week.

It will be seen from the figures given at foot that the imports of Tea for the first two months of the season year, *viz*: June and July, are nearly five million lbs. less than those of last year, and as much as 14 millions less than those for the same two months in 1899. These figures only confirm the news which has already been received from the producing countries.

INDIAN.—Auctions were resumed on the 12th instant after an interval of a fortnight. Bidding was a trifle irregular, and at times lacked animation, with the result that some parcels had to be withdrawn. Good usual Teas from 6d. to 10d were the kinds which met with strongest competition.

Thursday auctions will be resumed next week.

Week's average of New Season's Tea sold on Garden Account, 1901, 20,816 pkgs., av. 8·90d. 1900, 26,138 pkgs., av 8·74d.

New Season's Tea sold on Garden Account, 1st June to date, 1901, 32,171 pkgs., av. 7·66d. 1900, 54,018 pkgs., av. 7·99d.

CEYLON.—Tuesday's public auction, comprised some 19,000 packages for which competition was more general than of late, and prices showed firmness for all descriptions; this firmness was again noticeable in Thursday's auctions.

Average for week 6·63d., against 7·03d. same week, 1900.

Ceylon Tea sold on Garden Account, 1st Jan. to date, 756,601 pkgs., av. 6·56d. 1900, 792,295 pkgs., av. 7·24d.

JAVA.—These kinds met with fair demand and fully maintained previous values. Many of the Teas possessed strong useful liquors for which buyers showed their appreciation.

Bank Rate 3 per cent. Exchange on London three months' sight:—Calcutta 1/4 3/32. Colombo 1/4⅛.

COCOA.

Auctions were resumed on Tuesday after the August vacation, the catalogues embracing 3,428 bags Colonial and 1,551 bags Foreign growth. Notwithstanding the material reduction in the London stock by fire, the value of all grades continue to fall away, prices on the 13th instant being generally 1s lower. Of 2,457 bags Trinidad offered 780 bags found buyers at 69s to 71s for good to fine and 67s to 68s for fair, being about 1s easier. Of 379 bags Grenada 250 bags sold at 1s decline—at 61s to 64s 6d for fair to fine. 70 bags Demerara about half sold at 65s to 68s for good to fine, being about 1s below valuations. 6 bags Dominica realised 59s and 14 bags good St. Lucia 61s. 97 bags Jamaica partly sold at 58s to 61s for ordinary to good. Of 682 bags Guayaquil about 50 bags sold at 56s to 57s for Esmeralda. 5 bags Maracaibo brought 50s 6d. Of 173 bags Colombia 60 bags damaged sold, the remainder being bought in, as were 53 bags Surinam, 4 bags St. Vincent, 220 bags Samana, 200 bags Puerto Cabello, 188 bags Haiti and 30 bags African. Ceylon is very difficult to move, only 30 bags chips selling at 57s 6d per cwt.

PEPPER.

BLACK.—The market is very quite and business has been of small importance. Fair Singapore is quoted at 6d on the spot and at 6 1/16d for September-November shipments.

At auction on the 14th instant 227 bags Singapore were offered, and 117 bags fair sold at 6d per lb. 1 bag good clean Ceylon sold at 5¾d.

WHITE.—There has been no improvement in the demand, which remains very slow. Fair Singapere on the spot is quoted at 9d, and fair Penang at 8⅝d.

At public sale on Wednesday 120 bags Singapore bought in at 7d to 10d. 5 bags Ceylon sold at 9d for good white, and 8¼d to 8½d per lb. for mixed with brown.

Pepper steady; not much business done. 50 tons Singapore September-November sold at 6d and buyers.

The shipments of Black Pepper for the first half of July compare as follows:—

		1901.		1900.	
U. K.—Singapore	130	170	400	420	
,, Penang	40		20		
Continent		140		370	

The shipments of White Pepper for the first half of July compare as follows:—

		1901.		1900.	
U. K.—Singapore	80	150	100	270	
,, Penang	70		170		
Continent		100		10	
Total tons ...		250		280	

GINGER.

COCHIN.—The tendency is towards lower prices for rough Ginger but cut kinds are very firm, being in small supply. 50 cases 296 bags offered, and 6 cases sold under the hammer—good bold, some medium, cut and scraped at 87s 6d. Privately fair washed rough sold at 37s to 38s, and Calicut sorts at 38s 6d per cwt.

JAMAICA.—continues in good request, and practically the whole of the 920 barrels offered sold at 1s to 2s rise—low middling to middling washed 42s to 44s 6d, ordinary to good ordinary 36s to 40s 6d per cwt.

QUININE.

The improvement noted last week in the second-hand market has continued, the spot price, since our last report, having advanced quite ½d per oz.—from 1s 2½d to 1s 3d There has been a fair demand throughout the week, the business being chiefly for December delivery, which has risen from 1s 2⅞d to 1s 3½d per oz. the outside figure being paid on Wednesday. To-day, on receipt of the bark shipments from Java for the first half of the month (620,000 Amst. lbs.), the market has declined ¼d, there being rather sellers than buyers at the moment.

CARDAMOMS.

The supply at to-day's auctions was unusually small, the bulk consisting of Ceylon-Malabars, which were not in demand. For medium to bold pale Ceylon-Mysore 2s 8d was paid; small to medium palish sold at 2s, small splits at 1s 0d, and brown splits and pickings 1s 5d per lb. There has been a good inquiry for cardamom seed, of which supplies have been very scarce, nothing being offered to-day; in second-hands up to 2s 4d is wanted.

CINCHONA BARK.

Offered, 23 packages. Sold, 0. *Calisaya* bark was offered and found no bidders.

MOVEMENTS OF TEA IN LONDON FROM 1ST JUNE TO END OF JULY.

	Imports.			Deliveries.			Stock.		
	1901.	1900.	1899.	1901.	1900.	1899.	1901.	1900.	1899.
Indian	5,873,605	7,043,559	12,257,769	15,786,855	14,531,687	18,742,353	28,976,325	19,555,467	25,016,957
Ceylon	19,305,240	22,048,198	19,729,454	16 037,697	16,832,022	15,927,396	29,011,100	30,399,671	23,592,310
Java	846,790	708,330	582,960	822,570	1,067,220	747,740	1,245,580	647,710	550,340
China, etc.	3,355,623	4,403,607	10,739,479	2,627,568	3,941.042	4,673,128	11,845,870	12,879,646	16,131,240
Total lbs.	29,381,258	34,203,694	43,309,662	35,274,690	36,371,971	40,090,617	71,078,875	63,482,494	65,290,847

(AVERAGE FOR ALL INDIA 8·69d., AUGUST 16TH.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price.
Travancore ...	**1504**	**5·98**												
Arnakal ...	144 p	6½	22 p	7	48	5¾	59 p	7½	8	4¾	...	...	7½c	3¾
Carady Goody ...	73 p	5¾	20	6¾	18	5½	19	5¾	14	5	...	...	2½c	5
Cherian Mallay ...	41 p	4¾	...	...	18	5	10	5½	10	4	...	...	3½c	2¾ 3½
Ellangy ...	160	5	...	...	74	5 5¼	40	5¾	46	4½	...	...	...	...
Kan Dev H Co M ...	172 p	8¼	31	8¾	54	8	41½c	9¾	31	7	...		15½c	7½
„ Perai Vurrai ...	261 p	5¾	...	..	37	7¾	31 p	9	91	5	81	5¼	21 p	6
Merchiston ..	97	5¼	14	5½	59	4½ 5¼	19	5½	..	...	5	4	...	...
Penshurst ...	30	5¾	...	..	30	5¾	...	...	.	...	...	...	...	...
Poonmudi T Co B...	70 p	6¼	...	...	21	6½	20	7¼	14	5	2	4½	13 p	3¼ 5½
„ Braemore...	62 p	6¼	14	7½	28	4¼ 6½	6	6¾	12	5	...	...	2½c	3½
„ Poonmudi...	81 p	6	9	8	33	5½ 6½	14½c	6	18	5½	3	4¼	4½c	3½
Stagbrook ...	189 p	5¼	74 p	7¼ 8¼	47	4¾	13	5	41	4½	4	3¾	10½c	3
S T T Co Venture...	124 p	6¼	...	...	55	6½	30	7½	25	5¼	...	...	14½c	4
Wynaad ...	**201**	**5·34**												
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PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 20th instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad.

September 10th.—*Weather*—A long continued break, bright sun and little wind, ground getting very hard. *Works*—Few works are pressing now, weeding and digging are the principal. *Crop*—Prospects poor. *Coffee*—Healthy. *Health*—Good. *Labour*—Abundant.

Coorg.

POLLI BETTA, *11th September.*—*Weather*—A very local shower out East last Saturday, measuring upwards of an inch-and-a-half. Out West nothing. On Monday night there was some general rain, otherwise the weather has been uniformly bright. Coffee, on the whole, looking very fine, but individual trees are to be noticed with leaf disease bad upon them. All seasonable works well advanced. *Labour*—Plentiful. *General Health*—Fair.

SOME NOTES ABOUT COFFEE.

THERE has been a good deal of despondency about the future of Coffee, and the future of Indian Coffee especially has been the subject of the most gloomy forebodings. We do not wish to be over-sanguine, but we would remind our readers that Coffee is not the only product that has had to face a crisis, indeed to meet crisis after crisis. Other products have won through. Why should not Coffee? The general view appears to be that nothing but a recovery of prices can save Indian Coffee. In the fact that this view is so widely taken we see the chief danger that threatens the industry. Years ago sugar-planters had a very rough time. It was statistically and mathematically demonstrated that sugar which they could not sell at more than £10 or £12 cost them £16 at least. They, too, had an idea that prices must rise, but competition became keener and keener, and eventually it was shown that under favourable circumstances

sugar could be produced at a cost of about £6, odd, per ton. Probably it will yet be produced at a still lower rate. The moral to be drawn from this by Coffee-planters is clear. The aim should be to produce a good article at a low price. It is idle for Coffee-planters in India to think that any action or efforts of theirs will bring about an important change in selling prices ; but the cost of production is largely under their control, and the quality of crops is not entirely beyond it. We have urged this previously, and we are glad now to be able to quote some remarks by an expert in the West Indies which are identical in sense with what we have repeatedly urged upon our readers : aim high (as to quality), aim at placing produce on the markets of the world at the very lowest price.

Addressing teachers undergoing a course of agricultural training at Hope, Jamaica, last year Mr. CHARLES DE MERCADO said that though the commercial world was constantly disturbed by over-production, very seldom indeed did it witness over-production of the best qualities of goods. If a man had a specialty that was really good, he could readily find a good market for it. He specially instanced Coffee : "when the price of the product dropped it affected the inferior qualities very seriously indeed, but the price of Blue Mountain Coffee had practically not been affected at all." Again, Mr. DE MERCADO remarked that in the case of Coffee, the peasant proprietor was in the same position as the largest proprietor ; nay, he was even in a better position, for on account of the smaller extent of his operations he could give much closer personal supervision to the details. One of the essential features of good Coffee was to secure a large bean. That was to be arrived at by attention to proper pruning and manuring. It might be urged that the rich man could buy manures and the poor man could not, but his hearers were being taught by their instructors that proper manures lay ready to the hand of the small settler, and were to be had for a little time and trouble. Here some interesting remarks were made about systems of curing. Mr. DE MERCADO observed that the system of curing Coffee followed for the most part in the lowlands of Jamaica—which produced what was known as "double-husk" Coffee—was quite wrong, and ought to be improved without delay if Jamaica was to successfully compete with her rivals. A very important point was only to pick each day such berries as were quite fit. The plantation should be gone through constantly, for this purpose ; people should not through pure laziness, want to pick a lot of berries at once, whether fit or not. After a start had been made to dry the Coffee, it should never be allowed to get wet again under any circumstances. The "double-husk" method was to dry the Coffee in the berry. That was a bad system, because it produced Coffee which was poor in quality, discoloured, and deficient in aroma. It was much better to pulp the berries, but of course many settlers had no pulper and could not afford to buy one, and therefore had to dry the Coffee in the husk. Coffee was a product which very quickly took up any external odour, dirt or impurity. If it was to be cured in the double-husk, it should never be allowed to lie on the ground, as was very often the case. Frequently care was not even taken to sweep the place clean, and the Coffee consequently soaked up all the manifold impurities of the soil, and was ruined. They must remember that the buyer abroad not only inspected the Coffee he bought and judged of its aroma but actually ground, roasted, and tasted it.

Some of our readers may be inclined to think that all this has nothing to do with them. They are not peasant proprietors, they are not small holders who can conduct a species of garden cultivation of Coffee, and they know how to prepare their coffee for the curing works. Nevertheless it has a great deal to do with them. The point is that "mild" Coffee can be produced in Jamaica and various other places as well as in India ; and that unless Indian planters steadily try to improve they must eventually go to the wall. Here is Jamaica, a small island, with more than one expert advising agriculturists and ready to be consulted by them. Madras can boast nothing to compare with this. The greater reason why every hint that comes from other countries should be seized upon, reflected upon, and adapted as far as possible to local requirements. So important do we consider this matter indeed, that we shall say more upon it at an early date.

TEA AT KIUKIANG.

Mr. Acting Consul Clennell says in the course of notes on the Kiukiang tea trade during 1900 that in black teas, Keemuns were a better crop than in 1899. Of 67,000 half-chests, 50,000 were brought by Russians. Prices for the best were 50 taels, the lowest figure being 15 taels. They mostly did well in Europe. Ningchows, the other principal variety grown in the district, were inferior to the previous year. In the Wuning district nearly the whole crop was lost by drought. An authority says :—"The best parcels realised 57 taels, the next grade 35 to 41 taels, nearly all for Russia. British buyers got some wonderful value at about 18 taels, but, on the whole, they lost money in Europe." Nevertheless, the decline on all kinds of black tea was only from 156,158 cwts., valued at 482,349 l., to 146,688 cwts. at 414,974 l. It is stated that for the first time on record that no teas were settled in Kiukiang in 1900, the natives being now aware that Hankow is their best market, but that as the season advanced a few teas were settled, though natives would scarcely ever sell in any quantity unless they got better prices than in Hankow.

The green tea harvest was considered good, though here again the volume and value of trade show a decline. Prices, inland, for the first crop ruled at 20 to 30 per cent. less than in 1899, but, as the selling price in Shanghai remained about the same, a fair profit was made. Hohows were of good average quality and were freely taken at 15 taels for the best. Kutoans were poor in make and liquor, but easily found buyers at 16 to 18½ taels. In brick tea the export shows an advance from 51,610 to 60,794 cwts., but this is partly accounted for by the fact that whereas the figures for 1900 include a portion of the 1899 crop, none of the 1900 crop was left over to be dealt with in 1901. The same remark applies to tablet tea, of which the output has, however, slightly fallen off. These articles are prepared from tea-dust for the Russian market at the factories of Messrs. Tokmakoff, Molotkoff & Co. and Molchanoff, Petchatnoff & Co. Both worked busily, night and day, during several months of the Summer and Autumn, making an effort to dispose of their entire stock some two months earlier than usual in view of the chance of untoward events occurring on the Yangtze. Consequently they closed their active season before the end of the year. As it was impossible to obtain transport to Tientsin, the cargo was diverted to Russian ports direct. Expensive hydraulic engines for making tablet tea are now in use in the factories, and the old wooden presses for making the bricks are being, or have been, replaced by steel moulds of an improved

pattern. At the beginning of the season the price of the dust used for brick tea ruled at about 11 to 12 taels per picul, against 7 to 8 taels in 1899. The Chinese dealers combined to demand 13 taels, but the outbreak of the northern troubles compelled them to accept a reduction, and before the season closed they were selling at about 6 taels. For tablet tea a better quality of dust, at considerably higher price, is required. For the manufacture of brick tea the dust is moistened by steam. It is then subjected to a pressure, applied by steam power, of 12 tons to the whole surface of each brick. The pressure is only applied for a second or two, but the mould is immediately locked with wedges and kept so for about two hours. The bricks are about $8\frac{1}{2}$ by 6 by 1 inch in size, and vary in weight from 1 to $2\frac{1}{2}$ lbs. for different grades. The tablets are made by means of a hydraulic press. The dust is used dry and a very high pressure is required, as it is only applied for a fraction of a second. When made they somewhat resemble cakes of chocolate, weighing about 4 ozs. each. They are then tastefully wrapped in paper covers and packed in baskets suitable for camel transport.

The following table, in piculs and taels, shows the immediate destination of the tea exported during the year :—

Kind of Tea.	To Hankow. Quantity Piculs.	To Hankow. Value Hk. Taels.	To Shanghai. Quantity Piculs.	To Shanghai. Value Hk. Taels.
Black	108,355	2,379,904	14,856	293,626
Green		...	35,997	1,099,160
Brick	...	...	51,067	507,859
Tablet	...	...	1,008	16,030
Sundry	1,299	6,493	3,576	18,948
Total ...	109,654	2,386,397	106,503	1,935,623

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

Bounty on Green Teas.

The Indian Tea Association (Calcutta) has issued the following circular, dated 9th September, 1901 :—

At the meeting of the General Committee held on the 30th July last, a Sub-Committee was appointed to consider and to report upon the feasibility of inducing growers to manufacture green teas of like qualities, and of making arrangements for bulking them in Calcutta.

2. I am now directed to subjoin for your information a copy of a Memo., dated 26th August, containing the outlines of a scheme which the Sub-Committee have suggested. For the reasons stated in the concluding paragraph of the Memo., the scheme cannot be put into practice until next season. And before definitely accepting it, the General Committee desire to ascertain the views regarding it of those members of the Association who are interested in the manufacture of green teas. The scheme is based upon the assumption that the money required will be forthcoming, but this will depend upon the measure of support given to the new levy for the Foreign Market Fund. I am however instructed to suggest that members should now submit samples of the green teas which they will be able to manufacture next season ; and should also state the quantity which they will be prepared to offer, and the time when it will be delivered in Calcutta. As will be understood from clause 7 of the Memo., it is proposed that the bounty should be paid at the present rate, *i.e.*, $1\frac{1}{2}$ annas per lb.

3. The whole question is one of great importance, and the General Committee are most anxious that any scheme which may be ultimately adopted should first be thoroughly approved of by the industry. They trust therefore that if you have any criticisms to offer upon the Memo. you will kindly submit them without delay.

MEMORANDUM.

Green Teas.

At a meeting of the General Committee held on the 30th July, 1901, it was decided to appoint a Sub-Committee in connection with the production and distribution of green teas.

The instructions to the Sub-Committee were stated in the following terms:—

"The Sub-Committee were to be asked to consider and to report upon the feasibility of inducing growers to manufacture green teas of similar quality; and of making arrangements whereby such teas might be bulked in Calcutta; the object being to ensure greater uniformity, and to enable orders to be duplicated without difficulty."

The following gentlemen consented to serve on the Sub-Committee, *viz.*:—

Messrs. A. Tocher (*Vice-Chairman of the Association*), L. C. Baines, Norman McLeod, and H. B. Yuille.

A meeting of the Sub-Committee was held on the 20th August, when all the members were present. The various points in question were discussed; and the following conclusions were arrived at:—

(1) That the unfermented type of teas now being manufactured by Indian growers would, it was believed, find a market in America if a regular supply were available.

(2) That in order to obtain a regular supply, the Association should make arrangements with a limited number of producers for certain quantities of such teas to be sent to Calcutta at regular intervals throughout the season.

(3) That the tea should be packed in half chests of uniform description and dimension, say, 16" × 16" × 16" outside measurement.

(4) That on the arrival of the teas in Calcutta a relative value should be placed upon them by experts to be appointed and remunerated by the Association.

(5) That thereafter the teas should be bulked in Calcutta and shipped to the United States or Canada on the joint account of producers. The agents in Calcutta and America to be appointed by the Association, who would fix their remuneration, which would be deducted from the proceeds of the teas.

(6) That the net proceeds of the sale of the teas in America should be divided among the producers in relative proportion to the values determined in Calcutta.

(7) That the present bounty of $1\frac{1}{2}$ annas per lb. be continued as an inducement to producers to take up the business.

(8) That the total quantity to be manufactured should be fixed at, say, 200,000 lbs. as at present.

The Sub-Committee presumed that the arrangements detailed in the Association's Circular No. 37, dated 6th May, 1901, would continue in force for the current season. Their proposals, if adopted, would not therefore be put into practice until the season of 1902. But they were of opinion that it would be advisable at once to invite producers to submit preliminary samples, and to indicate the quantity of tea which they would be prepared to manufacture.

Calcutta, 25*th August*, 1901.

INDIAN TEA FOR INDIANS.

In connection with the scheme for developing a taste for tea among people in India, various Indian journals have viewed the matter as if an attempt were to be made to train the Indian peoples to extravagance, and others have even represented tea as quite as dangerous a drink as alcoholic liquors. Now, the abstemiousness of the native of India is, speaking generally, beyond a doubt. The first impression it causes as one of appreciativeness ; but the fact remains that, as Mr. Meredith Townsend has observed, it produces little result of a beneficial kind. Character does not seem to be strengthened by it. Mr. Townsend notes as a curious fact that

"the Indians, who do not drink, who avoid meat, and who save cash with persistent care, have not made India, which is in the main a fertile continent, very rich, nor raised the average of wages very high, nor developed the wants which generate what we call comfort. To all appearance, the grand results of their splendid abstemiousness are that the minimum rate of wages is the lowest, prices being considered, in the world, and that the continent contains perhaps a hundred millions more people than is quite good for it." He then proceeds to the very subject that is interesting Indian tea-planters at the present time and observes:—"There are signs, for instance, we are told, as yet faint, that native abstemiousness and thrift may yield to one strong temptation now pressing very closely upon them. They all like tea, and may by degrees, like English sempstresses, like it enough to crave it, though its consumption—now confined to medicine—would greatly disturb the economy of their households. If that ever happened, Indian Chancellors of the Exchequer would jump for joy, and we feel by no means sure that the wealth of the people would not be greater. Tea is as much pure waste, except in the pleasure it gives, as alcohol, perhaps it is even more so; but then, the desire for tea produces the energy necessary to obtain it, and so far as appears, the countervailing consequence of abstemiousness is deficient energy." These are words that some of our Indian contemporaries would do well to ponder over.

NOTES.

Colombia Coffee. In Colombia cleaned coffee pays an export tax of 40 cents. per hundred pounds; hulled, 30 cents.

Coffee in Fiji. Fiji coffee planters have given up all hopes of making coffee pay at present prices and have abandoned their plantations.

Norway. During the year 1900, Norway imported about 10,415 tons of coffee, as against 9,330 tons in 1899; and about 121 tons of tea, as against 117.

Coffee in Barcelona. The year 1899 was considered rather exceptionally good as regards the importation of coffee into Barcelona and district, but last year the quantity has diminished by one-half to the loss of the Porto Rico market.

India-rubber in Colombia. In 1899 the value of india-rubber exported was £34,665 whilst in 1900 it dropped to £14,063, this being due to the enforced detention of the rubber in the interior, through lack of facilities to bring it to the Coast. The quantity shipped fell off by about one-half.

Amsterdam Bark Market. A supplementary catalogue issued for the Amsterdam auctions of August 29th increases the offerings by 930 packages, comprising 78,953 lbs. of cinchona bark. The shipments from Java for the first half of August were 590,000 Amsterdam lbs., against 450,000 Amsterdam lbs. last year.

Brazilian Exchange. The monthly averages of Brazilian Exchange during the first half of the current year are as follows:—

January	$9\frac{7}{8}$	February	$10\frac{3}{64}$	March	$11\frac{3}{4}$
April ...	$12\frac{9}{32}$	May	$12\frac{21}{64}$	June	$11\frac{3}{8}$

Ceylon Tea. The total Exports of Ceylon Te are as follows:—

	lbs.
From 1st January to 19th August, 1901 ...	94,210,169
Do. do. do. 1900 ...	97,571,557
Do. do. do. 1899 ...	80,178,132

Otto of Roses. A circular published by the Asso ciation of Oil-of-rose Producers i Bulgaria states that Herr Hermann Bredemeier, of Bremen has been appointed representative of the Association i Germany, in order that otto of rose may reach German whole sale buyers direct from the producers without the interventio of the middleman. The price is, however, not yet fixed.

No Middlemen. The *American Grocer* writes:—Wit the beginning of the new crop yea (July 1), Arbuckle Brothers and Hard & Rand began t import coffee in vessels chartered by themselves. Prior t that date, these firms brought coffee here under contract wit the Brazil Steamship Company. The first steamer, th *Gottardo*, brings 44,000 bags to Arbuckle Brothers.

Tea and Coffee in Sweden. During 1899 and 1900 imports a Gothenburg were as follows:—

	1899.	1900.
Coffee, tons.	7,619	7,520
Tea, cwts.	1,460	1,541

In bulk, therefore, tea is to coffee in Sweden as abou 1 : 100, and as most of the coffee is imported from Hambur we fear there is but very little of the Indian berry consume in Sweden.

Brazilian Exports. The following figures show Export of Coffee etc., from all ports of th Brazilian Union during the first six months of 1901.

	1st Quarter.	2nd Quarter.	First half 190
Coffee paper ...	91.691:289	76.331:287	168.022:576
Cocoa	3.521:834	1.994:404	5.516:238
Maté	3 488:362	4.304:520	7.792:882
Rubber (seringa) ...	70.480:145	31.085:448	101.565:593
Do. (mangabeira and manicoba)	852:237	203:212	1.055:449

Pepper in Hamburg. Of pepper 69,100 bags were im ported into Hamburg in 1900, as against 65,000 bags in 1899, and 49,900 bags in 1898 Trade was animated during the first six months of last year but a period of calm then followed up to the end of December buyers being kept back by the high quotations for Singapore pepper. We read that "the importations of Tellicherry peppers were larger than in previous years; those of Aleppey sorts were about equal in quantity."

Calcutta Tea Sales. At the Calcutta Tea Auction on the 6th only 16,600 packages were offered, against 21,000 at the corresponding sale of last year. Common teas were a point easier, but otherwise there was little change from last week's rates. Quality was made scarcely as good, but is above that of last year, and teas now appear to show very good value, especially Broken Pekoe kinds. There was good bidding for suitable teas for outside markets, and a fair quantity was thus diverted from London.

Indian Tea Prospects. The following telegram with re ference to the tea crop in the various districts has been despatched by the General Committee of

the Indian Tea Association here to the Committee of the Association in London :—*Assam*—Outturn last month good. *Cachar*—Outturn last month about normal ; deficiency remains. *Sylhet*—Outturn last month about normal ; deficiency remains. *Dooars*—Outturn last month about normal. *Terai*—Outturn last month very poor. *Darjeeling*—Season will probably close early ; deficiency remains.

The Private Tea Sale-Room.

Special cables to the *Times* of *Ceylon* state that in the private sale-room last week, 7,000 packages Indian tea were offered ; and 6,000 packages are catalogued for next week. Of Ceylon tea, 2,000 packages were offered, and 2,000 are in sale next week. All that is offered in the private sale-room now is practically confined to teas controlled by Messrs. Buchanan & Co. The private tea sale-room has been decorated with a placard in the shape of a tomb with the following inscription :—"In memory of the ticket sales, which died after a sickly existence, August 22nd. Damned for ever. Regretted by few."

The Planting Community in Ceylon.

The *Ceylon Observer* gives the following figures to show how many European planters there are in Ceylon :—

European Tea, Cacao, Cardamom, etc., planters in Ceylon	...	1,261
,, Out of billets (say)	... .	39
		1,300
,, On Cocoanut and Cinnamon plantations	...	25
		1,325
Connected with Ceylon, but out of the island just now	...	235
		1,560

Coffee in London.

Since the resumption of the auctions on Tuesday only a moderate amount has been brought forward, says the *Produce Markets' Review* of 17th ultimo, and as was anticipated the demand was strong and prices showed an advance of from 2s to 3s above those ruling before the holidays. The reports of a fresh revolutionary outbreak in Colombia, which were current a few weeks back, have since been confirmed, and in consequence supplies, which were beginning to come forward more freely, have been checked, and judging by the information from the most reliable sources no heavy quantity can be expected for some time. This has given strength to other Central American growths and merchants are not willing to sell at anything like the prices of last month. In the terminal market continued heavy receipts have put prices down about 6d, but this has led to more buying and the tone is firmer at the close.

Rubber in Bolivia.

Two items of interest are chronicled in *The India Rubber World*—the starting of a scientific expedition to study the rubber-yielding species in that country, and the reorganization of the largest company yet formed to exploit the natural rubber resources there. It will be observed that both the botanists now on the way, and the rubber-importing house interested in the company referred to, are American. It may be recalled here that the navigation of the river Beni, in the Bolivian rubber centre, dates from the explorations made by Dr. Heath, an American. American enterprise is largely interested in mining in Bolivia, the development of which will open the way for further undertakings in that country by American capital. Bolivia possesses rich rubber resources, and it would seem to be a natural field for development for capital from the United States, since this country ranks first in the consumption of rubber.

The London Tea Market.

Cabling to Colombo on the 5th instant Messrs. Gow, Wilson & Stanton report that the market generally is steady, that for medium liquoring Pekoes and Broken Pekoes showing a fractional advance ; while the market for Common pekoes and Broken Pekoes is also steady. The price of fair liquoring Ceylon Pekoe Souchong is $5\frac{1}{4}$d and the average price of Ceylon tea sold on garden account this week was $6\frac{7}{8}$d (both same as last week). The average of the corresponding week last year was 7d. Reuter reports that common qualities of Ceylon tea are steady and others firm, while fine qualities are active and a farthing higher. Fair Pekoe Souchongs are quoted at $4\frac{3}{4}$d (same as last week) but the average for the week is 7d. ($\frac{1}{8}$. up) 25,000 packages of Ceylon tea were offered for sale and 23,000 were disposed of ; while of the 30,000 packages of Indian tea offered, 26,000 found purchasers, at an average of $8\frac{1}{2}$d per lb. ($\frac{1}{8}$d up).

Big Theft of Tea at Adelaide.

The *Adelaide Register* of August 21st reports that some time between Saturday evening and Monday morning the new premises of Griffith Brothers, the well-known tea merchants in Rundle street, were entered by burglars, and a quantity of tea was removed. The premises were left securely fastened on Saturday evening, but when the employees arrived on Monday morning one of the windows at the rear of the building leading to the basement was found to have been broken, and on further investigation it was seen that several canisters containing about 1 cwt. of tea had been stolen from the first floor. It is suspected that more than one person was implicated in the burglary, and so much tea was taken that it is quite evident that the burglars removed their spoil by the aid of a horse and cart. After the experience of the firm in Sydney some time ago special precautions are taken, and no money is left on the premises.

Indian Tea in London.

The public sales were resumed on Monday, when 26,700 packages were brought forward, including a good assortment, mainly consisting of the new crop. The *Produce Markets' Review* says :—The quality of many of the Teas, particularly the Assams and some of the Darjeelings, shows an improvement on last season, and as the market has been but poorly supplied with the better grades for some time past, there was brisk competition. Prices were firm for the finer descriptions while for some of the finest parcels of exceptional quality high rates were paid. Although present values may continue until the trade have replenished their stocks, the future course of prices will probably be downward, as from all accounts the available supply of these kinds is likely to form a liberal proportion of the imports. The medium sorts, ranging from 7d to 9d, are less plentiful at the moment, and very firm prices have been paid as is frequently the case in the early part of the season, but as the arrivals will now be on a much larger scale there is a prospect of easier rates. For the common descriptions the tendency has been to a lower range of values, and a larger quantity of new Teas has been obtainable at 5d.

GENERAL ARTICLES.

VARIETIES OF COCOA.

Cocoa buyers state that a low price is frequently given because the beans are not all from the same variety of tree, that the good and inferior kinds are mixed, when naturally the inferior rules the price.

On many estates the pods are of all kinds, and it is impossible to say to what variety any particular tree belongs.

There are three chief varieties of cocoa grown in the West Indies, *viz.*, the Calabash, Criollo, and Forastero.

The Calabash pod of typical form is small and round with a smooth skin; the beans are flat, bitter, and of a dark purple colour inside

The Criollo pod is thin-skinned, and has a "bottle-neck" near the stalk; the beans are rounded, sweet, and white inside.

The Forastero has a thick skin, deeply furrowed; the beans are somewhat rounded, slightly bitter and pinkish within.

The Criollo cured cocoa gets the highest price. but the tree is the most delicate of all, and liable to disease. It can only be grown on the very best soils.

The Calabash cocoa takes twice the time and attention to ferment it as the Criollo, and fetches a very low price. The tree is, however, very hardy, and will thrive on poor soil where other kinds would not grow.

The Forastero is intermediate in character between the other two. The quality of the cured cocoa is good but not as fine as Criollo. The tree, however, is not subject to disease, and bears largs crops This is the variety recommended for planting in Jamaica, and is the one distributed from Hope Gardens.

It is of great importance to planters to have as nearly as possible only one kind on his estate. For instance, if an estate has some trees of the Calabash variety and some Forastero, the beans must be separately cured, or the fermentation will be too long for some and too short for others, resulting in a badly cured sample.

In planting out an estate for the first time, the choice should be made of one variety and nothing else should be grown. Many estates get a low price for the cocoa, simply because the trees are not even in character. The colour of pod does not matter.

As regards situation for growing cocoa, it should not be planted on dry ridges, but in moist sheltered valleys, and this is essential in districts where the rainfall is small and uncertain.

SISAL HEMP AND OTHER FIBRE PLANT CULTIVATION IN TRINIDAD.

BY MR. QUESNEL, 11TH JUNE, 1901.

I have seen, with a deep regret, some persons rejecting at first the idea of cultivating fibre plants in Trinidad as requiring too much capital and too costly machinery.

This is a great mistake. Yukatan is there as a proof of it, because the Indians of that country export now more than 100,000 tons, prepared with a very rough machine called "Raspador," a wheel of four feet diameter, working at 160 revolutions a minute. The cost of it cannot be, with horse gear, above $150. That machine is easy to move from one place to another. It wastes a certain amount of material, and is slow at work; but it is not the first time that the primitive appliance of the peasantry has succeeded better than costly machines and big capital, with their heavy interests and annuities. The Raspador gives net 333 lbs. in ten hours A machine for working three quarters of a ton would cost, with steam engine and the buildings to correspond. £1,200 at least, when five Raspadores, would not cost more than £150.

A steam engine would not be moveable and could not be economically established where the area under cultivation would be less than 1,000 acres.

I take my data from various reports from Dr. Morris, Imperial Commissioner of Agriculture, Barbados, and from Mr. Richard Dodge, of the Washington Fibre Investigation Committee on account of the Government of the United states.

From them I come to the conclusion that the fibre plant gives a hemp of a value of £30 a ton in London, which I reduce to £14 a ton after allowing for discount, commission and freight, and also for cultivation and packing. This is less than the amount given i the reports referred to.

I take for planting five rows in 36 feet, that is to say, four at si feet distance and the fifth at twelve. I put the plants six fe apart in the rows. This gives me more than 1,000 plants to an acr Each plant at four years gives forty leaves a year of a weight 50 lbs. of which four per cent. turns into fibre, dried and white, two lbs. of fibre to a plant, or 2,000 lbs. an acre. £14 a ton is mor than three cents a pound. I allow only 2½ cents a pound to mak $50 an acre. Thus an acre producing net $50 yields double th results of 200 cacao trees on an acre, at ten bags per 1,000 trees $12 net (when 65s. the London market quotation) or two bag $12 = $24. It is a great deal more than 20 tons of sugar canes to a acre at 9s. a ton, leaving probably not more than 1s. a ton to th cane farmer, or £1 an acre.

If an acre gives 2,000 lbs. a year. and a Raspador prepares som 330 lbs. a day—100,000 lbs. a year of 300 days—it will require 50 acre to produce sufficient fibre for one Raspador's work in one year; fiv Raspadores for 250 acres; 20 for 1,000 acres.

But what strikes me more is that I noticed that on all the suga plantations, all the cacao estates, everywhere on Crown land there is a large extent of useless land, when not first class. Wel the fibre plants grow nearly everywhere except on absolutel barren lands. And immediately every one can foresee what is th future of Trinidad when all lands, unless barren, will be cultivate with plants yielding double what cacao gives. 1,000 acres of lan for sugar canes giving 1,500 tons of sugar, will require (if I do no make a mistake) £37,000 worth of machinery, at least: and 1,00 acres of land for fibre plants will require only 20 Raspadore costing £600, and will give yearly at $50 or £10 per acre, £10,00 sterling to repay cost of land and of contracts.

But no industry can be established with safety if it is not starte with economy and perseverance or if any one is discouraged becaus purchasers do not come from abroad to buy the first pound befor it is ready. I believe that this, and five or six years' gambling i the London Exchange, have stopped the first attempt made i Tobago and in Bahamas some ten years ago. But the machine have been greatly improved during the last four years, the price after fluctuating during the time of speculation between £13 an £75 have become steady at £30, and the plants, ten years old nov are everywhere giving sprouts from their roots, and seeds fro their poles.

The Agricultural Society is being called upon to decide regard ing the introduction of hard-working immigrants from Teneriff Can we find a better basis for settlement by free companies these free people, in a free country? Profitable contracts could b offered to them on landing at the Quay at a rate of $25 an acr five after brushing, $5 after planting, $15 on delivery on fourt year. Each contractor would not receive more than 12 acres to b planted in three years—four acres a year. As there is very litt trouble in cultivating the fibre plant when it is a year and a ha old. every year each contractor could receive some four acres mor In five years he would have planted 20 acres and from the fourt to the ninth year he would receive $500, whereas, 12 acres in caca or. 2,400 trees, would give him only $480 in the same tim —*Journal of the Jamaica Agricultural Society.*

THE KANAN DEVAN HILLS PRODUCE CO., LIMITED.

Report of the Directors for the year ending 30th Novembe 1900, to be submitted to the fourth annual ordinary gener meeting of shareholders of the Kanan Devan Hills Produc Company, Limited:—

The Directors have now to submit their report for the yea ending 30th November, 1900. The crop gathered during the seaso from the tea estates amounted to 1,444,695 lbs, and realized a average of 7·27d. per lb. The coffee amounted to 1,400 cwts., an cinchona to 555,089 lbs. The amount at credit of profit and los account, after providing for commission on profits to tea estat Managers, Agents in Calcutta, and Secretaries, interest an discount on bills, etc.; and dividend on preference shares, £10,037 7s. 8d. Out of this the Directors propose to pay a dividend the rate of 3½ per cent. on the ordinary shares, payable on 30th Augus 1901. This will absorb £9,100, leaving a balance of £937 7s. 8d.

be carried forward to the following year. Considering the unprecedented crisis which has prevailed in the tea market during the past six months, the result is satisfactory. In Assam the properties are all in good order. In Travancore the progress in the important works in hand has not been so rapid as was anticipated. Communications have been much improved by the completion of the wire ropeway, which is now working satisfactorily. The cart road of 10 miles from Bodinayakanur to the foot of the hills, constructed by the Company's officers, has been inspected, approved, and taken over by Government, and it is believed that a Steam Tramway will be laid down on this road, and on to Ammayanayakanur, the station of the South India Railway where the Company's produce is despatched. The cart road from the top of the ropeway to the Company's head-quarters at Munaar is now being metalled, and it is hoped this work will be finished by the end of the year, when permanent cart traffic will be established Meantime, the one line tramway is working fairly well. Three new factories for the manufacture of the Company's tea were under construction during the year under review. These have been opened for manufacture during 1901, and are now fully equipped. Another factory is being erected, and three more are on order. Owing to want of accommodation and a defective water-course, full justice could not be done to the tea in 1900, but it is hoped, with the new factories mentioned above, a marked improvement in the quality will be effected during the year. Some of the 1901 invoices have been sold in the London market at a considerable improvement in price, and samples recently to hand show good valuations. An area of 2,763 acres new tea was added to the cultivation during the past year. The result of this planting was generally satisfactory, but the vacancies are being carefully supplied.

As the shareholders are aware, the Company's concession in Travancore is considered one of the finest fields for cinchona in the East, and the Directors, finding the product to be profitable, are doing all they can to judiciously develop it. The cinchona tree yields the bark from which quinine, so much valued in medicine, is obtained. It has been arranged that 2½ millions cinchona seedlings reared from specially selected seed, will be planted during 1901, and a similar quantity will be planted in 1902. These seedlings will be planted througout the existing tea cultivation; and, as the growing and puting out of the plants will be practically the only expense incurred, the outlay will be small. The up-keep will cost little extra; and it is anticipated that a valuable crop of bark will thus be secured cheaply. With a view of obtaining the fullest information in regard to cinchona, the Directors recently sent one of their managers on a visit to the cinchona plantations of Java, and his report is both useful and encouraging. The Directors feel that, with its large holding in cinchona, the prospects of this Company are more assured than if they rested on tea and coffee alone. The greatest care will be taken to make the cinchona planting a thorough success. The season in Assam, although a bad one generally, did not materially affect the Noakacharee Group of estates, the yield both in quantity and quality being fairly satisfactory, namely—898,128 lbs. against an estimate of 827,600 lbs., while the average price realized was 7·88d. per lb.

During the year under review, the following extensions, arranged for shortly after the formation of the Company, have been made:—19 acres tea in Assam, 2,744 acres tea and 60 acres cinchona in Travancore. The total area under cultivation at 30th November last was 16,086 acres, namely, 14,441 acres tea, 944 acres coffee, and 701 acres cinchona. The estimated crops for the current year are 2,217,225 lbs. of tea, 942 cwts. of coffee, and 248,500 lbs. of cinchona bark. As explained in the circular letter of 7th August, addressed to the shareholders, Mr. P. R. Buchanan the special adviser to and visitor for the Board proceeded to India by mail of 4th January last, and he, along with the managing agents in Calcutta and Colombo, and the Company's visiting superintendents, has been able to effect considerable economies in working without impairing the efficient up-keep of the estates, which should help the results of 1901 and subsequent years. In the circular of 7th August, above referred to, and in the circular of 9th ultimo, the Directors gave information regarding the position of the tea industry and the prospects of the Company.

In terms of the articles of Association one of the Directors, Sir Robert D. Moncreiffe, *Bart.*, retires at this time, and is eligible for re-election.

The auditors, Messrs. Alexander Sloan & Co., C.A., retire, and offer themselves for re-election.

CEYLON TEA ON THE CONTINENT OF EUROPE.

Mr. Renton has sent extracts from German Customs Returns of teas cleared for home consumption as at 30th June; also cutting from a French newspaper with translation of the opening paragraphs.

EXTRACTS FROM GERMAN CUSTOMS RETURNS.

Teas cleared for home consumption in month of June:—

	1900.	1901.
	Kilos.	Kilos.
From Great Britain...	18,500	36,300
,, Holland	6,600	3,400
,, British East India } ...	9,100	14,400
,, Ceylon } ...		28,100
,, China	52,300	53,800
,, Netherlands India	30,700	24,200

Totals for six months ending 30th June:—

	1900	1901.
	Kilos.	Kilos.
From Great Britain... ...	203,200	281,400
,, Holland ...	51,400	32,900
,, British East India } ..	139,900	179,100
,, Ceylon }		116,400
,, China	995,400	1,010,600
,, Netherlands India ...	201,700	194,800
,, Elsewhere	92,700	65,600
	1,689,300	1,880,800

Total increase for six months 191,500 kilos., of which British grown imported directs are 155,600 kilos., say 342,320 lbs.

(*Translation of an article in "Courrier d'Haiphong," July,* 1900.)

The general agricultural show has been held at the Grand Palais. With the exception of Algeria and Tunis the colonies have been conspicuous by their absence. For all that, it is a splendid opportunity to make an annual show of what our colonies can produce. In addition all facilities should be given for the despatches of our colonies, by agricultnral communications, planters, syndicates, etc., and in Paris by the ministeries of agriculture and colonies and by the colonial office. Why do the colonies wait before taking part in these shows? As they are French, they ardently await an order from the authorities. Such an order was given in 1888 to Annam; why has it not been renewed for all our colonies and for annual consignments?

An exhibition of food products has just been held at the Tuileries. An Annamite Van Hai had a boutique there. He sold Ceylon tea!! Another stall for sale of Ceylon tea was kept by a Sinhalese. The tea Company of Ceylon continues its propaganda. The visitors might have demanded Annam tea as much and often as possible, they received instead an advertisement of Ceylon tea of which the following is the text:—

"OUR TEAS,

"After having obtained a brilliant success in the countries where tea is a national drink, have been introduced for the first time, thanks to the exhibition, into France. Owing to their purity and exquisite flavour they have not waited long to be adopted by the French salons, which are opposed more than any other to all changes. So much is this the case that to-day certain qualities of inferior tea find it advantageous to be labelled 'Ceylon Tea,' etc." [Here follow quotations on its merits from Mr. Bamber's books.]

We recommed the above to our planters in Indo-China to give them food for thought and to clear their understanding. In addition the Ceylon Pavilion has been reconstituted at 4, Reu Caumartin, and herewith its advertisement a little charlatanesque, but profitable for the English. * * * *"

Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant the appointment of "Purveyors to Her Majesty The Queen and Empress of India" from the year 1837 until the time of her death, have now had the honour of being appointed by Royal Warrant "Purveyors to The King."

THE INFLUENCE OF COFFEE PRICES ON EXCHANGE.

In an interesting brochure Mr. Laneuville alludes to the absurdity of the theory that maintains that low exchange favours production by the following reduction *ad absurdum:*

Suppose that for one cause or another, a fall of exchange, for example to 1d. (in France and Colombia it fell lower) and that Santos good average cost 15$ with a production of 8,000,000 bags and 5,000,000 at Rio. The price would doubtless be remunerative enough. But what would the sale price be in Europe? 7s. 6d. PER CWT. COST AND FREIGHT! taking freight at 1s. 3d. The planter could then produce and deliver his coffee at Santos at 5s. per cwt. and still earn a profit in milreis. On the one side the producer would obtain a so-called remunerative price and on the other consumers would be provided almost gratis and all that thanks to exchange. A theory that asserts such probabilities is evidently false and absurd.

Suppose again that a big fall of exchange is simultaneous with a rise of currency prices and fall of gold prices abroad (in case of heavy production) as has often happened, and that currency prices do not rise as rapidly as exchange falls. The profit on the side of consumers would then be incontrovertible, but is it equally true that producers would realize a profit in selling his coffee dearer? That would be a regular panacea were it not an absurdity.

The *Brazilian Review* remarks:—The truth is that Brazilian money could buy less as exchange fell and that although a nominal profit in reis may have been realized, there is in reality a loss.

Mr. Laneuville concludes that consumption during the last 5 years has increased certainly 25%, not only on account of lower prices, but in consequence of the immense economical progress of the two chief consuming countries—the United States and Germany. The fall of prices below 40 to 45 francs must provoke a crisis in the producing countries as has already occurred.

Mr. Laneuville in common with ourselves is an advocate of the reduction of par. In this connection he says "We know only of two examples in History of countries which have renewed specie payments on the basis of original parity—Great Britain and the United States. On the other hand six countries have endeavoured and some succeeded in regulating the value of their currency by consolidating part of the depreciation of their monetary unit, *viz.*:—

Russia	which reduced the	4 fr.	Rouble	to	2f. 66.
Austria Hungaria ...	,,	,,	Florin	from	2f. 50 to 2f. 10.
Japan	,,	,,	Yen	,,	5f. 40 to 2f. 58.
Chili	,,	,,	Peso	,,	— to 1f. 90.
Argentina ...	,,	,,		,,	5f. 00 to 2f. 20.
India	,,	,,	Rupee	,,	2f. 38 to 1f. 68.

JAPAN TEA TRADE COMBINE NOT YET COMPLETED.

SOME INTERESTS HAVE NOT YET CONSENTED TO JOIN.

In May last an account appeared in these columns of a plan to organize a central company which should have full control of the trade of Japan teas. The United States is virtually the exclusive market for these teas, and the proposition is to induce all interests in this country acting as first hands and all Japanese concerns exporting to this country directly or indirectly to form a central company and give over their business to such company on proper compensation. It may be stated on authority that while some progress has been made since the original publication of the plans already referred to, some interests are still standing aloof, and the new company is not yet ready for incorporation. Among those who have not yet joined, are, it is understood, Messrs. Hunt & Co. and Messrs. Hellyer & Co.

One of the objects of the combination, it is said, is to do away with the ruinous competition which the trade has recently been undergoing and which has placed Japan tea at a distinct disadvantage with the China and other teas which are fired and packed by natives. Members of the trade argue that under current conditions they are forced by the exigences of competition to buy from the Japanese at high prices and to sell at low prices. This is particularly the case during the month of May—the opening of the new season—when it is necessary to duplicate the exceeding choice samples, which can only be secured very early in the seaso The extremely active competition for these grades enables th Japanese to fix fancy prices, and the buyers have the added induc ment to take all the choice grades of the early supplies for th reason that the Japanese will then consign any surplus of the grades to this market to be sold in competition with the regul importers. That the Japanese freely pursue this policy of sendi supplies direct is shown by the following list of settlement (virtually shipments to this country) for the season 1900-1901 :—

LIST OF JAPAN TEA SETTLEMENTS FOR SEASON 1900-1901.

	Piculs.
Mourilyan, Heimann & Co.	23,493
Smith, Baker & Co.	43,418
Hunt & Co.	39,390
Hellyer & Co.	38,848
Jardine, Matheson & Co.	16,843
Fraser, Farley and Varnum	9,756
Middleton and Smith	5,226
Nitto Boyeki Hwaisha	8,434
Averill & Co.	15,807
M. J. Brandenstein & Co.	5,505
C. B. Bernard & Co.	10,180
J. C. Siegfried & Co.	23,660
G. H. Macy & Co.	46,040
Japanese	25,772
Total ...	312,372
Same date last season ...	335,280

The active competition in securing supplies of Japan teas resul from the fact that the offerings must be accepted with virtually n delay. The teas are in perishable shape and must be immediatel fired and packed by the purchaser. As the supplies of the "cream of Japanese teas may be purchased only at the beginning of th season, and as the various buyers have customers for special line of teas which can be obtained only at that period, it will be readil seen that the Japanese have excellent facilities at hand to secur favourable first prices. The tea trade in Japan, like other branche of business and industry there, is largely controlled by guild which operate for the benefit of home interests. While the opera tion of these guilds seems to produce favourable results early in th season, it does not, it is claimed, work permanently for the good o the trade. In fact, the growers of India and Ceylon teas are jus now promising increased competition as a result of the offerings o blends resembling the Japanese article very closely.—*Journal o Commerce*, New York.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange, 29*th July*, 1901.—Ninety days' Bank rate on Londo opened on Monday, 22nd, at $10\frac{5}{16}$d and closed to-day at $10\frac{2}{32}$. Th average Bank 90 d/s counter-drawing rate for the week comes ou at $10\frac{1}{64}$d, the corresponding sight rate being $9\frac{61}{64}$d against $10\frac{1}{64}$ the average sight rate of the *Camara Syndical.*

It is impossible to advance any opinion as regards the immediat future of exchange. The factors in play are so complex as to def calculation, but it is satisfactory to observe that the rise of 1d. ha checked the fall of coffee in the foreign markets. For a short tim one of the foreign banks suffered a kind of run, and it was publicl reported that two foreign banks were about to close their door There was, of course, no reason in such a panic, but at such time anything finds credence. On Friday, without previous warning, th scene changed completely and within 5 days rates rocketed u once more to $10\frac{1}{2}$d. The rise is attributed by some to greate firmness at Santos, and by others to Government assistance. How ever it may have been there can be no doubt it was very timel and checked a fall that might have developed into disaster.

During the past week the value of coffee shipments (embarque at Rio and Santos was £429,000 as against £412,000 for the previou week and £338,000 for the same period last year. Since the 1 July the total value of coffee sailed from Rio and Santos up to th 26th instant was £1,030,688 as against £1,014,737 last year. Rubbe meanwhile, scarcely yielded anything, £79,000 last week and £72,0 the week before, nor will it be until November or December tha rubber entries will greately affect the market.

Coffee.—Entries at Rio and Santos during the week ended 26th July were 45,665 in excess of the previous week's and 170,999 more than those for the corresponding week last year. Since the first July entries aggregated 1,174,235 or nearly 80 % more than during the same period last year.

Sales were active, 2[illegible]6,000 as against 193,000 for the previous week and 181,000 last year, whilst embarques were likewise very active, 303,352 bags as against 284,010 the previous week and 131,176 bags last year. Stocks however are commencing to rise again, being 883,912 at Rio and Santos on the 26th instant, as against 766,408 on the 19th instant and 628,758 on 27th July last year.

Reports of "requiema" are common in the São Paulo coffee districts and a smaller crop for 1902-1903 is anticipated in consequence. For two years past new buds always made their appearance between June and July, which, though they are practically useless, were always considered the forerunners of an abundant flowering later on. This year not a bud has made its appearance so far.

At Itatinga coffee picking is well advanced and indicates a yield ⅓ less than last year. The "colonos" are grumbling at the low rate of 400 reis paid per alqueire of coffee and threatening strike.

Labour.—A son of the Marquis of Rudini, the head of the Syndicate for promoting emigration to São Paulo, arrived at Santos in the *Centro America* on the 25th July. The Syndicate propose to take up the low lands about Iguape to begin with.

The careful way in which the statistics of the coffee movement are kept by the Associação Commercial of Santos, in such contrast with the slipshod methods here, is proved by the fact that the difference between the Associação figures for shipments and those of the Estatistica Commercial for the 1900-1901 crop is only 198 bags, the Associação showing 7,821,541 and the Estatistica 7,821,343 bags exported to foreign countries from that port. Even this slight difference is probably due to some coast coffee having been included in the Associação figures.

DISTRICT ASSOCIATIONS.

WYNAAD.

Proceedings of a General Meeting held at Meppadi Club, on Wednesday, 4th September, 1901. PRESENT:—Messrs. Atzenwiler, Mackenzie, Nicolls, Lance, Powell, Trollope, and G. Romily, *Honorary Secretary*. *Visitors:* Dr. Beley, and Mr. Gillatt. Mr. Atzenwiler *in the chair*.

1. Proceedings of the last General Meeting, 3rd July, and of the Special Labour Meeting of 24th July were taken as read.

2. **U. P. A. S. I. Meeting at Bangalore.**—Mr. D. Mackenzie reported that the Labour Bill had been discussed in Committee and that he had brought up the points raised by this Association and had left the matter in the hands of the Planting member. Mr. Mackenzie suggested that the Honorary Secretary be instructed to correspond with the Planting member through the U. P. A. S. I. when the Bill comes up for discussion. Mr. Mackenzie gave further information about the schemes for distributing Tea and Coffee and urged that they should receive unanimous support from members of this Association.

3. **Tea cess and contributions to the Foreign Market Fund.**—Read circulars from the I. T. A. and U. P. A. S. I. on the subject. Resolved that the Honorary Secretary when forwarding the circular on the New Levy to Tea growers should request them to forward their subscriptions direct to the Secretary, I. T. A., and at the same time notify the fact to the Secretary, U. P. A. S. I.

Read circulars on the sale of Tea in India.

4. **Coffee.**—Read U. P. A. S. I. circular giving the report of the Sub-Committee on the proposed sale of Coffee in India.

Proposed by Mr. Mackenzie and seconded by Mr. Trollope, that this Association should support the scheme by donations. A certain sum having been promised by members in the room the Honorary Secretary was instructed to address the other Coffee growers in the district on the subject.

Adulteration of Coffee.—Read circular No. 58. Recorded.

5. **Pepper robberies.**—Read the Honorary Secretary's letter to the Collector of Malabar; and the Collector's answer declining to reconsider his previously expressed opinion. Recorded with regret.

6. **Encashment of notes at the Vayitri Treasury.**—Read letter from the Accountant-General to the Collector of Malabar, dated 21st August, 1901, saying that the arrangements sanctioned in the letter of 5th June, 1894, No. 1536, may be considered to be still in force. That is that no notes can be cashed unless there is a balance of Rs. 3,000 over and above the undrawn portions of letters of credit issued on the Treasury in favour of any public officers.

7. **Differential duties.**—Read U. P. A. S. I. circular giving the correspondence between the Chairman and Secretary. Considerable dissatisfaction was expressed that so little information was forthcoming on so important a subject and the Honorary Secretary was instructed to address the Chairman of the U. P. A. S. I.

8. The following U. P. A. S. I. circulars were read and recorded:—

No. 57. Dr. Watt's services refused.
„ 60. Letter from Col. Campbell.
„ 63. On the French Import Tariff.
„ 64. Import duty on Tea in Ceylon.
„ 66. Abbott's pest.
„ 68. Complaints as to inaccuracy of statistics.
„ 69. On Freights.
„ 71. St. Petersburg Exhibition.
„ 72. Investment of U. P. A. S. I. Funds.

9. The following papers were laid on the table:—

I. T A. circulars.
Proceedings of Coorg Planters' Association.
Do. Central Travancore Planters' Association.
Notice of sales of estates.
Bulletin No. 44. Notes of Cattle in Madras Presidency.
Agricultural Ledger, No. 1. Paspalum dilatum.
„ 2. Triticum Vulgare.
Administration Report, Government Botanical Gardens. Nilgiris.
Planting Opinion.
Indian Planting and Gardening.

A vote of thanks to the chair terminated the proceedings.

(Signed) H. ATZENWILER,
Chairman.
(„) GEORGE ROMILLY,
Honorary Secretary.

SHEVAROY.

Proceedings of the Annual General Meeting of the Shevaroy Planters' Association held in the Victoria Rooms, Yercaud, on Monday, the 2nd September, 1901, at 1 p.m.

PRESENT:

Mr. W. J. Lechler.
„ C. G. Lechler.
„ S. Campbell.
„ C. Rahm.
„ W. Rahm.
Revd. J. M. Kempff.
Mr. Bruce Short.
„ C. Dickins.
„ E. Dickins.
„ J. C. Large.
„ H. Dickins.

Mr. Newton, *visitor*.
Mr. Gompertz, *Chairman and Honorary Secretary*.

1. Notice calling the meeting was taken as read.

2. Confirmed Proceedings of Committee Meetings held on the 8th July and 12th August, 1901.

3. Read and passed accounts for past year showing a balance in hand, on the 31st ultimo, of (Rs.568-6-11) five hundred and sixty-eight rupees, six annas and eleven pies.

4. The Honorary Secretary here read his report as follows:—

Report of the Honorary Secretary, Shevaroy Planters' Association, for the year ending 31st August, 1901.

GENTLEMEN,—I come before you once more with the inevitable Annual Report and Balance-sheet.

2. I regret to say that, during the past year, four of our members have withdrawn, whilst only two new ones have joined; so that we close the year with only 37 members, instead of 39.

3. On the 31st August, 1900, we had a balance in hand of Rs.466-11-0, while to-day it is Rs.568-6-11. We must not congratulate ourselves much on the improvement however, for it was caused by a payment made by Messrs. Duff & Co.; and was for coffee which we had sent them for transmission to our troops in the Transvaal, but which by some mistake was never shipped, so it had to be sold for what it would fetch in Madras, *viz.*, Rs.134-7-4. Deducting this payment we are not so well off as we were

last year, though our expenses have been much less; and as the subscription has just been reduced, to which I shall presently refer again, our income in future will only be $\frac{3}{5}$ of what it has been until now—unless we can secure a large influx of new members.

4. Prices, I am sorry to say, have gone from bad to worse; and to meet the wishes of a good many members, the subcription to the Association was reduced last June, as a temporary measure, from Rs.5 to Rs.3 per quarter. Personally I think that this was a great mistake. I know—none better—that, in the present state of the market, it is difficult to raise a rupee; but to argue that, because the fall in prices has brought us to the verge of ruin we cannot *afford* to do anything to avert it, is not like planters and is alien to the British character. Desperate conditions require heroic remedies. No one will contend that five rupees a quarter could make or break our poorest member; but "a straw shows how the wind blows;" and if men are unwilling to do so little to support the District Association, they are unlikely—voluntarily—to make the greater sacrifices which are absolutely necessary to avert the ruin of the industry, and to retrieve the position of Indian coffee in the markets of the world. I showed last year the good work done by the U. P. A. S. I., such as recognition of the planting community by Government, the appoinment of a planting member on the Legislative Council, more than Rs.12,000 subscribed by Governments and merchants to advertize our coffee at the Paris Exhibition, the duty removed from imported manures which reduces their price by one-twentieth, improved communications such as our new Ghaut Road, etc., etc., etc. The United Planters' Association owes its existence to, and is supported by the District Associations; and I begged you all to use your influence to obtain recruits amongst your friends, that we might get rid of the anomaly of a planter in our midst, who shares in the benefits conferred, but who refuses to contribute his mite to the expenses of procuring them:—but alas! our number does not increase. Men make all sorts of excuses to avoid joining, or to cover their retreat—any absurdity seems good enough. Some say they are leaving the District—forgetting that their estates, and their interests, remain; some that in these hard times they cannot afford unnecessary (!) expenditure; and one man told me he withdrew because the Association did not repair the road through his estate (!); forgetting the impossibility of undertaking such works in return for a subscription of one rupee a month. We pay, besides the Government kist, a local cess of two annas per acre. Estate roads must, of course, be maintained by their owners; but District roads, hospitals and the like are kept up out of the local cess, as far as it will go. The Association is represented on the District Boards, and our representative takes care that all that can be done locally is done, to the full extent of the local cess, and even more. It is difficult to see what more can be reasonably expected. But, by far the commonest excuse is that they would join if others would, but they don't see why they should keep up an Association for the benefit of Tom, Dick or Harry, who will give nothing towards its support.

5. This, of course, brings us face to face with the difficulties of a compulsory cess. Our Association is unanimous in favour of it; and in accordance with your instructions, I brought up the question at the late Conference. But, as you know, we are about to ask Government to impose it upon tea; and it was thought we should have a better chance of obtaining it hereafter, if we proved successful in getting it for tea. Consequently the sense of the meeting was opposed to pressing the point at present, and I had to withdraw my motion. But though a compulsory cess on coffee is, for the moment, dropped, the delegates were unanimous in thinking that it was absolutely necessary that every coffee planter should, voluntarily, subscribe for the purpose of advertising and pushing the sale of our coffee, as the tea planters are doing with their tea. The Chairman, Mr. Hodgson, in a very able speech, proposed a most admirable and practical method for raising these subscriptions in a way that would scarcely be felt. He said "another thing I want to impress upon you very strongly is the necessity for advertising your produce. Unless your produce is properly advertised the sales always fall off. In fact, I may say that the only road to a good market is by advertising. If you throw your products on the market without any advertisement, it is like drift wood on the water, which is collected and used by others who advertise, with much profit. I know what I am asking, it means that you must put your hands in your pockets to provide money. Now no one knows better than I do that at the present time the planter finds it difficult to provide money. But I must remind you that for the working of your estates you must provide a certain amount of money per acre, and, to do so you must draw up your estimates. In drawing up these estimates I would ask you to insert an item for advertising your produce, say, at four annas per acre. I am quite convinced that, if you can do that, it will probably be the smallest and the most profitable item in your accounts." I have quoted his *words;* but there was something in the way in which he said them that came home to every one of us; and, though it was not reported, he was interrupted at this point by vociferous applause; for we felt that he had struck the right nail on the head, and had shown us a way of raising the subscription which was likely to be more favourably received than any that had been propounded before. If the delegates had had the power of binding their Associations, I have little doubt that his proposal would have been carried by acclamation, then and there.

6. There still remains the question of how the money thus raised i be utilized. This was also discussed at the late Conference; and it agreed to support the Paris shop in Europe from the funds already at disposal of the U. P. A. S. I.; and, under certain conditions, the Uni Coffee Growers Co. in India, for the present, from subscriptions to collected here; as this was thought to be the best beginning we could m I hope at our next Quarterly General Meeting to be able to tell you t the U. C. G. Co. have agreed to comply with the wishes of the l Conference, in which case I shall propose an elaboration of Mr. Hodgso scheme; but, after all, the Agency we employ is merely a matter detail. What I want to urge on you now, as forcibly as I can, is that y should accept Mr. Hodgson's suggestion; and that, in making out yo estimates of expenditure, you should insert an item of four annas an a for advertising and pushing the sale of your coffee. Eventually we c employ the U. C. G. Co.; or, if you do not like that, any other Agency that is a matter for future consideration. But send the four annas acre without delay to the Honorary Secretary for the coming year, to presently elected, with a *proviso*, if you please, that he is not to disp of it except in accordance with the wishes of the majority at the ne Quarterly General Meeting. But do it, I beg of you, gentlemen, do *at once.*

7. As Mr. Leeming's estates are in our midst, I need not say mu about his system here. Allthough "a prophet is not without honour s in his own country and in his own house" most of you have eith adopted his system, or at least are experimenting with it; but as whe at the Conference, the Chairman said that he was not aware that any o but Mr. Parton had tried it, several men got up and said that they h which was not reported in the papers, it may not be out of place i inform you that men from all parts of Southern India have visited estates, and have gone away well pleased with what they saw, and th experiments are being made with it in every coffee-growing Distri Considering the great saving in the cost of production, its importan particularly in these times of ruinously low prices, can scarcely be ov estimated.

8. Very fair progress has been made on our new Ghaut Road, duri the past year. When completed it cannot fail to increase the importan of our charming little Hills, and to enhance the value of land and hou property.

9. The Labour Bill, I regret to say, has not yet been passed; owing the constant alterations in it, insisted on by the Supreme Governmen but it has not been lost sight of, and will, I hope, soon become law.

10. I have unfortunately heard nothing about experiments amongst with new staples. Though I am a firm believer in the future of our coff I think it is much to be regretted that those of our number who ha facilities for doing so, do not endeavour to introduce new produc Amongst others I may draw attention to fibre, rubber, pepper and fr culture on a large scale, as likely to yield a handsome return to the m who will undertake their cultivation systematically; whilst perhaps t most promising of all is the raising of plantains, both for fruit and fibr though it is doubtful if they could be grown here as successfuly as the plains.

11. Apologizing for the length of my report—or address—I will conclu The Committee and myself now place their resignations in your hands, a request you will be so good as to elect office-bearers for the coming year.

(Signed) ROBT. GOMPERTZ,
Chairman and Honorary Secretary, S. P.

5. Proposed by Mr. C. Lechler and seconded by Mr. Larg Carried unanimously:—

That the Honorary Secretary's report, including the accoun be adopted and printed, and a copy of it be circulated to all membe and to any others that the Honorary Secretary thinks would be inte ested in it.

The balloting for the office-bearers for the coming year was th proceeded with, and the following gentlemen were elected—

COMMITTEE:

Mr. C. Rahm.	Mr. J. C. Large.
,, E. Dickins.	Revd. M. Andersen.
,, C. G. Lechler.	,, J. M. Kempff.
,, W. J. Lechler.	Mr. C. Dickins.

Mr. R. Gompertz, *Chairman and Honorary Secretary.*

Read letter from Messrs. Willocks & Co. describing a certain ne kind of blood manure called "Ufertas." Their representativ Mr. Newton, was present at the meeting, and offered to send a sm quantity free of cost to any gentleman present, who would give it fair trial, and report the results.

Resolved that Mr. Newton's offer be accepted and that he requested to send the samples to the Honorary Secretary who und took to see that they should receive a fair trial.

Resolved that a very cordial vote of thanks be tendered Mr. Gompertz for his services during the year, and for the al

manner in which he had represented this Association at the late Conference in Bangalore.

The following letters were read and recorded :—

Circulars received from the Secretary, U. P. A. S. I., during the month of August, 1901.

No. 60/01. Col. Campbell thanks us for vote of sympathy.

No. 61/01. The St. Petersburg Exhibition postponed to November, 1901.

No. 62/01. The I. T. A. are doing all they can in favour of compulsory Tea Cess.

No. 63/01. The Bombay Chamber of Commerce does not think it would be any use to address Government *re* possible enhancement of French import tariff.

No. 64/01. The I. T. A. are about to address the Government of India with a view to getting Ceylon import duty on tea removed.

No. 65/01. Mr. J. A. Harris accepts vice-chairman ship of the Association, regrets inability to attend late annual meeting.

No. 66/01. J. C. Abbott forwards description of Ceylon Government Entomologist of a new species of bug.

No. 67/01. Messrs. A. Yule & Co. do not see their way to selling coffee at present.

No. 68/01. Secretary of the I. T. A. forwards correspondence complaining of the very imperfect returns submitted by the S. I. Tea planters, rendering reliable statistics impossible.

No. 69/01. Hon'ble Mr. Acworth thinks it would be useless to get steamer freights from Cochin reduced till the Shoranur-Cochin extension is opened for traffic.

No. 70/01. Forwarding correspondence between Chairman and Secretary *re* precis of replies received to circular on Differential Duties.

No. 71/01. The I. T. A. thinks tea ought to be adequately represented at the St. Petersburg Exhibition, but is short of funds.

No. 72/01. Secretary has purchased Rs.5,000 of Government paper as instructed to at late Conference.

G. O., Madras, No. 693, of 9th August, 1901, regarding mule-breeding.

Correspondence with Collector about the Treasury being closed on days on which notice had been given that it would be open.

The following books and papers received during the month were laid on the table.

Brazilian Review, June 25th, July 2nd, 9th, 16th, and 23rd.

Planting Opinion, August 10th, 17th, 24th, and 31st.

Proceedings of the Indian Tea Association, dated August 13th, 20th, 23rd, and 29th.

Proceedings of the Coorg Planters' Associations, dated July 24th, 1901.

Circulars from the Bengal Chamber of Commerce, No. 321/01, dated August 9th, 1901, and No. 332/01, dated 14th August, 1901.

INDIAN TEA ASSOCIATION

Abstract of the proceedings of a meeting of the General Committee held at Calcutta on 27th August, 1901. Mr. H. S. ASHTON (*Chairman*), presiding.

The attention of the Committee had been drawn by members of the Association to the question of regulating supplies for the London market.

It was, the Committee believed, recognised that the tendency to concentrate supplies upon the London market during a few months in each season, had greatly developed during the last two or three years. This concentration was, in their opinion, mainly due to improvements in communications between the producing districts and the sea-board. The extension of the Dooars Railway, and the opening of new bridges on the Northern Bengal Railway, had considerably accelerated the passage of teas from the Dooars. And the keen competition between the Assam-Bengal Railway and the Inland Steamer Companies (in consequence of which tea was carried in mail boats at cargo-steamer rates,) together with the establishment of a direct service from Chittagong, had sensibly diminished the time formerly occupied in the transit of teas from Cachar and Sylhet. There could be, the Committee thought, no doubt that if, during the present season, the effect of these improved transport facilities was in no way restricted, the London auctions would be overburdened at an early date. The questions therefore arose (1) as to whether it was desirable, by regulating supplies, to avoid or to diminish this risk; and (2) if such regulation were deemed to be desirable, as to the form which it should take.

In the course of the discussion which ensued, it became evident that the majority of the firms represented on the Committee were of opinion that regulation here would have a good effect upon prices. But a minority were not convinced of this. They held that it was questionable whether the news of tea being held back would not have a more depressing effect upon the market than would be caused by permitting shipments to go forward in the usual course. In these circumstances it seemed to be clear that no system of regulation in India was practicable. The Committee consequently decided to submit to the London branch of the Association a statement of the position, and to enquire if any scheme of regulation in London was contemplated.

Considered a letter, No. 4297, of 24th August, from the Collector of Customs, Calcutta, with reference to the values declared by shippers for tea exported from Calcutta. Figures were quoted in this letter with the object of showing that the declared values were higher than the average prices realised in London or Calcutta. And an enquiry was made as to whether it was the general practice to include in the declared value the equivalent of the charges incurred up to time of sale in London. The Association was also asked to suggest some feasible methods by which greater accuracy could be secured in future.

The Committee were of opinion (judging by the figures given in the letter) that the declared values were somewhat high. And they decided to circulate copies of the letter to the members of the Association with a recommendation that greater care should be exercised in future. The permission of the Collector was, however, to be obtained before publication. They believed that it was not the custom to include in the values the charges incurred up to time of sale in London; and they agreed to inform the Collector accordingly.

Considered information received from Colombo in reply to an enquiry which was made by the Committee, as to what would be the position of Indian teas in Colombo if the duty were reduced to 5 per cent. *ad valorem*.

The information was to the effect that so long as a duty was levied, at however low a rate, Indian teas could never rank in Colombo on equal terms with Ceylon teas. The reason for this was that dutiable teas were stored in the Bonded Warehouse and could not be removed except by the payment of duty, or on their being shipped. This prohibited the dealers from using such teas for blending purposes; and prevented their sharing to a full extent in the general competition. The only possible means of putting all teas on equal terms would be to abolish the import duty. And if Indian teas were admitted free, it was thought locally that teas from China, Japan, and Java, should receive similar treatment. Any proposal to remove the duty would not be favourably received in Ceylon.

This information coincided with the opinion previously formed by the Committee; and they agreed to address the Government of India on the general question as early as possible. The letter was to follow the lines prescribed in the proceedings of the meetings held on 16th July and 13th August, 1901.

NORTH MYSORE NATIVE P. A.

At the Annual General Meeting of the North Mysore Native Planters' Association held at Chikmagalur Club on the 30th July, 1901.

PRESENT: Messrs. B. Gundappa, T. Puppannasetty, Abdul Rahiman Kader, Mohamed Khan Saheb, B. Runga Rao, K. Hanumantha Rao, M. Siddanna, C. Srinivasa Rao, A. Shama Rao, G. Abdulkhader, Pir Kasim Saheb, Janardaniah, N. Gundappa, C. Vasudeva Rao, D. Srinivasa Rao, Mahomed Alli Kader, B. Budan Saheb, S. Mohadeen Saheb, T. Narsing Rao, A. Davood Saheb, and G. Abdulkhalek.

The President, Mr. C. Veeratha Gowda, being absent Mr. B. Gundappa was voted to the chair.

The Secretary's Report.

GENTLEMEN,—Before we commence the business of the day I regret to inform you that we have lost two members from the planting community, *viz.*, Mr. Courpalais and Mr. Budandeen Saheb. Mr Courpalais is not only an old but also a successful planter. He was a great helping hand to many around him in the Native Community. I need not mention his charities to you as they are well known.

The coffee industry seems almost to have collapsed. But comparing our prices now to that of 1885 and 1886 I find no reason to fear. The chief difficulties we have to contend against now are the increased expenditure on coffee cultivation at the present day, the abnormally bad seasons and an over-stocked Market. In the old days almost all the Native planters cultivated coffee on the Arabian system I mean allowing coffee plants to grow into large bushy trees which covered the land. By this means the expenditure on weeding was greatly saved and no expenses on pruning and handling were incurred. The crops picked were usually heavy. The only mistake then made was, I think, not attending to manuring the estates and supplying vacancies. I am glad to tell you that many amongst us are now seriously thinking of going back to our old system, and cutting down our expenditure by half, to pull us through till better times come round again.

Brazil has again produced a large crop this year estimated at 12 million bags. Papers show that she too has got great financial difficulties and has to depend on foreign capital for her cultivation just as we do. Brazil cannot go on producing this large crop, year after year with the small return she gets for it.

Mysore coffee has headed the list this year also amongst the East Indian coffees excepting Ceylon. A few lots of Central American have fetched better prices than Mysore lots. There have been complaints of late that our berry has deteriorated and this is a serious matter which requires our greatest attention.

I am glad to tell you that coffee consumption in Southern India is slowly on the increase.

Now I bring before you a question which may appear to you, a dream, but it is well worth your deliberation. I mean the establishment of a Native agency in France and in England. I am sure of success. The novelty itself will create a demand for our produce much more so when it is found to be of the best quality and not mixed with indifferent kinds.

I place the accounts on the table for your perusal and request the members to pay their subscriptions due to the Association promptly.

Resolutions.

1. *Office-bearers :*—Mr. C. Veeratha Gowda and Mr. C. Vasudeva Rau were re-elected as President and Honorary Secretary.
2. Resolved that Mr. A Shama Rao be elected to represent the Association in the coming Dussara Assembly.
3. Resolved that the Association deeply regrets the death of Mr. Courpalais and that of the rising planter, Mr. Budandeen Saheb.
4. *Game law.*—Resolved (after a great discussion) that the Government be requested at the ensuing Dussara Assembly to reduce the fee charged on shooting licenses. To shoot in the village grounds to 1 rupee and to 2 rupees for shooting in the District and to rupees 5 for all Mysore. Further request be made to allow the shooting of Monkeys and Parrots when they are destructive to crops.
5. Resolved that the Government be requested to allow planters to cart fire-wood from their estates on their own passes.
6. Resolved that Government be requested to consider the question of connecting Chikmagalur with Kadur by rail and from Chikmagalur the line be connected with Arsikere-Mangalore line.
7. Resolved that the rule of leaving a margin of 50 yards on both sides of the streams entails great hardships on the planters and does not help in keeping the springs alive and to represent that as coffee is always cultivated under shade and hundreds of trees are planted for every one cut down, the springs are protected; and request Government to re-consider the matter.
8. Resolved that Government be requested that the minimum acreage granted for coffee cultivation be reduced to 5 acres, as it is found that the present minimum of 15 acres is a great hardship on the poorer ryots.
9. Resolved that Government be again requested that Bagani toddy be given for *bonâ fide* purposes for the use of the planter and his Jetagars.
10. Resolved that a requisition be made to Government for c tinuing the Baba Booden Road towards Punderwalli side a joining it to Chikmagalur Yedehully Road
11. Resolved to ask Government to allow applicants to t Bagani trees if they are not marked within 7 days from the date Durkast and payment.

With a vote of thanks to the Chairman the meeting terminate

C. VASUDEVA RAO,
Honorary Secreta

THE COST OF WAR.

From the day when Achilles fasted three days and nights ov the body of Patroclus, slain in the ten years' siege before the sto walls of Troy, have we learned of war's sorrows.

The Duke of Wellington wept like a child when he surveyed t bloody, hard-won field of Waterloo. Methuen, it is said, bro down at the ghastly sight of Magersfontein, and returned to h tent that the men might not witness his grief.

"Who dead is must be buried," says Homer, and, we might ad "who ill is must die."

So thought Private John Smith, living now at 19, South Uxbrid Street, Burton-on-Trent. The *Aurania* steamed out to the Ca on December 27th, 1899. with this soldier aboard her (that was b fore she steamed back with the gallant C. I. V.'s) and in telling r of his trials, on August 29th, 1900, Private Smith says that *th* part of his duty was pleasant enough.

"Shortly after Earl Roberts' famous march into Kronstadt, were stationed between that town and Jacobsdal to guard the li of communication. Towards the end of April I was laid low wi that fell disease enteric fever.

There were hundreds of men down with it. It has laid l more men than all the shot and shell that was ever fired by Bo Artillery. For several weeks I was in the fever hospital. M stomach was converted into a manufactory of torturing pains a I grew as weak and helpless as a new-born babe.

"I was for *days unconscious*, but gradually recovered sufficient to be invalided home."

Yet the suffering of Private Smith was not over. "I we aboard the Hospital Ship *Nineveh* in June," he says, "and short afterwards sailed for home. During my short stay in Sou Africa, I lost over 20 lbs. in weight. Nothing that I took relieve the constant vomiting, or increased my strength."

"After," he says, "I had been home a few days, my brother, w is an engine driver on the Midland Railway—not of *an armour train*—advised me to try Mother Seigel's Syrup. I got a bottle. found it was doing me good. The vomiting *ceased*, and I was ab to enjoy all kinds of food. My appetite is now enormous."

"Altogether I have taken four bottles of Mother Seigel's Syru and gladly give you permission to use and publish my statemer This Syrup is a fine tonic and a great medicine for the stomach. can especially recommend it *to soldiers returning from South Afri* in feeble health."

Wellington knew the bitter cost of war in 1815.

Methuen in 1899 and 1900.

And the hero of this narrative in 1900, too. His was a perso cost. "Green vomit." Charles Reade writes, "laid her sickly ha on him."

A BROKEN MAN.—Until the kindly offices of Seigel's Curative Syr put him on the stepping-stone of "first wealth," which is health.

MARKET REPORT.

[*Per Mail advices of* 23*rd August* 1901.]

COFFEE.

The London Commercial Record says:—A steady demand h prevailed during the week, and the moderate supplies at aucti have met with good competition at firm prices to a further advan of 1s per cwt for most descriptions, and a greater improvement f all desirable colory qualities. Washed Santos found ready buye at the recent improvement in prices. Privately there has be more enquiry, and a fair amount of business has been transact at public sale rates. The market for futures has been steadier covering by bears, and, although receipts at the shipping po have been very large, the latest quotations show a slight advan for the week. Yesterday September delivery of Santos was dealt

it at 28s to 28s 3d, December at 28s 7½d, March at 29s 1½d to 29s 4½d, and May at 29s 9d to 30s per cwt.

London	Santos	Sept. delivery	...	28s 3d.
New York	No. 7 Rio	,,	...	4·95 cents.
Hamburg	Santos	,,	...	28¼ pf.
Havre	Santos	,,	...	34¾ francs.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
West India ...	510	631	741	635
Ceylon ...	179	122	211	175
East India ...	4,573	2,649	10,193	4,731
Mocha ...	348	308	502	543
Brazil ...	2,755	3,496	2,224	1,460
Other Foreign	11,205	10,471	23,281	20,914
Total Tons ...	19,570	17,677	37,152	28,458

	Home Consumption.		Export.	
	1901.	1900	1901.	1900.
West India ...	157	130	508	361
Ceylon ...	107	126	104	238
East Inda ...	2,458	2,272	3,902	4,497
Mocha ...	494	446	49	111
Brazil ...	2,162	952	1,755	2,166
Other Foreign ...	7,964	7,070	12,467	9,156
Total Tons ...	13,342	10,996	18,783	16,529

The preceding figures exhibit— Tons.

In the Imports an increase this year of ...	8,694
Home Consumption an increase of	2,346
Export an increase of	2,252
Stock an increase of	1,893

Auctions this week have passed off as follows:—

CEYLON.—*Plantation.*—32 casks 6 tierces 10 barrels 6 bags mostly sold, middling to good middling 93s to 103s, good to extra bold 110s to 118s.

EAST INDIA cured in *Ceylon.*—14 casks 8 barrels 4 bags mostly sold—faded 33s to 36s, bold 48s, peaberry 36s.

EAST INDIA.—1,500 bags mostly sold as follows:—*Coorg*, smalls 33s to 34s 6d, low middling to middling 40s to 45s, bold 51s, peaberry 44s to 60s; *Neilgherry*, smalls 32s to 42s, fine ordinary to low middling 37s 6d to 43s 6d, middling 45s to 55s 6d, fine middling 66s 6d, bold 50s 6d to 60s, good bold 65s 6d to 66s, peaberry 34s to 70s; *Mysore*, smalls 35s, low middling to middling 40s to 47s 6d, bold 50s to 64s, peaberry 44s to 47s; *Wynaad*, low middling 43s, peaberry 34s; *Naidoobatum*, peaberry 56s; *Pulneys*, bold 55s 6d; *Travancore*, peaberry 51s 6d to 55s.

NYASSALAND.—33 bags sold, small 34s to 38s, fine ordinary greenish 38s, low middling to middling 41s to 47s 6d, peaberry 45s 6d to 47s 6d.

MOCHA.—127 half-bales bought in.

JAMAICA.—30 barrels 14 bags mostly sold—smalls 29s, good to fine ordinary 34s to 39s, low middling brownish 41s.

GUATEMALA.—914 bags partly sold—smalls 32s 6d to 33s, fine ordinary to low middling 38s to 45s, bold 56s, peaberry 38s 6d to 5?s.

VERA PAZ.—394 bags mostly sold—middling 58s 6d, good to fine middling 70s to 78s 6d, bold 93s to 102s 6d, peaberry 52s to 70s.

NICARAGUA.—507 bags sold—smalls 31s 6d to 45s, good to fine ordinary 34s to 37s, low middling to middling 43s to 49s, good to fine middling 52s 6d to 64s, bold 86s to 91s 6d, peaberry 33s to 72s.

COSTA RICA.—595 bags mostly sold—low middling to middling 44s to 53s 6d, good middling 58s to 61s, bold 73s 6d, peabeary 42s 6d to 65s.

SALVADOR.—1,376 bags mostly sold—good to fine ordinary 34s 6d to 39s 6d, low middling to middling 41s 6d to 47s 6d, peaberry 41s 6d.

MEXICAN.—343 bags sold—smalls 39s 6d, good ordinary 34s 6d to 37s, middling 47s, bold blue 59s to 62s, peaberry 56s.

VENEZUELAN.—34 bags bought in.

COLOMBIAN.—1,657 bags sold—partly damaged, smalls 29s 6d to 37s, ordinary to good ordinary 30s to 32 6d, fine ordinary 38s t) 39s, low middling to middling 40s to 47s 6d, bold 44s 6d to 59s, peaberry 38s 6d to 48s.

BRAZIL.—Of 1,922 bags Washed Dumont Santos 1,580 bags sold—smalls 28s to 29s 6d, medium 31s to 33s, bold to extra bold 36s 6d to 40s 6d, peaberry 34s 6d to 38s.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99. Bags.
Rio ...	978,000	417,000	683,000	537,000
Santos ...	1,652,000	1,370,000	1,511,000	1,079,000
Total...	2,630,000	1,787,000	2,194,000	1,616,000
Crop ...	—	10,900,000	8,971,000	8,772,000

Rio Exchange 10 7/16 d, previous day 10⅜d.

HAVRE, *August* 22.—Good average Santos August opened quiet at 34½f. and closed steady at 34½, September opened at 34¾f. and closed, at 34¾f, December opened at 35¼f. and closed at 35¼f., March opened at 36f. and closed at 36f., May opened at 36½f. and closed at 36½f.

HAMBURG, *August* 22.—Good average Santos August opened quiet at 28pf. and closed steady at 28pf., September opened at 28pf. and closed at 28¼pf., December opened at 28¾pf. and closed at 29pf., March opened at 29½pf. and closed at 29¾pf., May opened at 30pf. and closed at 30¼pf.

NEW YORK, *August* 22.—Closing prices of No. 7 Rio were as follow:—

	Aug.	Sept.	Oct.	Nov.	Dec.
August 22...	4·95	4·95	5·00	5·10	5·20
August 21...	4·85	4·85	4·90	5·00	5·10

Prices realized at Auctions of the Principal Marks of East India Coffee, for the Week ending 21st August, 1901.

NEILGHERRY.

		A Bags.		B Bags.		PB Bags.	
Curzon Nilgiris	...	27	55/6	37	43/-	9	52/6
Crofton Nilgiris	...	14	not sold	22	40/-	6	49/6
Madanaad Nilgiris	...	8	not sold	20	39/-	6	45/6
Palmer ...	...	26	49/-	74	40/6	19	47/-
Seergoor N	...	7	47/-	13	40/-	3	43/-
Rookery	...	3	not sold	9	34/6	3	35/-
Shola Rock	...	36	60/-	40	45/6	11	52/-
				17	45/6		
Little Ireland	...	13	59/-	20	45/6	5	51/-
				8	45/-		
Glenburne	...	16	not sold	20	40/6	5	44/-
				14	40/-		
Benhope	...	6	50/6	13	40/6	3	44/6
Corneillon	...	4	not sold	6	not sold	2	43/-
Prospect	...	13	65/6	21	46/-	4	54/-
Pomanoo	...	6	not sold	11	41/6	3	45/6

COORG.

		A		B		P	
Subbanyas Coorg	...	35	43/6	28	40/-	13	49/6
		1		2		P	
G Kowrie Cadoo Coorg	...	5	not sold	11	40/-	2	44/-
G Hunchi Betta Coorg	...	14	50/6	23	41/-	4	54/-
F —,,— F	...	12	not sold	14	44/6	4	57/-
Kowrie Cadoo Coorg	...	23	61/-	26	45/-	6	60/-

TEA.

INDIAN.—Auctions were heavier, totalling 33,400 packages, compared with 25,100 packages during the week before. In the corresponding period last year 35,000 packages were offered.

Business throughout the country has, as is usual in August, been quiet, and the quantity brought forward proved ample for immediate requirements. Dealers having recently made moderate purchases of the new crop seemed inclined to pause before adding further to stock, and although the best invoices sold fairly well, bidding for the less attractive ones was not so lively and withdrawals were consequently more numerous. Common leafy sorts tended in favour of buyers.

Quality generally was barely maintained, though many of the arrivals from Assam, Darjeeling, and the Dooars continued to be of a useful kind.

For 29,600 packages on estates account 9d per lb. was obtained, against $8\frac{5}{8}$d per lb. for 29,000 packages and $8\frac{3}{8}$d per lb. for 35,400 packages in the two preceding seasons respectively.

It is satisfactory to note that while total clearances for home consumption are above those at this date in the foregoing year, the figures indicate a considerable expansion in the amount sent from this country to outside quarters in the seven months ending 31st ultimo.

CEYLON.—Public sales aggregated 27,600 packages, contrasted with 29,900 packages in the antecedent week and 40,600 packages in 1900.

Arrivals were well up to the average, here and there making an improvement, and competition was good for most descriptions, though prices were a little irregular, especially for the medium grades. Pekoe Souchongs and Pekoes below $5\frac{1}{4}$d per lb., as a rule, remained steady. Flavoury Pekoes and Orange Pekoes, particularly when suitable for export purposes, were occasionally dearer. Not much change occurred in Broken Pekoes with inferior cup, but those with either full liquor or briskness were in demand and quotations in some cases rose $\frac{1}{2}$d per lb. Finest lines fetched about former rates.

The average is almost $6\frac{3}{4}$d per lb. On the 15th instant it was $6\frac{5}{8}$d per lb. and $6\frac{7}{8}$ per lb. twelve months ago.

The statistics record a further increase in the movement of these Teas from here to the Continent of Europe, America, etc., from January to the end of July, and this growing trade should help to strengthen our market.

JAVA.—Nearly 3,800 packages of direct import passed the hammer, not much change being apparent in quotations for desirable lots, but the tone was not so strong for others.

Deliveries.—Clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 20th August, 1901	... ...	9,819,275 lbs.
Do. do. 1900	... ...	9,339,840 ,,

During the week the following have been printed for sale by public auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offered. Pkgs.
India	26,317	7,110	33,427
Ceylon	25,116	2,480	27,596
Java	3,125	638	3,763
Total ...	54,558	10,228	64,786

Also 1,744 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated August 23rd, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian. Pkgs.	Ceylon. Pkgs.	Java. Pkgs.
1901-1902	156,091	304,766	16,405
1900-1901	127,186	321,129	10,145

35,095 *pkgs.* INDIAN
28,175 ,, CEYLON
3,763 ,, JAVA
} Total 67,033 packages were offered in public auction this week.

An increase of over eleven million lbs. took place in the quantity of Indian and Ceylon Tea sent to foreign and colonial markets during the first six months of the present year, as compared with the same period of 1900.

1901.	1900.	1899.	1898.
42,423,250 lbs.	31,700,517 lbs.	23,913,661 lbs.	24,427,654 lbs.

Low prices are doubtless responsible for the largely increased quantity thus disposed of.

In spite of the relief thus afforded to the market and of the reductions in output—not only from India and Ceylon, but also from China—prices still continue on an unsatisfactory basis, owing doubtless to the large amount of accumulated stock which has to be worked off, much of which is probably duty paid.

INDIAN.—Teas of good quality sold well, but common and medium kinds showed a fall of $\frac{1}{4}$d. to $\frac{1}{2}$d. per lb. Some good invoices were sold from Assam and Darjeeling, but the quality from the Dooars was poor. The official wire gives exports to U.K. for the first half of August as 10,805,680 lbs, including 965,680 lbs. from Chittagong against 11,480,000 lbs. last year, making the total from 1st April to 15th instant 35,903,680 lbs. against 42,141,000 lbs. in 1900.

The following averages are worthy of note:—"Jungpunnah" 1/$7\frac{1}{4}$; "Poobong," 1/$6\frac{1}{4}$; "Beheating," 1/$5\frac{1}{4}$; "Margarets Hope" 1/$4\frac{3}{4}$; "Ass. Co. Deopani" and "Tara T Co.," 1/$3\frac{3}{4}$.

Week's average of New Season's Tea sold on Garden Account, 1901 29,952 pkgs., av. 8·81d. 1900, 29,614 pkgs., av 7·46d.

New Season's Tea sold on Garden Account, 1st June to date, 1901 82,939 pkgs., av. 8·41d. 1900, 90,091 pkgs., av. 8·14d.

CEYLON.— In Tuesday's Public Auction prices were on the whole fairly steady, although some irregularity was occasionally noticeable, and a few Teas were in consequence withdrawn. A corrected official telegram gives exports from Colombo to United Kingdom during July as 8,500,000 lbs. against 11,750,000 lbs. in 1900, making the total exports from January to that date 67,750,000 lbs., against 74,000,000 lbs. during the same period 1900. Thursday's unrecorded auction of 4,099 packages passed at about Tuesday's rates.

A private wire states that only 3 million lbs. were exported to the United Kingdom during the first fortnight in August, against 4 million during same period in 1900.

Average for week 6·70d., against 6·90d. same week, 1900.

Ceylon Tea sold on Garden Account, 1st Jan. to date, 783,470 pkgs. av. 6·57d. 1900, 828,470 pkgs., av. 7·22d.

JAVA.—The large selection comprised a varied assortment amongst which were some Teas of good quality. 432 packages from "Goalpara" averaged 10d. per lb. The Teas were mostly sold in the room at steady prices.

Bank Rate 3 per cent. Exchange on London three months' sight:—Calcutta 1/$4\frac{3}{32}$. Colombo 1/$4\frac{1}{8}$.

COCOA.

Public sales on Tuesday offered 5,349 bags, but there was very little animation in the bidding, and only 1,200 bags, all Trinidad, were quitted, prices generally showing no change from the previous week's level. Trinidad growth comprised 3,219 bags of the total and 1,200 bags found buyers at 70s to 73s 6d for fine to very fine, 67s to 69s for middilng to good, and 66s for small. Of 38 bags Grenada a few lots of good sold at 63s per cwt. The remainder of the offerings all passed the hammer unsold—*viz.*, 45 bags Demerara etc., 154 bags Surinam, 37 bags Venezuelan, 47 bags Colombian, 81 bags Caracas, 1,115 bags Guayaquil, 235 bags Haiti, and 37 bags Ceylon. The limited business transacted privately has generally been at lower prices, the sales including 500 bags Trinidad at 68s to 72s. 150 bags fair Grenada at 64s to 64s 6d, 6 bags Haiti at 53s to 55s, 400 bags grey Caraquez Guayaquil at 61 to 62s, and a few lots of Ceylon at 63s for fair estate, and 52s per cwt for ordinary collected.

PEPPER.

BLACK.—The market is quiet and only small sales are reported at former prices. Singapore, of fair quality, has been sold at 6d spot, also some parcels near at hand at same price. For arrival there are sellers of distant shipment (s) at $6\frac{1}{16}$d.

There were no offerings at Wednesday's auctions.

WHITE is also slow of sale. For arrival the only business reported is a sale to the Continent, *viz.*, 25 tons Singapore August-September, and September-October shipment at $8\frac{11}{16}$d c.i.f. Sales of Singapore have been made on the spot at 9d, and of Penang at $8\frac{5}{8}$d.

Only 100 bags fair limed Penang were brought to the hammer on the 21st instant, and they retired at $8\frac{3}{4}$d per lb.

GINGER.

Cohin in very poor request. 51 cases 114 bags were offered, of which 34 bags slightly mouldy brown rough Calicut sold at 36s 6d, 38s being required for the sound, 65s for medium cut, and 50s per cwt for small cut. Privately business in medium and small washed rough at 37s 6d to 38s 6d per cwt. as in quality.

Jamaica.—With some difficulty holders were able to quit 28 barrels of the 463 barrels catalogued; prices were without material alteration for the commoner lots, but 1s per cwt. dearer for the better qualities, and embraced 42s 6d to 46s for middling to middling bold, 40s to 42s for low middling, and 37s to 39s per cwt. for dark part lean.

Mace was not represented at the auctions. Privately good pickings of Penang have been sold at 1s 4d per lb., being firm.

CINCHONA.

Although small supplies were catalogued for auction on Tuesday, only a languid interest was shown in them, owing to the heavy auctions at Amsterdam next week. Importers, however, were anxious to meet the market, and the average unit declined to 1½d, against 1¾d paid at the last London auctions.

The following table shows the quantity of bark offered and sold:—

	Packages offered.	Packages sold.
South American cinchona	940	910
East Indian cinchona	336	288
Java cinchona	236	44
Ceylon cinchona	228	155
	1,740	1,397

The following were the approximate quantities of bark purchased by the principal buyers:—

	Lbs.
Agents for the American factories ...	59,332
Agents for the Brunswick factory	28,933
Messrs. Howards & Sons	26,770
Agents for the Imperial factory...	26,179
Agents for the Mannheim and Amsterdam factories ...	9,270
Agents for the Paris factory	9,046
Agents for the Frankfort and Stuttgart factories ...	8,660
Druggists, etc.	29,603
Total quantity sold ...	197,793
Bought in or withdrawn	74,584
Total quantity offered ...	272,377

The prices paid were as follows:—

SOUTH AMERICAN.—About 900 bales Bolivian cultivated Calisaya quill offered and sold at from 6½d to 10⅞d, and broken quill at from 7⅛d to 8½d; 7 bales of flat cultivated Calisaya sold at 1s 3½d for sound.

JAVA.—Ledgeriana chips, 6d per lb.

CEYLON.—Ledgeriana original stem-chips, 5⅝d; branch, 2⅛d; hybrid original stem-chips and shavings, 3¾d to 4⅛d. Red, original stem, 3⅝d per lb.

EAST INDIAN.—Ledgeriana stem-chips, 2d to 5⅓d; branch, 4¾d; and root, 3d to 7d. Succirubra, original stems, 1¾d to 3⅝d; branch, 2d; and root, 2¼d to 3⅓d. Officinalis, stem-chips and shavings, 2½d to 5⅝d; branch, 3¼d to 5⅝d; renewed chips, 3¼d to 9⅛d; and root, 8½d per lb.

To the Amsterdam auctions to be held on August 29, 1,629 bales and 46 cases Java bark, totalling 139,864 kilos., have been added, so that the total amount to be offered is now 7,740 bales 293 cases, weighing 707,644 kilos. The manufacturing bark contains an average of 5·68 per cent. quinine sulphate, against 5·91 per cent. for the July auction, and an average of 5·26 per cent. for the ten auctions held in 1900. The bark contains 37,192 kilos. (1,300,000 oz.) of quinine sulphate. The stock in first hands at Amsterdam on August 14 consisted of 2,173 packages Government and 10,170 packages private bark, including the quantity to be offered at auction.

QUININE.

On Saturday last the "official" price of German sulphate was reduced a further ½d, now 1s 4d per oz. in bulk. Howards' price was also reduced 1d, and they now quote 1s 5d for bulk, and 1s 7d for not less than 1,000 oz. in vials. Quinine salts have also been reduced. The relapse which we noted last week in second hands has continued and with a very dull market, the spot price has dropped by fractions to 1s 1½d, with a small business thereat. October delivery has sold at from 1s 1⅞d down to 1s 1½d, and December at 1s 2d, but there were sellers to-day at 1s 1¾d in this position. The market closes quiet.

(AVERAGE FOR ALL INDIA 8·81d., AUGUST 23RD.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price.
Travancore ...	**739**	**6·50**												
Arnakal ...	144 p	6¾	18	7	44	6¼	67 p	7¾	2	4½	...	...	13⅓c	3 4½
Fairfield ...	125	6¾	23	8	52	6¼	28	8	14	5¼	...	...	8	4¾
Ladrum ...	171	6½	89	6½ 8	40	6	...	...	23	5	...	...	19	5½
MD ...	55½c	5¾	32½c	6½	17½c	4¾	...	...	6½c	3¾	...	...	...	...
Penshurst	164 p	6½	26	8	88	6	22	7½	...	...	...	...	28½c	4¾
Trav T East Co Pa	80	6	20	6¼	26	5	20	7⅛	9	4¾	...	...	5	5¼
Wynaad ...														
Chulika ..	44 p	7	23½c	8½	19	6¼	...	...	...	...	...	...	2½c	5½

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

CROSSE & BLACKWELL'S, LTD.

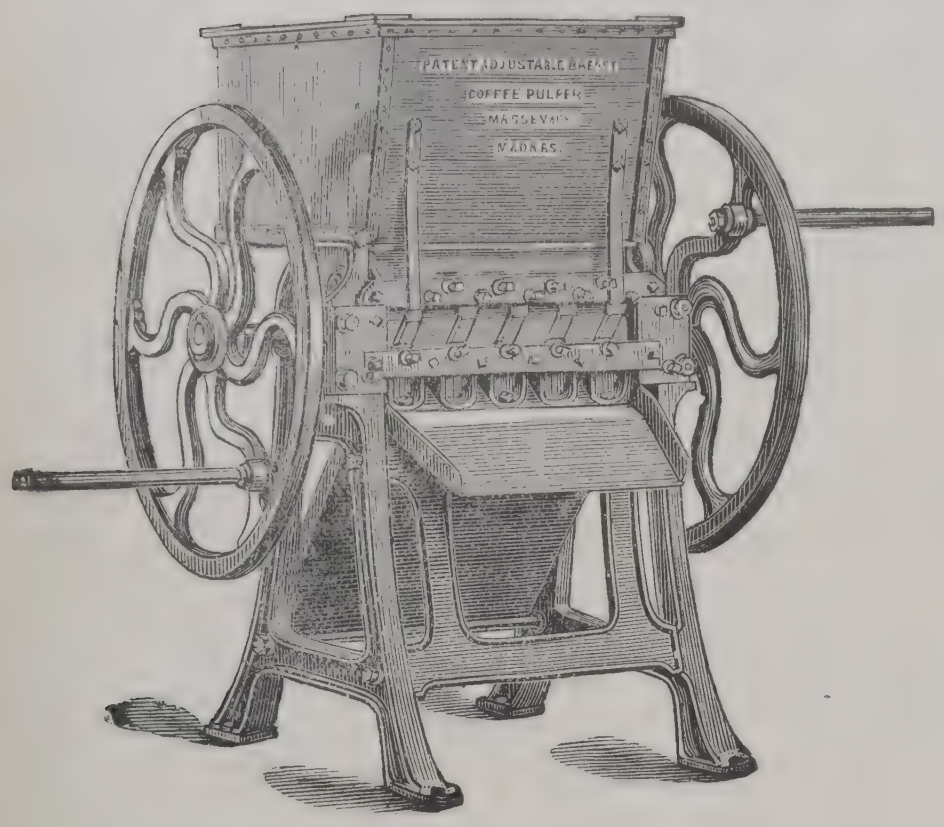
By Special Warrant Purveyors to The Queen AND Empress of India.

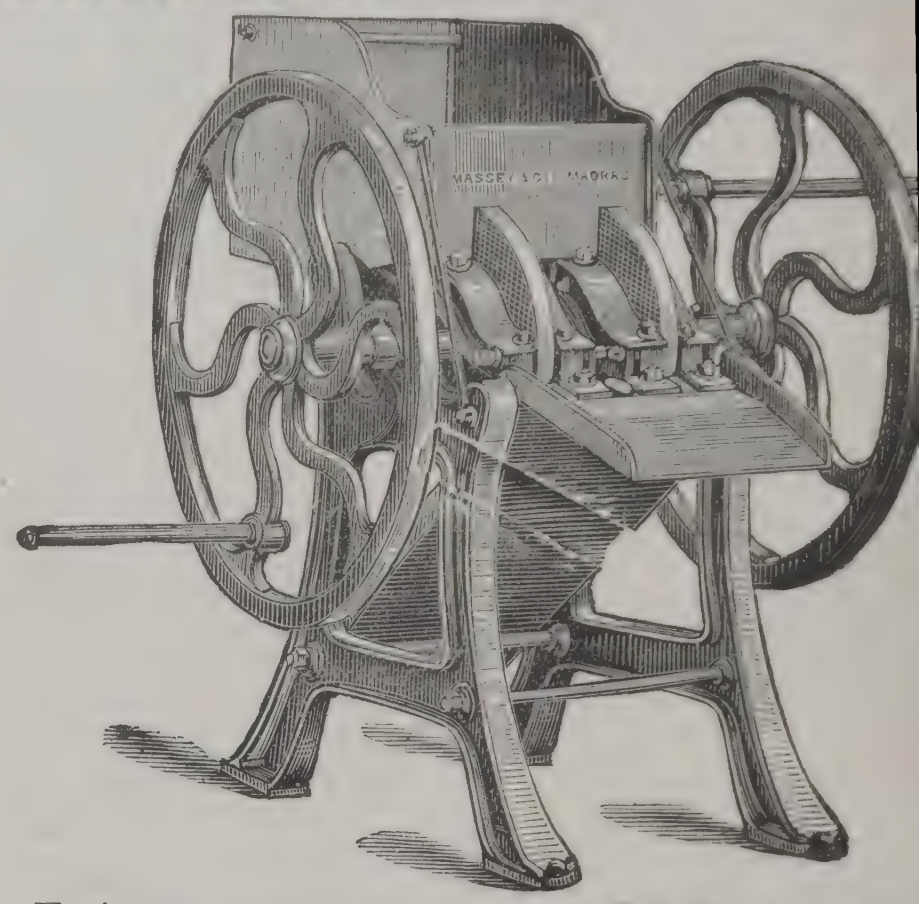
CELEBRATED OILMAN'S STORES.

[w. 1-10-98 -t.f.o.]

MASSEY & CO.,

ENGINEERS AND IRON FOUNDERS, MADRAS.





Engines with Pulpers supplied and erected. Estimates, Lists of users of Oil Engines and Pulpers and current Price Lists on application to

MASSEY & CO.,
MADRAS.

Notice is hereby given for general information that application having been received for the purchase of the under mentioned land, under the Waste Land Rules, it will be put up to public auction before the Assistant Commissioner of Coorg at Mercara at noon on Friday, the 1st November, 1901, and sold to the highest bidder above the upset price.

No.	Name of Applicant.	Name of Land.	Taluk, Nad and Village.	Area in Acres.	Value of Timber, Sandalwood and Bamboos.			Upset Price.			1/10th of the value of Timber and Sandalwood recovered.			Survey charges received.			Fees for engrossing Title-deed.			Annual Assessment.
					RS.	A	P.	RS.	A.	P.	RS.	A	P.	RS.	A.	P	RS.	A.	P.	
1	Mr. W. Prager ...	Abyal Paisari. Surey No. 249.	Mercara Taluk, Horoor Mudigerinad, Eralevalmudi Village ...	10·56	221	8	9	245	9	9	22	1	6	...	...	...	2	0	0	From 1st November, 1905, at one rupee annually per acre and from 1st November, 1913, at two rupees annually per acre on the whole area.
	Mr. H. G. Parsons ...	Manjacolly Estate. Survey No. $\frac{134}{1}$.	Padinalknad Taluk, Bengnad, Kuengerinad Bettathur Village ...	169·53	253	14	6	625	12	6	26	0	0	...	..	..	2	0	0	

For conditions of sale apply to the Commissioner of Coorg, or to the Officer conducting the sale.

COORG COMMISSIONER'S OFFICE,
Dated Mercara, 25th July, 1901.
[a. 31-8-01—28-9-1901.]

(Signed) G. F. MEIKLEJOHN,
Commissioner

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

VOL. VI.] MADRAS, SATURDAY, SEPTEMBER 21, 1901. [No. 38.

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ADVERTISEMENTS.—The charge for line advertisements is As. 4 per line for the first; As. 3 for the second, and As. 2 for the third and succeeding insertions. Five-line (or shorter) advertisements from Subscribers will be inserted for three issues for One Rupee; non-Subscribers will be charged Two Rupees.

DOMESTIC OCCURRENCE.—The fee for inserting a domestic occurrence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 27th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Coorg.

Polli Betta, 17*th September*.—*Weather*—There has been some rain during the past week—1·40 inch on Monday. Coffee looking very fine. *Labour*—Abundant. *General Health*—Good.

THE MARKETING OF COFFEE.

Coffee is a crop that has to undergo a process of preparation after being grown before it can be placed on the market. It is not enough to grow the berry. To know how to grow this, is one thing; to know what to do with it after the crops are grown, is another. We take it that every coffee-planter in South India is capable of seeing that his crop is properly prepared for the curer; but it may be well to remark that mistakes on the Estate cannot always be rectified at the curing mill; and that every bad sample of coffee sent out as "Mysore," "Coorg," "Nilgiri," etc., damages the reputation of a whole district, perhaps even of "East India" coffee generally. Indian coffee should command a much high average than Brazilian, because of its general superiority. There is little room for doubt however, that the margin between prices of East India descriptions and Brazilian is growing narrower. Either Brazilian is winning a better reputation or Indian is losing prestige. Every planter who, by carelessness, or neglect, or ignorance, helps to bring such a loss of prestige about is doing irreparable harm to his neighbours. We do not for a moment suppose that things happen here such as

are said on excellent authority to have occurred in Jamaica, but the fact that such ridiculous things should happen in that island ought to make planters here extra careful to see what it is that is really sent to market. The small settler system in Jamaica appears to lead to strange results when the coffee is packed. Mr. DE MERCADO recently stated there, in public, that he had in his office a museum of foreign substances found in bags of coffee sent to his firm. Among them were such things as pumpkins, a pair of baby's shoes, a chisel, a hammer-head, empty tins, several boots, and, in fact, pretty nearly every known article in the world. This was the result of gross carelessness. The people who packed the bags at the country shops were not dishonest; they simply let them lie about open, and when they emptied, say, a tin of condensed milk, it was the most natural thing in the world to throw it into the coffee bag, and perhaps the opener as well. Things are so bad in Jamaica that Mr. DE MERCADO states that experience has taught him that he dare not send away coffee without repacking it, or the people with whom he did business abroad would think he was not an honest man, and would write to tell him that when they wanted to buy hammers and chisels they would prefer to go to the hardware store.

We have no fear of this sort of thing here, but have referred to the above in order to give force to an exhortation to coffee-planters in India to see that their crop is dealt with in a cleanly manner, from beginning to end. Absolute cleanliness is the first essential in handling a crop. Barbecues, store-house, packages—all must be kept scrupulously clean. The result will be that the expense of placing the coffee on the market will be reduced. Railage will not have to be paid on dirt. The curers will not have to handle a large percentage of "foreign matter" with the coffee. Moreover, if the curers constantly receive coffee in a very clean condition their own inclination towards doing clean work and sending forward bags of clean coffee will be encouraged; and even the most enterprising firm is none the worse for receiving a little encouragement occasionally. What we have been urging is that planter and curer should both so work as to make the very best of the quality of coffee raised, so that the coffee may be put on the market in the best possible condition and the most attractive form, with a minimum percentage of extraneous substances included in each bag.

Another important point in the marketing of coffee is the cost of transport. Some little progress may be said to have been made, quite recently, towards a reduction of railage charges on coffee in Southern India; but a good deal remains to be done. In regard to steamer freights there is much greater room for improvement. Brazil gets a great advantage because of the immensity of her production and the fact that almost the whole crop is shipped at two ports. This concentration of cargo at two ports cheapens freights and expedites loading. In Southern India we cannot very well make up whole cargoes of coffee, and, as a result, a much higher rate of freight has to be paid. The matter is not one that can be put off, however. To a great extent the future of Indian coffee turns upon the solution of the problem of lowering the cost. Brazil has succeeded in lowering the cost, Mexico is producing at a very low cost. Everywhere there has been a downward tendency, and India must adapt herself to the situation. Rail and steamer freights should receive the closest possible attention, and every effort should be made to bring down to the very lowest point the cost of producing coffee and placing it on the market.

THE COMMISSIONER OF ASSAM AND THE PLANTERS.

In our U. P. A. S. I. section we publish a letter from t Hon'ble Mr. G. L. Acworth to the Secretary, U. P. A. S. (Incorporated). It seems to us that what Mr. Acworth writ is sound common sense. The facts to which he alludes ar no doubt, well known to his hearers. Mr. Cotton, Chief Co missioner of Assam, recently wrote about Assam planters if they were, as a class, brutal, barbarous slave-drivers "sweaters." He made the astounding statement that the prese average rate of wages paid to unskilled labour in Assam more than double that of the wage prescribed by law for A Coolies. He gave figures to support this statement, and wa no doubt, led by them into the diatribe in which he indulge The Hon'ble Mr. Buckingham challenges every figure, app rently with excellent reason. He shows that Mr. Cotton figures are entirely wrong, and incidentally remarks :—

"For any comparison to be drawn from the pay of rural labou conditions must be equal; permanent work, and family earnin are the back-bone of garden labour. If 0-6-0 a day or Rs.1 month is so easily procurable by unskilled free labour, why do n coolies leave gardens for this enhanced rate? No direct answ has been given to this pertinent query, although the point w raised by me in Council; still a most damaging admission appea in the Assam Police Administration Report for 1900, submitted the Inspector-General of Police, completely upsetting Mr. Cotto statements."

Mr. Buckingham adds :—

"Until therefore the Hon'ble Mr. Cotton informs the public as where he got his figures, as quoted at the commencement of th letter, and is prepared to vouch them otherwise than by me assertion, we must come to the conclusion that he has been misle and as his statement was made with the greatest publicity t least we can claim is, that they should be as publicly withdraw or substantiated up to the hilt."

In the meantime planters in Southern India might we adopt the Hon'ble Mr. Acworth's suggestion and show the sympathy with their brethren in the North.

SOME BRAZILIAN STATISTICS.

From various tabular statements that appeared in th *Brazilian Review* we obtain certain information, whic is retabulated, below for convenience of reference. In th first place we find a note of comparative entries in bags 60 kilos. (official figures) at Rio and Santos :—

—	1897-98.	1898-99.	1899-00.	1900-01
July	966,467	698,540	1,075,766	788,9
August	1,667,396	1,227,530	1,575,678	1,319,5
September	1,402,003	1,263,255	1,460,986	1,536,3
October	1,277,623	1,045,757	1,086,472	1,668,2
November	1,001,813	627,713	903,663	1,030,2
December	821,504	691,018	613,570	750,5
January	693,455	743,012	525,276	680,0
February	595,407	565,141	510,444	750,6
March	725,134	610,053	417,055	892,7
April	499,661	369,554	239,640	559,3
May	449,847	366,975	176,303	468,7
June	356,668	537,349	332,023	543,5
Total Entries for the Crop-year.	10,457,368	8,745,897	8,987,416	10,989,1
Transit	...	...	...	...
Total including transit ...	10,690,309	8,893,976	9,107,088	10,988,1

Towards the above totals the contributions of Rio and Santos separately in each year were :—

	1897-98.	1898-99.	1899-00.	1900-01.
Rio	4,537,716	3,320,161	395,337	3,015,968
Santos	6,152,593	5,572,816	5,711,751	7,473,118

Official Stocks.

	Rio.	Santos.	Both.			
	1900-01.	1900-01.	1900-01.	1899-00.	1898-99.	1897-98.
July 31 ...	164,191	483,100	647,291	832,945	718,169	714,182
August 31 ...	262,459	655,669	918,128	1,310,195	984,221	1,312,714
September 30 ...	292,280	1,013,882	1,306,162	1,328,317	1,505,491	1,526,090
October 31 ...	281,717	1,259,699	1,541,446	954,830	1,334,573	1,581,896
November 30 ..	249,362	1,323,710	1,573,072	913,370	1,146,500	1,520,746
December 31 ...	218,632	1,246,078	1,464,710	817,274	959,113	1,231,257
January 31 ...	260,269	1,171,129	1,434,398	612,928	895,222	1,161,627
February 28/29	217,528	1,195,070	1,342,598	610,604	833,110	1,057,029
March 31 ...	252,235	1,119,002	1,371,237	681,610	737,116	890,581
April 30 ...	217,330	885,798	1,103,128	571,299	623,516	500,993
May 31 ...	179,733	590,571	770,304	421,879	556,181	531,539
June 30 ...	162,055	398,833	560,918	430,983	575,724	560,924

The following statement shows the various destinations for which Brazilian coffee was cleared during the crop years 1900-01 and 1899-00.

	Grand Total for crop-year 1900/1901.	Grand Total for crop-year 1899/1900.		Grand Total for crop-year 1900/1901.	Grand Total for crop-year 1899/1900.
New York ...	4,462,414	3,849,412	Tripol ...	...	375
Hamburg ...	1,843,445	1,524,309	Gothenberg ..	...	375
Trieste ...	584,468	551,410	Jaffa ...	...	375
Havre ...	786,090	921,556	Scio ...	625	250
Rotterdam ...	961,553	710,451	Dardanells ...	125	250
Antwerp ...	385,587	336,737	Syra ...	...	502
Baltimore ...	229,303	274,058	Messina ...	462	250
New Orleans.	526,631	213,063	Tunis ...	250	125
Merscilles ...	198,489	179,656	Lagos ...	250	125
Cape ...	119,410	141,791	Cavallo ...	...	125
Genoa ...	139,419	122,950	Barcelona ...	10,939	125
Copenhagen..	116,517	114,684	Bougie ...	500	125
River Plate ..	99,704	96,446	Livorno ...	530	125
Channel f.o ..	61,100	51,300	Caifa ...	...	125
London ...	54,524	42,382	Catania ...	59	50
Galveston ...	13,271	41,663	Dakar ..	20	40
Bremen ..	67,250	42,931	Liverpool ...	1,332	20
Constantinople.	27,660	36,302	Palermo ...	...	14
Alexandria ...	20,600	30,520	Coastwise ...	252,805	231,230
Smyrna ...	21,951	26,183	Cadiz ...	4,592	
Venice ...	16,375	20,625	Malaga ...	6,915	
Fiume ...	14,890	19,794	Santander ...	1,075	
Salonica ...	8,875	15,740	Oporto ...	189	
Oran ...	13,700	13,552	Varna ...	475	
Algiers ...	6,425	11,325	Christiania ...	1,613	
Odessa ...	16,544	10,700	Braila ...	125	
Bordeaux ...	10,722	12,087	Vigo ...	181	
Amsterdam ..	...	8,500	Stockholm ...	250	
Gibraltar ...	21,425	7,773	Wiborg ...	425	
Phillippeville	3,100	3,253	San Francisco	250	
Chili ...	10,409	3,210	Rhodes ...	625	
Beyrouth ...	3,250	2,750	Kiresur ...	125	
Southampton	4,718	19,744	Aivali ...	125	
Bulgaria ...	...	2,125	Samos ...	125	
Samsoun ...	1,750	1,750	Port Said ...	500	
Trebizonde...	1,501	1,176	Riposto ...	55	
Dedeagatch...	750	975	Syrracusa ...	18	
Piraeus ...	750	875	Taranto ...	800	
Mostaganem..	...	750	Leixoes ...	21	
Naples ...	2,067	602	Seville ...	2,081	
Lisbon ...	46	599	Gijon ...	225	
Genda ...	...	550	Valencia ...	125	
Galatz ...	...	500	Manchester ..	30	
Mytilene ...	500	500			
Malta ...	750	500		11,145,775	9,702,471
Bourgos ...	...	475			

We have given the above at length in order that every planter interested in the development of consumption of *Indian* coffee may see where the chief attack should be directed. A glance over the above figures will show, not merely to what markets Brazil coffee goes, but also those in which it is gaining and there in which it is losing ground. These are points that should be studied.

Maximum and minimum prices of Rio No. 7 per 10 kilos. at Rio :

Rio No. 7, per 10 kilos.			1900-1901 ...	...	Max.	8,815
					Min. Réis	4,289
Do.	do.	do.	1899-1900 ...	...	Max.	10,894
					Min. ,,	6,060
Do.	do.	do.	1898-1899 ...	...	Max.	8,987
					Min ,,	6,264
Do.	do.	do.	1897-1898 ...	...	Max.	10,622
					Min. ,,	7,353

THE CEYLON TEA CAMPAIGN.

Recent remarks on the conduct of the Ceylon Tea Campaign in America appear to have exercised considerable influence upon the minds of the members of the "Thirty Committee." At a meeting held at Kandy last Saturday, when twenty-six members were present, it was resolved in the first case that in the opinion of the Committee the tea cess should be increased; on the other hand, only £4,000 was voted to Mr. Wm. Mackenzie for the purpose of pushing and advertising Ceylon Tea in America during the year 1901. This is a very big drop from the £10,000 previously voted. As regards the Cess, the Planters' Association will be requested to ascertain the opinion of tea producers as to increasing the cess, in view to giving further assistance to the Green Tea industry. It was further resolved that on the grant for green teas at 5 cents per lb. ceasing under the present scheme, the grant be fixed at 5 cents per lb. on a further 2,000,000 lbs. ; (II) that an estimated probable balance of £6,000 sterling, remain in abeyance with a view to further assistance to the Green Tea industry at a later date. In reference to the Brokers' Certificate for green teas, it was resolved that, in view of the increasing trade in Ceylon green teas, the four Brokers' firms —Messrs. Forbes & Walker, Somerville & Co., E. Benham & Co., and E. John & Co.—be requested to arrange among themselves for a Committee to pass green teas for the standard.

For the work of pushing and advertising Ceylon Tea on the Continent of Europe £2,500 was voted, which will include Mr. Renton's salary.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

Trade with Persia.

Mr. E. G. Foley, who is travelling in Persia on behalf of the Indian Tea Association, has written as follows, under date Meshed, Persia, 2nd August 1901 :—

I met the leading merchants here last evening at tea about, 150 of them, at the house of Shaik Faiz Mahomed, the third biggest merchant here, and a British subject. Besides myself, our Consul-General and his Private Secretary, the Manager of the Imperial Bank of Persia and his assistant were also present. The samples of tea and indigo were shown round and examined, and the tea used was from the Orange Pekoe I have brought up. The Orange Pekoe and

the two kinds of green tea were very much approved. On their enquiring prices I quoted Quetta prices, *viz.*, 9 annas, 8 annas, and 7 annas for Orange Pekoe, Pekoe and Pekoe Souchong, and for the green tea the price marked 10 annas. Then I was asked if I would bring the tea up to them and what credit would be allowed. To this my reply was that we would undertake to deliver the tea at Seistan on their paying cost of carriage and duty. As regards credit we were not prepared to do that, as our prices were for cash and wholesale, but no doubt there would be no difficulty about payment, as the Bank here would advance them the money on the lien of their goods. As the Bank Manager was present, he was asked if the Bank would do this. His reply was that it could be arranged with approved customers, and that he would write to head-quarters for instructions. If sanctioned, which no doubt it will be, there will be no necessity for any credit, which runs here from three months to three years, prices varying according to length of credit. As regards wholesale prices, tea similar to the Orange Pekoe, but not quite so good, sells at 18 *Krans* per *man* of 6½ lbs. (3½ *Krans* equal Re.1), which is retailed at from 22 to 24 *Krans*. Pekoe at 15 to 16 *Krans* per *man* wholesale, over retailed at 18 *Krans*. What these people require is a cheap but pretty tea to look at, their liquors being of no consequence ; as, for example, the white tipped Java teas which sell here at 24 to 25 *Krans* wholesale and 30 *Krans* retail. The general opinion here is that our Orange Pekoe is a better tea than the white tipped expensive Java tea at its value, and that it would oust the Javas from the market ; besides, our teas, Orange Pekoe and Pekoe, would also do for the Russian market, where the white tipped Java teas are not used or liked. Samples are being distributed to these merchants, and I hope to see them individually soon and hear what they have to say. Some of these people have Agents in Bombay, where they buy Dehra Dun teas cheap at about 5 annas per lb. and think our teas expensive.

With regard to the Russian market, I will obtain information to-morrow from the Jews and Armenians who deal with Russia, European and Asiatic, more than either Persians or Afghans and Pathans. The duty on tea in Asiatic Russia has been raised from 25 roubles per pood of 36 lbs. to the same standard as in Russia for black tea, *viz.*, 31½ roubles per pood, and as regards green tea and some tea called spring tea which I have not yet seen, from 14 and 6 roubles per pood to one uniform duty of 12 roubles.

An enormous quantity of tea is used here. There is a large covered-in bazár where nearly every fourth or fifth shop sells tea, either as leaf or made for drinking. Asiatics of all kinds and from different countries are found here, Pathans, Afghans, Turkomans, Armenians, Jews, and Hindus—goods of all descriptions and from different countries are sold here. From what I have seen of the people and learnt from our Consul-General and Indian Traders, it appears to me that goods will have to be brought to the Persians. They are not adventurous, and any trade with Russia would have to be carried up through native agents, as though there would be no direct opposition, yet owing to Russian jealousy and wish to see as much trade as possible diverted into their own country and to be brought by their railway, there would always be a passive opposition in the way of delaying goods or in suddenly, without warning, raising the duty. Those Persians and others who trade with Russia when necessary become Russian subjects and so escape the extra duties. Regarding the Russian trade, I have still a great deal to find out, which I will learn from the Jews and Armenians. The Russian officials are very reticent as regards any information to British subjects and traders. The Russians would like to see the new Nushki route closed and will try to put every obstacle in the way of increasing the trade by that route with Persia, and more so with Russia.

The great Pathan merchant, Shaik Faiz Mahomed of Dehra Ismail Khan, is very much taken with the samples of *compressed tea that I showed to him, and is sanguine that it will sell well in Afghanistan, with which place he trades largely (Heerat and Kandahar), and in his own Pathan country. He would like 40 lbs. sent to him for trial. He valued it at 15 *Krans* per 6½ lbs. or 10 annas per lb. Should any of this have been sent from home, please send two ½ chests or boxes (four if possible) of 40 lbs. each for Faiz Mahomed and Captain Webb Ware to distribute in the Pathan and Baluchi country—to Quetta to await my arrival.

Regarding the peculiarity of prices for tea being nearly the same at Birjand as at Meshed, though the unit of weight or *man* here is double that of Birjand, the only explanation I can get is that the quantity sold at Birjand is not nearly so large as that here, and that it is done with a view to profit. Market prices here are ruled by the quantity of the article available in the market. Our Consul-General tells me that if there is a delay in caravans arriving, prices may go up 50 % with a jump. No cornering is allowed by the Persian Government, *i.e.*, were a caravan to be delayed and any merchants were to combine and buy up all of any article and try to sell it at a prohibitive price, the Government would step in and make them reduce the price.

* * * *

The *Fort St. George Gazette* contains a draft of the rules it is proposed to make under Section 16 of the Madras Coffee-stealing Prevention Act, and notice is given that any objections should be submitted to Government before the 7th September, 1901. This is obviously a blunder, as the notification was not then published.

* * * *

The rules are much what the U. P. A. S. I. asked for, the sole difference apparently being the addition in the tabular forms of returns of a few columns : In the Estimate (1) "Name of the Police Station within the limits of which the plantation is situate" and (2) "Actual quantity harvested in previous year." In the return of Production (1) Name of Police Station as above, quantity harvested as above, and a Remarks column.

* * * *

Government has been asked to supply a few copies of the G. O. on the above subject for circulation to the Council of the U. P. A. S. I. Some interesting correspondence is attached but the paper has not been "laid on the Editors' table," so cannot be reprinted here.

* * * *

Assam Planters and the Chief Commissioner.

The Hon'ble Mr. G. L. Acworth writes :—I do not know if District Associations have followed the accounts in the Press of the systematic oppression the Assam Tea Planters are undergoing at the hands of the Hon'ble the Chief Commissioner of Assam. In any event it seems to me that it would only be right and proper, that each District Association

* These samples were tablets of tea compressed by machinery.

should at its next General Meeting pass a vote of sympathy with the Assam Planters to be forwarded to that body through the Indian Tea Association. I am strongly of opinion, that this is an occasion when all planters should stand by each other, whether they come from the North or the South, whether their product is tea or coffee.

This is not a question of legislation, in which our interference would be uncalled for and impertinent, knowing as we do nothing of the local conditions. It is an opportunity of protesting against the stirring up of labour against capital, against exciting racial feeling, and against an exasperating policy of pin-pricks on a body of men, who already have enormous difficulties to contend with, and who have exhibited much pluck and a determination of overcoming them, which in any other man but the Chief Commissioner would have extorted admiration in lieu of hostility.

Messrs. Binny and Co. have kindly sent a copy of the following report by Mr. A. M. Elder on

The Leeming System

of Coffee Cultivation, copies of which have been circulated to the Councillors of the Association :—

(*Report.*)

MESSRS. BINNY & CO.,
Madras.

THE LEEMING SYSTEM.

MADRAS, 22*nd August*, 1901.

DEAR SIRS,—As requested by you in your letter of the 9th instant I went to the Shevaroy Hills and visited Scotforth, Mr. Leeming's Estate, on the 12th and Kooderay Panjan Estate of which he is manager on the following day, and beg to report as follows:

The system of cultivation carried out on these properties has, for the sake of convenience, been called the Leeming System, but Mr. Leeming does not claim to have discovered anything new, he says he has merely thought out and applied to coffee growing the principles carried out by practical and scientific growers of fruit trees in various parts of the world, and his system, as it stands at present, is the result of careful observation and experiment carried on over several years. I was taken over every field in these two estates so that I might see for myself the effect of the system on both good and poor soils, Mr. Leeming answering all my questions without any reserve whatever.

The system may be said to have been instituted seven years ago when he ceased to either prune or handle and allowed suckers to grow, the trees being left to nature, but he continued to cultivate and manure the soil more carefully than ever. The result was that his crops increased and his trees suffered less from leaf disease, but it was apparent that they were so crowded that they could not give nearly as good crops as they might. In 1898—only three years ago—he began cutting out in field No. 10 of Scotforth reducing the number of trees from 27,000 to 13,500, just half, and giving them a space of 12 x 12 feet in which to spread, *i.e.*, about 600 trees per acre. In 1899-1900 he picked 1,500 struck bushels of ripe cherry from this field, equal to nearly 7 cwts. per acre. Last season he picked 1,700 bushels, nearly a ton more than in the previous year, and in April he again thinned out the field to 10,200 trees and the estimate for the coming crop is nearly 10 cwts. per acre. These figures I took from the estate books myself and are unquestionable, and a better record than this can hardly be imagined. The other fields were similarly treated in 1899 and 1900 and now his object is to finally get about 300 trees per acre and no more. In field No. 3 of Scotforth this has been done.

No sooner had the trees got root and air space then they at once began to fill out laterally and the long branches came sweeping down to the ground, thereby increasing the bearing area enormously and suckers grew very slowly. What suckers there are were grown before the thinning out process began. These trees are now 10 to 12 feet high and the branches have a spread of over 15 feet and I agree with Mr. Leeming in thinking it will take another five years to see them at their full development. I merely give the figures of field No. 10 because it was the first to be cut out, but those relating to the other portions are equally good. When thinning out from 600 to 300 trees per acre, he first cuts off the primaries leaving the suckers for a couple of years, thus giving air and some root space to the trees that remain, but he is not certain that it would not pay better to take them out at once.

When going over Kooderay Panjan be took the same trouble in order that I might see part of each field. I remember seeing this estate some eight are nine years ago, when although it grew very fine oranges and silver oaks the coffee was very poor indeed, now, under this system, there is a complete transformation, oranges, etc., have disappeared and avenues of great coffee shrubs healthy and vigorous, with dark glossy leaves and laden with crop have taken there place. When Mr. Leeming took charge of it eight years ago its crop was 1½ ton off 65 acres, last year off the same area with some little assistance from the young coffee he picked 25 tons. For seven years he never pruned and in 1898 he cut out to 600 trees per acre, and there is a good deal of it now thinned to 300 trees per acre. The coming crop is estimated at 11 tons and, judging from the wood now making, it should easily be followed by 30 tons. The way trees that were a mass of sticks from over bearing both here and at Scotforth are making new wood is simply marvellous.

The new clearings on both estates are planted 7 x 7 and 8 x 8 feet apart and beyond topping the trees that are intended to be permanent, they have never been touched with a knife. Those trees that are to be cut out eventually will have their primaries cut off and a crop or two taken from the suckers. I have never seen finer clearings, soil, climate, and deep cultivation being all in their favour.

Regarding cultivation Mr. Leeming believes in deep drains (3 to 4 feet deep) and 40 feet apart to enable those large trees to send their feeding roots deep into the soil; a six-inch digging with quintanies once a year; and ¾ lb. bone meal, poonac and nitrate of potash scattered evenly over the surface and dibbled in. The supervision of applying the manure has been very greatly simplified under the new system and each individual tree can be studied and manured according to its needs.

He is also growing a legume (a creeping pea) in the middle of the rows, one to each tree, which, when growing, will cover the ground and act as a mulch in preventing wash and loss of moisture and induce the earth worms to come up and make casts. I was shown examples of these casts as we went along. Just before flowering the legumes will be dug into the soil and will enrich it with a cheap store of nitrogen. He very kindly gave me a supply of the beans to try in our district.

The advantages of the Leeming system as compared with our present method are:—Economy in that no pruning or handling are required and only half the quantity of manure is necessary. (Mr. Leeming believes in manuring at *least* once a year.) *Improved quality of bean* as leaf disease is not nearly so virulent now that none of the leaves, which are the lungs of the tree, are sacrificed in pruning and the crops are not only more regular but are much better. These large trees are not nearly so easily affected by a bad blossoming season although they will always do best in a good one. Mr. Leeming's figures speak for themselves, the results are, as Mr. Hodgson remarked at the Conference of the U. P. A. S. I., "simply astounding." Whether we in Mysore are ever likely to achieve such results is doubtful, as the Shevaroys are, generally speaking, much more favourably situated as regards soil, climate and rainfall, but even if we only receive a third of Mr. Leeming's success we will improve our position enormously.

The system has been objected to on the score of "borer" but I find Mr. Leeming has had worse "borer" than we ever get and yet he has no fears on that score. He says it is only destructive on the clearings and that old trees are rarely attacked as the branches are close and come down to the ground thus protecting the stem; and this is borne out by the fact that those trees that have suffered have been bored near the top when the damage amounts to very little. It has been alleged that if trees are neither pruned nor handled they will lose their primaries, but this is not the case if they get room to spread. In fact the tree seems to change character and to adapt itself very readily to its new conditions. Mr. Leeming is in favour of the system on poor soils even although the trees do not crowd each other, for although there may be plenty of air space the roots want much more room in which to search for

nourishment than in rich soils. I do not anticipate that the results from cutting out will show themselves nearly so quickly on our estates where the trees have been pruned and handled, as on Mr. Leeming's that had been untouched for several years, and this is a fact that must be borne in mind.

Deep cultivation, fairly liberal manuring with earth mulching (if nothing else is available) in the shape of light diggings are absolutely indispensable to the success of the system and, if possible, small doses of nitrate of potash in March or April; and the growing of leguminous plants as green manure should also be tried.

Mr. Leeming took Dr. Watts, the Reporter on Economic Products for the Government of India, over Scotforth when he visited the Shevaroys and had the satisfaction of being told by that great authority on agriculture that *scientifically* his system of cultivation is the correct one. That it is a success from a commercial point of view the figures given above amply prove.

He has done the pioneering ably and well and it is a satisfaction to his friends that, unlike some pioneers, he is reaping his reward.

From the Shevaroys I went with Mr. Leeming to Coimbatore to see the works of the United Coffee Growers' Company, of which he is manager. There he showed me the whole process of roasting, grinding, and tinning coffee and during the whole process the product is not once touched by hand. The machinery is of the most up-to-date kind obtainable, the roaster being a German invention which roasts beans of all shapes and sizes evenly and thoroughly and, it being possible to do this, now accounts in a great measure for the falling off in the price of "peaberry."

The tin for the cans is imported in sheets and by means of three separate machines is manufactured into cans of various sizes in a very short time.

Considering that with the exception of Mr. Leeming and his assistant the whole process of manufacture is carried out by local native labour that had to be trained after the works were built and the machinery set up, *i.e.*, within the last few months, the smoothness and celerity with which the manufacture is carried out speaks volumes for the management and augurs well for the future of the Company.

What was perhaps of most interest to me from a planter's point of view was Mr. Leeming's method of testing the samples of the various coffees and learning their values from a Roaster's point of view before buying on the open market. He spent the greater part of one morning showing me how he performed these tests. Four cyclinders heated by gas and driven by a little hot air engine can each roast ¼ lb. of raw coffee. Having selected samples of cherry and parchment coffee and laid them out on his table he carefully roasted a small quantity of each and we then compared the roasted beans and I was shown how the finer samples differed from the others, the low grade cherry containing a considerable proportion of pale looking beans:—"pales"—that are useless and almost tasteless, while those of a parchment sample were "shelly" and containing more woody fibre had less "body" than the finer grades. He then weighed out equal quantities of the roasted beans and having ground them in a hand-mill, put them into cups each of which were exactly of the same capacity. He then filled them with boiling water, stirred the contents and allowed them to stand for a few minutes, then skimming off the froth the liquid was found perfectly clear. The tasting process consists of using a clean spoon each time and taking a sip of the liquid drawing it well over the palate and spitting it out, each sample being tried over and over again. Even to an outsider like myself the variations between some of the samples was very marked, the most distinctive one being in the flavour of a high-grown Nilgiri coffee, which Mr. Leeming informed me was very valuable for blending purposes. He says good Mysores contain these properties which accounts for the high price they receive on the home markets. When the low grade sample was tried the liquor was distinctly inferior and lacking in "body" and one could easily understand how unprofitable such coffees must be where the proportion of "pales" is large. However, with an added quantity of Liberian to give it "body" he hopes later on to produce a cheap coffee that will suit the pockets of the poorer classes and thus secure the great market that lies at our doors, and I hope the District Associations will see their way to assist the United Coffee Growers' Company, to develop this market and enable us to dispose of our low grade coffees in this country.

One experiment that Mr. Leeming has carried out here has solved what has been a vexed question to many planters, *viz.*, whether or not it is necessary to pick absolutely ripe cherry. He finds th the bean is fully developed when the cherry turns colour and th it should be picked as soon as it can be pulped as the "foxines so often complained of is frequently the colouring matter of t cherry going through the parchment skin.

The other advantages of being able to pick three parts ripe cher are obvious to all planters.

He also advises us not to pick any white fruit "billi hunnoo as it is from this that so many "pales" come and what so destro the value in the dealer's eyes of otherwise good parchment coffe Another piece of information he gave me and which he illustrate from samples, was that garbling ought to be more carefully don now than ever before and that all beans however slightly discoloure or irregular in shape ought to be put into "triage." He learne this from the dealers when going round the London market wit them. This past season he got his curers to treat his Scotfort coffee in this way and although it suffered equally with othe Shevaroy estates from drought the fact remains that it toppd th prices by several shillings per cwt. He says that it is possible tha his system may have had not a little to do with this improvemer the trees being stronger and better able to resist leaf disease, bu the more careful curing no doubt assisted.

In conclusion, I wish to express my obligations to Mr. Leemin for the trouble he took in showing me his estates and over the work for the admirable way in which he explained his reasons for every thing he did, and for the great kindness and hospitality he showe me.

The trip has been most pleasant and instructive.

I am, dear Sirs,

Yours faithfully,

(Signed) A. M. ELDE

NOTES.

"Ceylon Tea" in New South Wales.

A Ceylon planter, now visitin Australia, writes to the *Times* *Ceylon* from Sydney on the 24t August as follows:—"I have a sample of tea (Ceylon!) sol here for 4d. a lb. the other day. You never saw such dis graceful stuff in your life! The duty in New South Wale is 1d. per lb."

Cinchona in the U. S.

The imports into the Unite States for the twelve months ende June 29, 1901, amounted to 4,860,304 lbs., against 4,107,35 lbs. in 190 0. In auction 72 serons Huanoco quill sold a from 5¾d. to 6¼d. for fair to good and 3½d. for damaged from another catalogue 42 serons were bought in at 7d. pe lb., the limit being 6d.; for this parcel a bid of 5½d. wa refused.

Indian Tea Prospects.

The South Sylhet correspondent o the *Englishman* writing on the 10t says:—"Awful weather. Have not seen the sun for day and days. Quality must suffer in consequence; as for quan tity, how can it be good with a temperature below 80 degree and everything reeking with damp? and yet it's not heav rain; drizzle, drizzle, and heavy squalls of wind every no and again."

Indian Tea Exports.

The following figures of tea Ex ports taken from the Calcutta Cu toms daily entries are issued by the Indian Tea Association:— Quantity of Tea entered for export to the United Kingdo for the first half of September, 1901, £9,732,545; quantit entered during the corresponding period of last yea £9,147,367; total from 1st April, 1901, to 15th Septembe 1901, £56,747,882; total from 1st April, 1900, to 15t September, 1900, £64,954,426.

Calcutta Tea Sale. The shortage of the tea crop was again apparent at Friday's sale, when only 15,800 packages were offered, as against 22,600 same date last year. There was a good selection of Assam and Dooars teas, the latter District showing an improvement in quality, in many cases over previous invoices. Quality from other Districts is about the same. There was a good demand throughout the sale, and prices for all descriptions closed firmer. Australia, Bombay, and the Gulf buyers secured a good quantity.

Rubber in Paraguay. Rubber is not found in the wild state to any great extent in Paraguay, but attempts are being made to cultivate it, and it is thought that the most suitable species for artificial cultivation will be the Manicoba, of Brazil, owing to its rapid growth and general hardiness. The Manicoba is said to have given excellent results in Brazil and in Central America, and it is stated that the Paraguayan Government intends to offer special inducements to agriculturists in order to develop this industry.

Brazilian Coffee. The long spell of fine, dry weather which we have lately enjoyed has been highly advantageous to the coffee planter, says the *Rio News,* for it has been just what he needed for drying coffee. The season has been a favourable one, and the crop this year will not only be unprecedentedly large, but will be of exceptional good quality. Perhaps the planter will never have a better opportunity than the present one for making a modification in the method of marketing his coffee. The quality this year will be exceptionally good, and it is just the time for him to send it to market on its merits. Reducing all coffees to a few common grades, and destroying all individuality as to quality, is certainly detrimental to the industry.

London Tea Sales. The weekly special telegram, dated 12th instant, from Messrs. Gow, Wilson & Stanton to Colombo reports that the market generally shows a fractional advance, that for medium liquoring Pekoes and Broken Pekoes as well as for Common Pekoes and Broken Pekoes also showing a fractional advance. The price of fair liquoring Ceylon Pekoe Souchong is 5½d (a farthing up) and the average price of Ceylon tea sold on garden account this week was 7¼d (three-eighths of a penny up). The average of the corresponding week last year was 7d. Reuter reports that common and fine qualities of Ceylon tea realised full rates, being par to ¼ per cent. higher. Fair Pekoe Souchongs are quoted at 4¾d (same as last week) but the average for the week is 7¼d (a farthing up), 23,000 packages of Ceylon tea were offered for sale and 22,000 were disposed of; while of the 33,000 packages of Indian tea offered, 31,000 found purchasers, at an average of 8¼d per lb. (¼d down).

Plants and Electricity. M. Berthelot announces he has proved that the development of plants is affected by electricity. He has been carrying out the experiments at his country seat at Meudon, near Paris. A tower nearly 90 feet high is erected in the grounds, which M. Berthelot has been using for experimenting on the influence of natural electricity in transferring to plants free nitrogen from the atmosphere, and also for studying the variations produced on plants by altitude. One of M. Berthelot's experiments was directed to proving that a plant submitted to the influence of electric waves absorbs more nitrogen than another plant placed under the same conditions, but not influenced by electricity. M. Berthelot considers he is justified in supposing that he has fully demonstrated that free nitrogen in the atmosphere plays an important part in the life of plants, on the ground that crops of vegetables are obtained in high altitudes without the use of artificial manure, owing to the greater tension of the electricity.

Coffee in London. The short stock of all kinds, with the exception of Brazil, is beginning to tell upon values, says the *Produce Markets' Review* of 24th ultimo, and the trade generally both here and on the Continent have begun to realise that the heavy supplies, which were passed for auction immediately on arrival during the past two or three months, have either gone into consumption, or are being held firmly by dealers who understand values better than the importing merchants. As a consequence those who have not secured sufficient for their Winter trade are now trying to do so at the prices of last month, and find that there is an advance of from 2s to 5s, while the finest home trade sorts are so scarce that holders can obtain almost any price for such coffees. In the terminal market, in spite of very heavy receipts, the opinion gains ground that prices have dropped too low, and an advance of nearly 1s has taken place, while there is a much more general desire to operate than has been apparent for some months or more.

Indian Tea in London. The *Produce Markets' Review* of 24th ultimo says:—The quantity brought forward was larger than for some weeks past, and, as the market was easier in most cases, an improved business has been transacted. Most of the teas consisted of the finer sorts, mainly Assam growths, which continue to show desirable quality, but owing to the increased quantity values generally were distinctly lower than in the preceding sales. The trade appears to be operating cautiously by practically buying for immediate requirements in anticipation of the large supplies of this class reported to be coming forward. These teas will undoubtedly be in excess of last season, at any rate for a time, but the later shipments are reported to be inferior, and therefore at the recent decline in prices they are not likely to show much, if any, better value than the present supplies. There is still a comparatively limited quantity of the good medium descriptions, and consequently the small supplies offered have fetched extreme prices; this will no doubt be shortly remedied as the imports increase. For the common teas an easier tendency has prevailed and some of the new import sold as low as 4¼d, while a considerable quantity was withdrawn from auction, the market closing weak at the lower range of prices established. The latest reports put the export from Calcutta for this season as being still about 5,000,000 lbs. smaller than last year and no mention is made as to the probability of the deficiency being made up. This, however, has not affected the market as generally anticipated, which is in a great measure attributable to the excess of the stock here being larger than the falling off in the new crop. There were 34,969 packages catalogued for public sale and 8,601 withdrawn; the bidding was fairly active, especially for the more useful grades.

Mate Leaves. Cador, in an interesting paper on this subject (*Jour. de Pharm. et de Chim.*, 1901, ii. 162) points out that various observers have established the fact that not only the leaves of *Ilex paraguaiensis*, but also leaves of other species and even of plants not belonging to this genus, go to make up what is known as maté. Cador has examined twenty-five species histologically in order to determine differences in the structure of the leaves, and also the relative amounts of caffeine in the various portions of the leaf. Nineteen of the species belonged to the genus *Ilex*, two were of *Villarezia*, and four were of *Symplocos*. All these plants grow in South America, in the basin of the Rio de la Plata and its tributaries, in the basin of the Rio Uruguay, and in those of the Rio Paraguay, and the Rio Parana. All the ilex leaves have a bifacial structure. The upper epidermis is usually a single layer, is doubled in *Ilex affinis*, and partially doubled in certain varieties of *I. Theezans*. The cells of the mesophyll enclose corpuscles of a fatty nature and crystals of oxalate of calcium. Numerous peculiarities are noted in certain species, which enable one to differentiate between many of them. Such, for example, are cuticular striations on the lower epidermis, and sphero-crystals of hesperidine found in certain parts of the leaves. In the two species of *Villarezia* which are utilised, the cells of the lower epidermis are characterised by very thick walls, and in *V. Conghonga* very large isolated crystals are observed. Species of *Symplocos* are distinguished by the brownish-green contents of the cells of the upper epidermis, and by the disposition of the cells annexed to the respiratory apparatus. These are so placed as to have their long axis parallel to the ostiole. Of the various reagents suggested for the histologico-chemical examination of maté, Cador prefers concentrated hydrochloric acid and a 3-per-cent. solution of gold chloride By means of these reagents well-defined groups of crystals of the double chloride of gold and caffeine are obtained. The reaction is particularly marked in the case of *Ilex paraguaiensis*.

GENERAL ARTICLES.

JULY COFFEE MOVEMENT IN THE U. S.

The July deliveries were heavy in the United States, but light in Europe. The combined movement was smaller than for the same month in 1900, and was below the monthly average for the year ending June 30, 1901. The market was quite steady, with fluctuations within three-eighths of a cent. The speculation was more active than in May and June, but much lighter than in March and April.

The visible supply shows a heavy increase, and the month's receipts at Rio and Santos surpass any former record by 347,000 bags.

The following statement shows the July movement and general position of the article:

	Bags.	Bags.
Stocks, July 1, 1901—		
United States	1,196,628	
Europe	4,054,359—	5,250,987
Receipts during July—		
United States	475,613	
Europe	666,121—	1,141,734
Total supply, August 1 ...		6,392,721
Less stocks, August 1, 1901—		
United States	1,191,798	
Europe	4,063,991—	5,255,789
Deliveries, July—		
United States	480,083	
Europe	656,489 —	1,136,572
Deliveries, July, 1900 —		
United States	364,883	
Europe	854,175—	1,219,058
Decrease as compared with July, 1900 ...		82,486

The July deliveries in the United States consisted of 391,816 bag of Brazil; 88,267 bags of all other sorts.

The visible supply of the world, August 1, 1901, was 7,534,78 bags, against 6,867,627 bags on July 1 (an increase of 667,162 bags visible supply on August 1, 1901, was 1,717,030 bags smaller.

Receipts at Rio and Santos during July foot up 1,413,000 bag exceeding the previous July receipts by 633,000 bags, and Jul 1899, by 347,000 bags.

These figures indicate the importance of Brazil as a coff producer, and the rapid extention of coffee planting. During t past four years an average of 9 per cent. of the crop came to mark during the first month of the crop year. If such proves the ca this year, it indicates a total crop of 15,700,000 bags, or more tha the consumption ever reached in one year.

If, as in 19 0, the July receipts at Rio and Santos represent per cent. of the total crop, then we are face to face with a tot crop of 11,775,000 bags, which seems the more reasonable propos tion. We have then a Rio and Santos crop, and a visible supp aggregating 19,309,789 bags. Add to this 4,500,000 to 5,000,0 bags of coffee from other countries, and there looms up the coloss supply of about 24,000,000 bags of coffee to meet average annu requirements of less than 15,000,000 bags. It is no wonder th coffee is low in price; the burden of supply too large to permit a successful bull movement, and that there is little encouragme to carry a liberal stock.—*American Grocer.*

TEA STANDARDS IN AMERICA:

TEA DUTIES IN RUSSIA.

Samples of Standards under the American Tea Act were receiv here some time back and as a Colombo exporter writes:—"Th are very strict in America and there is no passing in rubbish the Indeed it is much easier to send such teas to London, than America! It would be an excellent thing if we had a similar A with Standards, and Inspectors, in England. It would lessen t supply of cheap rubbishy teas, and help to keep prices at a f level. The big blenders would not like it!" It now appears Mr. R. V. Webster's authority that the Standard fixed for t entering at San Francisco is much inferior to that fixed for te coming in at New York. How strange that the Customs regu tions should not be uniform in a civilised progressive country li America! A representation should certainly be made to t Colonial Office to take up the matter, and if the Planters' Assoc tion represented the case to H. E. the Governor, we have no dou Mr. Chamberlain would be induced to get Lord Salisbury to a for uniformity in the Standards. Our contemporary is, howev quite wrong in supposing that the inequality in duties on t entering Russia has been rectified. As the result of representatio arising out of Mr. T. N Christie's reference to the matter, t tariff on teas "Overland" was raised, but by no means equalis with that levied at Odessa, etc. Here is our latest information:

APPROXIMATE DUTY IN PENCE PER ENGLISH POUND.

Russia—Brick tea, black and green tea	8d *
Do. Other tea	1s 10d

* The following duties are also leviable:—Tea, imported over t Siberian frontier and the frontier of the Government of the Steppes:—

Black (Baicha) tea, flower tea, green, and yellow tea imported across the frontiers of the Steppes, Irkutsk, and the Amour	1s 4d
Other black, green, or yellow tea	1s 1¾d
Brick tea	2¾d
Tea in tablets, if bearing the marks of Russian Manufacturers on each tablet	10½d

COFFEE CULTURE IN QUEENSLAND.

Under the heading of No. 9 –The Treatment of Young Plants in the Field, Mr. Howard Newport, Instructor in Coffee Culture writes in the *Queensland Agricultural Journal*:—The young plants having been planted out in the field, a few notes about their treatment there, and the enemies or diseases they meet with, will be of use to the grower.

Not much actual work is required in connection with the plants themselves, still they need an occasional looking to. The principal work that lies before the coffee-grower, from the time of planting out, is the weeding of the clearing, and this is not only the heaviest but the most disagreeable work. Weeding itself is a big subject, and will be dealt with separately, but I wish to put in here a word of warning against allowing weeds to grow up among young coffee plants just put out. If the planting has been done carefully, and the clearing been at all clean at that time, the young plant will have "struck," *e.g.*, have sent out rootlets into the new soil round it before the weeds can do much harm to it. But after this it has to acclimatise itself and adapt itself to conditions very different to those of the nursery bed from which it came. At this stage a comparatively small growth of weeds will not only seriously handicap the plant, but possibly choke it, both above and below ground, by covering it and shutting out light and air or matting its roots.

It is hopeless to expect a young clearing to come into bearing in a minimum of time, unless kept scrupulously clean from the commencement.

When very young a plant may be easily bent or broken by sticks, twigs, weeds, or rubbish falling, being blown, or carelessly turned over on to them by weeders. This should be looked to, and every chance given the young plant. Occasionally suckers will appear on the stems, especially after a check at the time of planting, and sometimes double heads, grow, or have not been nipped off when planted. These should be carefully nipped off as soon as notice. In the case of double heads, the weaker or smaller is of course taken off.

If the pits have been narrow ones, as described in article No. 8, *Queensland Agricultural Journal*, May, 1901, p. 372, the ground round the plants should be dug or forked up for a foot or so at least, and stones removed, care being taken not to hurt or turn out the plant itself when the soil is hard and comes away in clods.

At first no mulching is required, but just before the end of the rains, or at any rate before the regular dry and hot weather sets in, weeds, etc., may be heaped round the plant for a foot or so.

This serves to conserve the moisture for the use of the plant during the hot months and prevents the caking of the ground. In mulching the ground should be first loosened, then the weeds, etc., laid lightly round, well covering the top of the pit. Sticks or rubbish likely to encourage grubs should be avoided, and grass, especially couch, is best avoided, for even if not growing readily, itself, it seeds so freely. Seeding weeds of any kind should not be used in a mulch, and the mulching never made deep at any time, but light and flat, and as broad, *e.g.*, covering as much ground round the plant as the grower has material or time to spend on the work.

Should the clearing be troubled with grubs, of which I shall speak later on, mulching with weeds or green stuff had better be avoided in favour of a mulching of loose earth about 2 inches deep applied in the same way. Mulching with weeds should not be done during the heavy rains, and if done with earth will have to be done again later on, as the earth mulch soon cakes and ceases to be of any benefit in rain. See remarks *re* "Mulching," *Queensland Agricultural Journal*, March, 1900, p. 214.

Within two or three weeks of planting out the field should be very carefully gone over, and any plants that are still drooping, or have faded or died, promptly replaced. This is called vacancy or supply planting. However good a planting, there will always be a few that will have to be replaced, and it will be specially good plants and good planting that will have less than 1 per cent. of failures by the third year. In a quite new clearing, the earth in the pits will still be soft enough to allow of its being turned over with the hand, and the plants put in as at first. Such supplies should be specially and carefully shaded, and every effort made to allow the new plants to catch up to the others. In the second year, the pits will have to be forked up, or the earth at least well loosened with the hoe before the plants are put in; and in old coffee, *i.e.*, three years or more—the pits will have to be re-opened entirely.

The supplies in old coffee will also be dealt with separately, but all vacancies should, when re-planted, have greater care, if possible, bestowed on them than at the first planting.

Remember that it is very much easier to get supplies to come on in young coffee than in coffee that has begun to cover the ground.

The first of what may be called the ailments that a young plant will be subject to, though not necessarily suffer from, is "sunburn." This shows as a brown or withered appearance on a soft young leaf, generally the top leaves, of young plants when first put out. It is exactly the effect that frost will produce, but, of course, much milder. It is due to the sudden exposure to the sun, of a plant that has not been properly hardened in the nursery before planting out, or was not shaded when put into the field. When noticed, the plant should be at once shaded as described in last article. If badly burnt, the leaves will fall off, and the plant should then be replaced by a good one, as the eyes from which leaves fall before primaries are formed, very often become blind, and an "umbrella" tree, or one that is all leg and head and no body, results. If not too far gone, light shading will save them. Sunburn may be experienced in a field of young plants that has been covered by weeds on their being suddenly removed; to plants once a year old, sunburn will do no harm, however. A plant that looks yellow, shrunken, drooping, or faded, should at once be examined. It may be found to be suffering from "ring-rot." This is mostly due to excessive dampness, but may be due to exposure to the sun of a little more of the stem than when in the nursery. The cuticles of the bark wither in the unaccustomed heat and light, and the plant becomes hide-bound between wind and water. The effect can be realised if one rolls up one's shirt sleeves a little higher than usual, and works a day or two in the sun. If the ring is complete, the plant is doomed, or at best is not worth waiting for, so replace promptly; if only on one side –and this is ascertained by making a small scratch through the bark with finger-nail or penknife and noting the colour—mulch up with loose earth, and the plant may recover.

If not suffering from "ring-rot," the plant may be "ring-barked" by grubs. This is done by a variety of grubs and is generally a little lower down than ring-rotting. So dig a little deeper and see. If ring-barked, it will be between the first lateral roots and the mature bark above ground, generally about an inch below the surface. If recently cut, try and find the grub; it is seldom far off. If quite, or even three-fourths ringed, pull up and replace; if only a little barked, it may recover if mulched up with earth, and any green or dry mulch there may have been is removed.

Grubs are a great trouble in clearings sometimes. A little ring of slaked lime round the stems of plants an inch or so below the surface has been found useful, also soot or ashes, but all these have to be renewed from time to time, especially after wet weather.

Sometimes young plants are ring-barked by grubs just above ground in which case they must be cut back to the ring and allowed to sucker; in the same way, in older trees, grubs will sometimes ring-bark them two or three feet above ground. When this occurs, the tree must be cut back to wherever the ring-barking is, and raised again to the normal height by means of a sucker. Ring-barking by grubs in old trees is not so troublesome or so frequent, as a rule, as in young plants.

If neither of these are apparent, something wrong with the root may be expected, such as a twisted or bent taproot. To find this dig deeper, on one side only, so that if anything removable or remediable appears the hole can be filled in again and the plant allowed to recover. If it proves to be a twisted taproot put out and replace at once. For effect, etc., *see* article on "Coffee Root Growth" (*Queensland Agricultural Journal*, March, 1900, page 214). A twisted taproot may occur by accident in spite of all care.

A great pest that is occasionally experienced in young clearings is grasshoppers and caterpillars. These eat down the tops and young buds of both stem and branches, occasioning a lot of work and handling. These pests are not very common, though exceedingly troublesome when they do occur. They are generally very local; one estate may be troubled with them, while its near neighbour is quite free. Caterpillars and grasshoppers may be bad one season and never appear again, or one field in an estate may be attacked perhaps for two or more seasons in succession and no others touched. The caterpillars would seem to be mostly the larvæ of moths of various kinds, and the grasshoppers of several varieties.

To remedy such plagues it is necessary to understand the life history of the special insect; occasionally, however, the application

of ashes will have good effect, and with caterpillars sometimes a ring of lime on the ground round the tree will keep many off. About the surest remedy for grasshoppers in young coffee is a flock of domestic fowls; but it would always be advisable in the event of any such trouble, as in diseases of any kind that are noticed, to send specimens at once to the Government Entomologist, either direct through the Department of Agriculture or the Instructor in coffee culture The Entomologist would probably be able to suggest remedial measures from his knowledge of the life history of the special insect or disease. An estate kept clean from the commencement is not so likely to suffer as much in this way as a weedy and ill-kept one.

A young plant of any age up to three or four years may suffer by being "wind-rung." The effect is much the same as in "ring-rot," but is caused by the swaying of the tree in the wind, which, forming a funnel-shaped hole round the stem of the tree by pressing back the soil, destroys the bark by friction. This funnel is easily formed in loose, soft soils in wet weather, and should hot, dry weather follow, the sides cake and very soon rub the bark off if the tree sways again. Even in wet weather continued chafing against the surrounding soil while swaying in the wind will ring-bark the tree, and this must be stopped as soon as noticed. The tree must be staked, and thus prevented from being further shaken in the wind. and the earth pressed back against the stem. If the plants are small, the stake previously used for lining, etc., will be sufficient if put in upright and close alongside the plant, but if older, proper staking will have to be resorted to, which will be described in another article.

A young plant badly rung, especially, if drooping, had better be replaced, for the lateral roots will probably be strained, if not rung also. The hole caused by this motion of the plant in wind is often the cause of damage to the roots by water. In the rains the hole is often filled with water which, not being able to get away owing to the caking of the sides, induces ring-rot. In heavy and moist soils, more especially, perhaps, in little hollows in otherwise good fields, an excess of moisture is retained a few feet below the surface. It may occur 1, 2 or 3 feet under ground, but the nature of the soil will change there and be sour and cold. The tap-root of a young plant may reach a point where this exists any time up to four years of age, and on reaching it will rot. This rotting once commenced will proceed from the bottom upwards, even into the drier and more aerated top soil, and is fatal to young coffee. The ailment is known as "wet feet." The lateral roots are often not affected, and so the plant may sometimes live on for some time after being attacked. The effect of wet feet is more often evidenced in dry than in wet weather. When this is observed, and the condition of the lower-stratum of soil ascertained by digging, the plants in that patch had best be taken out, and the patch either abandoned or deep-drained, and re-planted later on.

In any case, when young plants do not come on and the soil seems to be cold or sour, the pits must be entirely re-opened and left open for some time before being refilled and supplies planted. Situations where plants are likely to suffer from wet feet, have frequently, though not always, some indications that point to the necessity for draining before planting at all.

In a few instances I have observed coffee that has been eaten down by wallabies, though in several instances damage has been done by their breaking branches, or even young trees. In the instances observed, only young trees of six to eighteen months old were eaten, and then not to any extent. In many cases the wallabies did more good than harm by topping trees, and showing in a very marked way the advantages of so doing the grower. The trees thus accidentally topped were in every way better than the tall, over-grown trees left by the coffee grower. Wallabies should be kept out if possible, but fencing with wire netting is expensive on large areas. A stray cow will frequently do more harm in a few hours than any number of wallabies. Horses and cattle t some time to get accustomed to coffee leaves, and often not eat them, but once the liking is confirmed, stock prove v troublesome.

As a general rule, however, stock will turn away in disgust fr a well weeded, clean estate, but will seemingly take intelligent a deliberate pains to break down not only the fence, but the coff trees themselves, in getting at the grass, etc.. in a weedy garden

Young plants will stand a considerable amount of drought, as much as old coffee, of course, but still considerably more th many people imagine. In most of the soils on the coast of Quee land, several months of dry weather will not harm coffee, but i very dry situation young coffee, before it is old enough to co the ground, may droop and suffer from excessive evaporation of moisture from the soil. If this goes too far, the plants may seriously damaged. The effect of drought is to stop the grow and stunt the plant, and sometimes make it bark-bound. T lower primaries die back, and though the plant may reco during the next rains, the check will always be apparent. Wat ing large areas is out of the question in coffee culture, but if surface of the clearing is kept loosely chipped or harrowed, a the plants mulched up with loose soil, it will take a very unus drought to harm them.

Should they be so far gone as to lose lower primaries, th should be stumped, *i.e.*, cut back to within 6 inches or so of ground, and allowed to sucker again. In the case of sickly tr that are not suffering from any of the abovementioned ailmen trees damaged by weed growth, broken trees, or trees that ha over-borne in the third year (*see* article on "Disbudding," *Quee land Agricultural Journal*, February, 1901, p. 112), this stampi in the field may be resorted to with success.

The next shoot will grow quickly and prove healthy, and so lo as the root and stock are healthy, will take less time to grow a be safer than re-planting.

The planting being done in the rainy season, the loose ea round the young plant will sometimes get washed away in a hea shower in spite of all care. Any washing away of soil should once be remedied and the earth replaced. Should a plant happ to be washed right out of the pit, it is better, as a general rule, replace it with another plant from the nursery than re-plant t washed out one.

It does not necessarily follow that all the troubles detailed abo will beset a young clearing; but it is as well to know what to in any case, and the young trees will amply repay the attention.

Beyond this the trees will need very little attention till enough to require topping and handling. Topping, suckering, a staking will be dealt with next.

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

MR. WEBSTER ON THE AMERICAN CAMPAIGN

Writing to the *Times of Ceylon* off Mt Stephen, in a Canadi Pacific railway car, under date the 9th August, Mr. R. Valenti Webster sent us the following notes:—

I arrived at San Francisco on the 23rd July, and remained that city seven days, then I took train to Portland (36 hours' ru from there to Tacoma, Seattle, Victoria, and Vancouver. Gre excitement in the two latter cities. The salmon packing is now full swing, and the run of salmon is the largest ever known; th together with the abnormal wheat harvest of sixty million bush in the North-West, means a prosperous time for all, and a fortu for many.

Through a friend in the Apprizers' Office at San Francisco, was allowed to copy from the Government books the figures showi teas cleared at San Francisco during the past four and half yea Notwithstanding that the teas cleared in San Francisco each ye run to eight figures, our Tea Commissioner has not once visited t Pacific coast of America; besides San Francisco, considera quantities of teas are cleared at Portland, Tacoma. and Seattle, say nothing of the imports into Victoria and Vancouver.

Amount of tea cleared at the port of San Francisco during t past four and half years (this does not include teas in transit):—

1897, total lbs. 14,277,503.

1898, total lbs. 9,728,771, of which 160,719 was Ceylon, 104,3 Indian.

1899, total lbs. 11,561,922, of which 118,504 was Ceylon, 106,7 Indian.

1900, total lbs. 14,590,265, of which 391,149 was Ceylon and Indian.

1901, total for first six months 2,016,436, of which 221,615 was Ceylon and Indian.

Most of the tea—China and Japan—comes in during the last six months of the year. That accounts for the small total for first six months of 1901. Last year the Government fixed one standard for Ceylon and Indian teas, so now both these teas come in under the one class.

The standard fixed for Indian and Ceylon teas is an Indian tea, clean leaf Pekoe Suchong, worth to-day about 5¼d., including cost, freight, and insurance San Francisco; the standard for China tea (Congou) is very much inferior, merchants showed me China Congou that they were importing, costing 3¾d. (cost, freigh, and insurance San Francisco). At a glance is seen the great disadvantage Ceylon, and Indian, exporters are under, as compared to the China exporter.

Had we a Tea Commissioner who took some interest in his work, these standards would be very different, and the Ceylon exporter would be on equal footing with the China exporter.

On arrival at San Francisco I received a letter from my Continental representative, informing me that the Co-operative Tea Gardens Co.'s Quaker brand Ceylon tea had been awarded the Grand Prix at the Exposition Cuilinaire, Paris, 1901; Mr. Van Allen also informed me that he had the honor of presenting Madame Loubet (wife of the French President) with a cut-glass casket, with heavy plain silver lid, on which was engraved two branches of a tea bush with flowers meeting in a half circle, and under the words, "Quaker Ceylon Tea." The presentation took place in the Exposition Petit Palais, when all the Ceylonese boys (that I sent over in the early part of the year), were present. The following day a letter of thanks was sent from the Presidency. The ex-Queen of Madagascar was much pleased with the Tea Pavilion at the Petit Palais, and often went there for tea. Next month I hope to hear how my teas have done at the Medical Exposition, where Mr. Van Allen has arranged a very attractive exhibit.

I hope to send Mr. E. Rosling samples of the U. S. Government standards, as also a full range of Japan green teas; those interested might write Mr. Rosling, who I know will be pleased to forward them any samples they might require.

THE PRESENT CRISIS IN TEA.

J. writes in *Capital*:— A very great number of nostrums are being propounded to cure the present depression, or rather endeavour to secure to the investor some return for his money, and, no doubt, a great many economies that have been introduced are in the right direction; but, we think, and, we feel sure all our readers (at any rate those who have any practical knowledge) will agree with us that the inordinate reduction of European establishment on tea estates is one to be deprecated, and one which will bring ruin in its track. A tea planter's anxieties and worries are by no means "beer and skittles" in these bad times, and they tell more on the physique than anything else, and a sleepless night is worse than two or three days on the tila as it is expressively called. There are, we are glad to say, but one or two agency houses by whom the reduction is being introduced, and if the history of tea had been written, and the diary of the various companies, who have tried this economy, had seen the light of day, they would bear out our statement, that the so-called economy is a false one, even in bad times. We believe, and are prepared to prove, by figures and dividends that the reduction, below par of the European establishment, has invariably led to gardens being ruined; far better had they been shut up, instead of being allowed by the substitution of the native for the European to drag on a miserable existence, neither making a profit, nor a loss, but, hampering the market by supplying a quantity of tea giving a profit to no one connected therewith, which had better have disappeared, either into jungle, or, somewhere else! It is impossible, in an article like this, to quote names without causing heart burnings, and we, therefore, refrain from doing so, but any one who cares to, can scan the share list, pick out some of the non-paying companies, and enquire what the European establishment is now and what it was ten years ago. During an experience of considerably more than a quarter of a century, the writer of this has never come across more than a couple of natives capable of taking the European's place. We by no means advocate extravagance in European establishments, far from it, but what we do contend is that one man is incapable of managing a 1,000 acre garden with one assistant if he is to do justice to it. Every 6,000 maunds of tea require at least one manager, one assistant, and a tea house man; over this is extravagance, under it false economy. Any one who has been on a tea estate, knows quite well how a Baboo can manipulate figures, and if he is told that expenditure must not exceed so and so it won't be done; but, this is where the false economy comes in. A man managing a thousand acre garden with one assistant cannot possibly be after the Baboo continually, he has not the time to do it; he may on some very specially energetic morning go over every nook and corner, but this is exceptional, and the Baboo knows it, and is quite equal to the occasion. In a year or two, when the coolies find out how the Baboo is allowed full swing, they gradually become discontented, and drop away to the villages, or other estates one or two at a time, and in a few short years the labour of the estate gets depleted. In addition to this, when the state of cultivation is looked into, it is found that the bushes have suffered immensely, and like every other decay that sets in—be it in human, or vegetable life—it makes rapid strides, and what a short time ago was considered a first class property has to be relegated to the lowest grade, wound up, and sold for an old song. If the history of many of our oldest companies ever comes to be written it will fully bear out all we have said above. One company, in our mind's eye as we write, some ten years ago had six Europeans on its staff; now it rejoices in two, the area under cultivation in that period has decreased 25 per cent. and the dividend for the decade, was one year, four per cent., we cannot say the losses in the other time. A European can only do a certain amount of work in this climate. It is not the same as in a non-tropical country, where a man by extra exertion may last out a season of long hours, but in India a European cannot treat himself as he would at home, and the long hours that at present exist are very trying even to men in robust health. So how do proprietors expect their employés already but poorly paid to overwork themselves, if they have nothing to look forward to, if they do; and how are they to take a change which over-worked nature might call for, if there is no one to leave in charge but a native? A 600 acre garden we consider requires one assistant and a manager, and these might run to managing 800 acres, but beyond that, and up to 1,200, two assistants are absolutely necessary if the full amount is to be taken out of the estate, and the value of the same kept up, and it should be one of the enquiries of those who are not dealing in shares speculatively, but, as an investment before concluding any purchase, *viz.*, what is the European establishment? Given a fairly decent garden (not even first class of the acreage we have given above, and a European establishment on the same lines, and there are worse investments than tea; but, let the investor carefully examine into this, and beware of purchasing shares in any concern where natives have been substituted for Europeans, for this is the first sign of a decay that eats into the very heart of an estate.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Poland.—Messrs. R. Krowikowsky & Co., of Warsow, who are said to be the largest importers of colonial produce in Poland and N. Roumania, have made a proposal for a propaganda in favour of Brazilian coffee in those countries.

Exchange.—Extremes during the week ending August 2nd were 10⅛d—10⅞d. for 90 d/s Bank paper and 10¼d—10$\frac{29}{32}$d for private.

The average Bank 90 d/s counter-drawing rate for the week comes out at 10$\frac{7}{16}$d., the corresponding sight rate being 10⅜d. against 10$\frac{7}{16}$d., the average sight rate of the *Camara Syndical.*

August 3rd, 1901.—Ninety days' rate on London opened on Monday, 29th ultimo, at 10½, rose to 10$\frac{13}{16}$ on the 2nd instant, and closed this evening undecided at 10$\frac{15}{32}$d.

The liquidations that were so troubling the market have, it is said, been "reported" or postponed to the end of September or October, so the market has meanwhile a little breathing time, but, sooner or later, the *mauvais quart d'heure* must be faced.

Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant the appointment of "Purveyors to Her Majesty The Queen and Empress of India" from the year 1837 until the time of her death, have now had the honour of being appointed by Royal Warrant "Purveyors to The King."

Coffee shipments (embarques) are about the same as the previous week, £292,945 as against £172,366 last year, but it is doubtful if, at present, when rubber, sugar, and Cotton are all exhausted for the moment, they are sufficient to supply the market demand much less cover for previous sales. From 1st July to 2nd August the value of coffee cleared was £1,492,494, whilst imports alone amount to about £1,800,000. Of course there are other exports besides coffee, but not of much account just at present, so that should the balance sheets of the Banks for July show that there has yet been no real liquidation that is to say remittances, it would scarcely be surprising. In October or November, rubber will probably add a considerable sum to the supply of bills, and it is possible that something will remain over from the marks, requirements for covering purposes. Anyhow, it was unquestionably a wise thing to postpone the liquidation, because at present the requisite quantity of bills could not be found at any price.

Shipments of rubber from Pará and Manáos last week were a little more active, aggregating about £200,000. Stocks, however, are very small, being reduced on 2nd August to only 55 tons at Pará and Manáos.

Coffee.—Entries at Rio and Santos during the week ended August 2nd were 25,950 bags more than the previous week and 140,569 more than for the corresponding week last year. From 1st July to 2nd August entries at the two ports aggregated 1,583,725 bags as against 927,425 last year.

In spite of heavy shipments stocks are steadily accumulating and on the 2nd August were already over the million, as against 883,912 last Friday and 709,013 on the 3rd August, 1900.

Declared sales at Rio and Santos were 221,000 as against 226,000 the previous week and 154,000 for the corresponding week in 1900. A great deal of the coffee coming down to this market is said to have been bought and paid for by exporters up country on the plantation.

MARKET REPORT.

[*Per Mail advices of 30th August* 1901.]

COFFEE.

The London Commercial Record says:—The supplies at auction since our last have been unusually light, and with a steady demand from the trade the greater part was disposed of with good competition at a further advance of 2s per cwt. for nearly all growths. Ceylon Plantation brought very satisfactory prices and experienced active competition. East India did not show much change. The market for "futures" was stronger at the opening, and September Santos advanced to 28s 7½d per cwt., but subsequently heavy receipts in the Brazils had an adverse influence upon the prices, and September was sold at 27s 7½d; there has, however, been a little recovery at the close; yesterday September was done at 27s 9d to 28s, December at 28s 4½d to 28s 9d, March at 29s to 29s 3d, May at 29s 4½d to 29s 7½d, and July at 30s per cwt.

London ...	... Santos ...	Sept. delivery	...	28s 0d.
New York	... No. 7 Rio...	,,	...	4·70 cents.
Hamburg...	... Santos ...	,,	...	27½ pf.
Havre ...	... Santos ...	,,	...	34¼ francs.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Total Tons ...	18,986	17,401	37,578	28,727
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Total Tons ...	13,606	11,231	19,531	14,782

The preceding figures exhibit— Tons.

In the Imports an increase this year of ...	8,851
Home Consumption an increase of ...	2,375
Export an increase of ...	4,749
Stock an increase of ...	1,585

Auctions this week have passed off as follows:—

CEYLON.—*Plantation.*—7 casks 3 tierces 16 barrels 1 bag sold, low-grown, smalls 41s, middling 70s, bold 101s, peaberry 65s; high-grown, smalls 46s to 51s, good middling colory 95s 6d to 102s 6d, bold 104s, peaberry 70s to 75s.

EAST INDIA.—813 bags partly sold as follows:—*Coorg*, low middling 43s to 45s, bold 52s to 55s, peaberry 50s to 51s. *Neilgher* smalls 35s to 36s, fine ordinary 39s 6d to 40s, peaberry 43s 6d.

JAMAICA.—69 barrels 42 bags mostly sold, smalls 36s, ordina brownish 28s, good to fine ordinary greenish 36s to 39s, low m dling to middling 43s to 53s, peaberry 44s.

COSTA RICA.—Of 699 bags catalogued 200 bags sold, smalls 35s 38s, middling to good middling 48s to 57s, bold 60s, peaber 38s to 54s

GUATEMALA.—Of 1,320 bags offered 1,100 bags sold, smalls 30s 42s 6d, low middling to middling 42s to 50s 6d, bold 51s 6d to 5 6d, peaberry 43s 6d to 55s.

VERA PAZ.—Of 451 bags brought forward 270 bags sold, sma 40s, low middling to middling 47s to 55s, good middling 60s, bo 66s to 79s 6d, peaberry 54s to 58s 6d.

SALVADOR.—807 bags mostly sold, good ordinary 36s, fine ordina 40s, low middling to middling 42s 6d to 47s 6d.

NICARAGUA.—219 bags sold, smalls 29s to 30s, ordinary to fi ordinary 31s 6d to 38s 6d, middling to good middling 45s 6d to 5 fine middling 70s, bold 80s, peaberry 60s to 62s.

HONDURAS.—50 bags retired.

MEXICAN.—53 bags sold, good ordinary 38s.

COLOMBIAN.—1,174 bags nearly all sold, smalls 31s to 39s 6 good to fine ordinary 36s 6d to 38s 6d, low middling to middli 40s to 45s, bold 45s 6d to 56s 6d, peaberry 38s to 46s 6d.

VENEZUELAN.—Of 73 bags offered 45 bags sold, fine ordinary 3 6d, good middling 50s 6d, bold 59s to 59s 6d, peaberry 53s.

ECUADOR.—20 bags sold, ordinary mixed 27s 6d.

BRAZIL.—Of 1,929 bags washed Dumont Santos 1,220 bags sol smalls 27s 6d, medium 31s 6d to 35s, bold to extra bold 36s to 4 6d, peaberry 37s to 41s. Of 100 bags Rio a few bags sold peaberry 35s.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99 Bags.
Rio ...	1,100,000	512,000	782,000	638,00
Santos ...	2,000,000	1,515,000	1,786,000	1,297,00
Total ...	3,100,000	2,027,000	2,568,000	1,935,00
Crop ...	—	10,900,000	8,971,000	8,772,00

Rio Exchange 10⅝d, previous day 10 9/16d.

HAVRE, *August* 29.—Good average Santos August opened stead at 33¾f. and closed quiet at 34f, September opened at 34f. an closed at 34¼f, December opened at 34¾f. and closed at 35f., Marc opened at 35½f. and closed at 35¾f., May opened at 36f. and close at 36¼f.

HAMBURG, *August* 29.—Good average Santos August opened stead at 27¼pf. and closed quiet at 27½pf., September opened at 27¼p and closed at 27½pf., December opened at 28¼pf. and closed at 28½pf March opened at 29pf. and closed at 29¼pf., May opened at 29½p and closed at 29¾pf.

NEW YORK, *August* 29.—Closing prices of No. 7 Rio were a follow:—

	Aug.	Sept.	Oct.	Nov.	De
August 29...	4·70	4·70	4·80	4·90	5·0
August 28...	4·80	4·80	4·85	4·95	5·1

TEA.

INDIAN.—A reduced amount was catalogued, *viz.*:—25,600 pack ages, contrasted with 33,400 packages in the previous week, an 36,400 packages a year ago.

Late arrivals, particularly those from Assam and the Dooars did not maintain their early promise as to quality, and buyer were less eager to purchase. The demand for really stand out Tea continued good, although former prices were not always secured while for all missing this qualification a smart shrinkage in valu was apparent, and Pekoe Souchongs with poor liquor were to b had at 4d per lb.

A fair assortment of 1,500 packages from South India, including some parcels with colory infusions from Travancore, commanded good competition.

For 21,700 packages on Estate Account 8⅜d per lb. was realised against 8⅛d per lb. for 30,700 packages, and 8¼d per lb. for 35,80 packages in the two preceding seasons respectively.

The number of packages printed for importers in August is:—

1901.	1900.	1899.
84,200 packages	101,700 packages	129,800 packages

CEYLON.—Auctions aggregated 25.400 packages compared with 27,600 packages as advised on the 22nd instant, and 30,600 packages twelve months since.

Inferior grades barely maintained their position, but for others, after allowing for improvement in cup, a firmer tone prevailed, Broken Pekoes over 8d per lb. in most instances showing a further upward tendency. Finest and choice lines were still rather scarce, but the few available sold well.

The average is 6 7/8d per lb. against 6 3/4d per lb. as recorded in our last, and 6 7/8d per lb. in 1900.

Total during the month :—

1901.	1900.	1899.
94,800 pkgs.	116,000 pkgs.	147,600 pkgs.
(Avge. 6 3/4d per lb.)	(Avge. 7d per lb.)	(Avge. 7 1/8d per lb.)

JAVA.—Nearly 2,000 packages of direct import passed the hammer which on the whole went off with spirit at prior rates.

August public sales embraced :—

1901.	1900.	1899.
6,900 pkgs.	5,500 pkgs.	7,500 pkgs.
(Avge. 6d per lb.)	(Avge. 6 3/4d per lb.)	(Avge. 6 3/4d per lb.)

Deliveries.—Clearances of all Tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.* :—

From 1st to 27th August, 1901 ... ... 13,840,962 lbs.
Do. do. 1900 ... ... 12,862,350 ,,

During the week the following have been printed for sale by public auction :—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offered. Pkgs.
India	20,152	5,461	25,613
Ceylon	23,664	1,757	25,421
Java	1,739	214	1,953
Total ...	45,555	7,432	52,987

Also 418 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated August 30th, 1901, says :—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian. Pkgs.	Ceylon. Pkgs.	Java. Pkgs.
1901-1902	181,848	330,746	18,358
1900-1901	163,841	352,085	13,095

25,757 *pkgs.* INDIAN
25,980 ,, CEYLON
1,953 ,, JAVA
} Total 53,690 packages were offered in public auction this week.

A substantial increase took place in the quantity of Indian and Ceylon Tea shipped to North America during the first half of 1901, compared with the same period of 1900.

	1901.	1900.	1899.	1898.	1897.	1896.	1895.
Lbs. ..	9,446,997	7,087,476	5,134,914	6,245,443	6,580,336	3,850,735	2,972,575

The prolonged efforts made to capture the Black Tea market in that continent have at length borne tangible fruit.

If planters will only turn their attention with equal vigour and determination to the production of suitable Green and Unfermented Tea, there exists a far larger and more encouraging outlet than was ever the case with Black Tea in North America. The necessity for doing this has been rendered more pressing than ever by the over-supply of Black Tea and its consequent depreciation in value.

INDIAN AND CEYLON TEA TAKEN IN NORTH AMERICA FROM 1ST JANUARY TO 30TH JUNE.

INDIAN TEA.

	1901.	1900.	1899.	1898.
Re-exports from U. K. ...	1,850,454	834,677	1,112,573	1,106,886
Transhipments *viâ* U. K. ...	347,233	410,900	180,356	667,017
Direct exports *viâ* China ...	176,279	122,905	96,183	54,282
Direct exports from Calcutta	754,725	337,490	309,262	116,854
Total lbs. ...	3,318,336	1,705,972	1,698,374	1,955,039

	1897.	1896.	1895.
Re-exports from U. K. ...	1,175,979	623,317	819,560
Transhipments *viâ* U. K. ...	1,890,940	1,115,981	338,275
Direct exports *viâ* China ...	71,023	*not stated.*	*not stated.*
Direct exports from Calcutta	*nil.*	*nil.*	*nil.*
Total lbs. ...	3,137,942	1,739,298	1,157,835

CEYLON TEA.

	1901.	1900.	1899.	1898.
Re-exports from U. K. ...	2,445,237	1,584,408	1,437,994	1,965,295
Transhipments *viâ* U. K. ...	1,087,099	697,132	161,294	876,124
Direct exports *viâ* China ...	1,510,980	766,592	469.638	453,021
Direct exports from Colombo	1,274,990	2,333,372	1,367,614	995,964
Total lbs. ...	6,318,306	5,381,504	3,436,540	4,290,404

	1897.	1896.	1895.
Re-exports from U.K. ...	2,199,930	1,460,044	1,307,406
Transhipments *viâ* U.K. ...	982,759	564,790	383,127
Direct exports *viâ* China ...	259,705	86,603	124,207
Direct exports from Colombo	*nil.*	*nil.*	*nil.*
Total lbs. ...	3,442,394	2,111,437	1,814,740

INDIAN.—Although the quantity brought forward was much smaller, the market showed little disposition to purchase at current prices. The auction consequently passed slowly with a further slight decline, even good Teas meeting with rather less competition.

Catalogues are issued for 6,196 packages to be sold in an "un-reported" auction on Wednesday, the 4th proximo. The following averages are worthy of note :—"Pabbojan T Co.," 1/5 1/4; "Suddia Rd. T Co.," 1/3 1/4; "Darj. Co. Ging," 1/3; "Ass. Co.'s garden Khoomtai," 1/2 3/4.

Week's average of New Season's Tea sold on Garden Account, 1901, 21,189 pkgs., av. 8·23d. 1900, 31,485 pkgs., av. 7·94d.

New Season's Tea sold on Garden Account, 1st June to date, 1901, 104,128 pkgs., av. 8·37d. 1900, 121,576 pkgs., av. 8·09d.

CEYLON.—Rather more animation was noticeable in the market, and all Teas sold at firm prices, especially the higher grades. This improvement is doubtless partly due to the better quality of many of the arrivals. Average for week 6·88d, against 6·84d same week, 1900.

Ceylon Tea sold on Garden Account, 1st Jan. to date, 808,529 pkgs., av. 6·58d. 1900, 857,594 pkgs., av. 7·21d.

JAVA.—With a firm market and good bidding, the Teas were mostly sold in the auction room, very little being withdrawn.

Bank Rate 3 per cent. Exchange on London three months' sight :—Calcutta 1/4 3/32. Colombo 1/4 1/8.

COCOA.

Auctions on the 27th instant presented 2,522 bags, which again experienced but little demand notwithstanding the reduced stocks; barely 1,000 bags sold in the room, prices, with the exception of African (which growth went cheaper), being unchanged. Of 1,040 bags Trinidad catalogued 450 bags sold at about valuations :—very fine red 73s, middling to good 66s to 68s 6d. 78 bags Grenada half sold at 64s to 64s 6d for fine, being steady. 12 bags good Demerara realised 63s to 64s 6d, and 3 bags St. Vincent 56s to 60s. 120 bags African found buyers at lower prices—55s to 55s 6d for small red mixed. 12 bags Seychelles sold at 60s to 62s 6d. Ceylon was a little more enquired for than of late, and holders succeeded in quitting 350 bags, out of the 1,015 bags offered, at generally steady prices; fine bold and medium red brought 82s 6d to 87s 6d, good ditto 74s to 75s, dull brownish 60s to 60s 6d, fair to good smalls 54s 6d to 61s 6d, and blacks 46s 6d to 49s 6d per cwt. The bought in lots comprised 27 bags Jamaica, 32 bags Esmeralda, and 152 bags Guayaquil. The private sales during the week include—200 bags Trinidad at 67s to 68s, 100 bags Jamaica at 62 6d for fermented and 57s for ordinary, 200 bags fine African at 65s, 250 bags Ceylon at 71s to 75s, 100 bags Venezuelan at 65s, and 200 bags Guayaquil —good summer Arriba at 78s per cwt.

PEPPER.

BLACK.—The market remains very quiet. For arrival there are sellers at 6d for parcels of Singapore near at hand at 6 1/16d for distant shipments. On the spot sales of fair Singapore at 6d.

Nothing offered at auction on Wednesday.

WHITE.—Business has been on a small scale. Singapore on the spot has been done at 9d, and fair Penang at 8 1/2d. For arrival no sales reported.

At public sale on the 28th instant 50 bags Siam retired at 9 1/8d, and 112 bags Penang at 8 5/8d per lb.

GINGER.

COCHIN.—There is practically no demand but holders will not give way in price. Offering were restricted to 38 cases 150 bags

which were bought in—bold limed cut at 100s, medium ditto at 75, and good brown Calicut rough Sorts at 40s per cwt. (a bid of 37s refused).

JAMAICA.—Well held, and of the 412 barrels catalogued 250 barrels sold at very full rates for the better lots at 1s per cwt advance on the commoner. Fair bright washed realised 48s to 50s, low middling to middling 42s to 45s, common to ordinary 37s 6d to 41s, and mouldy at 38s to 40s per cwt.

CINCHONA.

The auctions of cinchona-bark held at Amsterdam, on August 29, amounted to 8,033 packages, weighing 707,644 kilos. Of the above quantity, 7,595 packages were disposed of at an average unit of 7·60c. per half-kilo., against 9c. paid at the auction on July 18. The following were the approximate quantities of quinine purchased by the principal buyers:—English and American factories, who purchased the equivalent of 11,417 kilos.; the Brunswick factory, 6,146 kilos.; the Mannheim and Amsterdam factories, 6,561 kilos.; the Frankfort-on-Main and Stuttgart factories, 5,239 kilos.; and various buyers, 5,366 kilos. The prices paid for the manufacturing-bark ranged from 3½c. to 82c. per half-kilo., and druggists' bark from 9½c. to 42c.

QUININE.

Before last week closed the spot price in the "outside" market dropped still further to 1s 1d and December to 1s 1½d, but this week there has been a slight recovery and prices of good German sulphate are steadier, spot having advanced to 1s 1⅜d, and December delivery to 1s 1⅝d to 1s 1¾d. Only a small business has been done, however, and to-day operators are waiting the result of the Amsterdam bark sale, where a 15 per cent. decline is anticipated. A reduction of at least 2d per oz. is expected in the "official" price.

CARDAMOMS.

A much better demand was shown to-day, and nearly all the catalogues were cleared at irregular prices, fine being easier, and the medium and lower grades bringing full rates. Good seed was 2d to 3d dearer. The following prices were paid:—Ceylon-Mysores, medium to bold pale, 3s 5d; bold medium pale, 2s 4d to 2s 8d; small and medium pale, 2s 2d to 2s 3d; ditto brownish, 1s 11d; small pale, 1s 5d to 1s 9d; very small pale, 1s 4d to 1s 5d; brown splits and pickings, 1s 4d to 1s 5d; bold pale splits, 3s; medium ditto, 2s 1d to 2d 2d, and small 1s 6d, with common at 1s 2d. Good dark seed sold at 2s 2d to 2s 4d, and pale at 1s 7d to 1s 9d per lb.

(AVERAGE FOR ALL INDIA 8·23d., AUGUST 30TH.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price.
Neilgherry ...	**200**	**6·47**												
Brooklands ...	43 p	5¾	43 p	5½ 6	...	...	...	...	...	...	...	...	...	...
Culloocoray ...	19	6¼	19	6¼	...	...	..		...	...	.	...	...	...
Prospect ...	103 p	7	23½c	8½	32	7	40 p	7¼	...	...	...	...	8	3¼
Thaishola ...	35½c	5¾	15½c	6½	20½c	5 5½	...		...	..	..	...	..	...
Travancore ...	**1124**	**6·01**												
Cherian Malay ...	63 p	4½	...	...	31	4½	13	5½	15	4	...	...	4½c	3¼ 3½
Glenmary ...	128	6¾	59	6½	...	...	39	7¾	30	5¾	..	...	...	...
,, ...	27 p	5½	..	...	...	...	7	7½	1	4¾	...	...	19½c	4
Merchiston ...	53	5¼	12	5¾	27	5	14	5¾	...	...	...	...	...	...
Mount ...	133	6¼	...	...	37	5½ 5¾	59	6¾ 7¾	..	...	...	...	37	5¼ 5½
Poonmudi T Co B...	105 p	5½	..	...	41	4¼ 6	24	6½	23	4¾	...	...	17 p	3½ 5¾
,, Poonmudi ..	140 p	6¼	32	8	56	6	18½c	6¾	28	5¼	...	...	6½c	3½
Stagbrook ...	53	4½	...	...	...	...	13	5	40	4¼	...	...	...	...
S T T Co Venture	132 p	5¾	...	...	47	5¾	46	6 7	23	4¾	...	...	16½c	3¼
Trav T East Co BA	108	6½	34	8½	34	5¼	40	6	...	...	...	...	...	...
,, Koli Kaanum...	116	6¾	25	9	30	5¾	30	7⅛	29	4¾	...	...	2	4½
,, Pambanar ...	66	5¾	18	6	22	5¼	21	6½ 6¾	...	...	...	...	5	4¼
Wynaad ...	**182**	**5·70**												
Pootoomulla ...	100 p	6¼	14½c	9¾	17	6¼	43½c	6¾	18	4½	8	5¼	...	...
Wynaad T Co Per...	82 p	5	20	5	...	...	32½c	6¼	25	4½	...	...	5½c	4¼

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

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[w.1-10-98—t.f.o.]

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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DOMESTIC OCCURRENCE.—The fee for inserting a domestic occurrence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 4th proximo. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad. *September 24th.—Weather*—A continuous break since August 29th. It is doing good to the old coffee, but supplies would be better with rain. *Crop*—ripening up rapidly on several properties, it will however be very short. *Works*—Handling has been omitted on several places this year. The least cultivation possible has been the general order. One proprietor has given instructions for 25% of his property to be treated according to the Leeming system. *Health*—Generally good. *Labour*—Abundant.

Coorg. Polli Betta, *24th September —Weather*—Ever since the 15th—on which day there was a heavy shower in the afternoon measuring 1·50 inches—it has been wet and gloomy, though the daily average has not been large. *Plant diseases*—This weather will foster leaf disease which is showing up badly in parts, especially west where crop is ripening. *Crop*—Fly picking will begin in the western parts of the district, where the blossom rains fell early, very soon. *Works*—Attention is being given to supplies and cleaning up, and some knife handling is being done. *Labour*—Plentiful. *Health*—Fair. This rain is in time to save a lot of paddy.

A PERNICIOUS SCALE PEST.

We have not heard that what is known as the San José Scale—*Aspidiotus perniciosus*—has been identified in Southern India. There is, however, a general similarity in the ways and methods of the scale pests that attack fruit trees, and the planter in this part of the world can derive useful information by noting what is done by scientists in the North American Continent with a view to the extermination of one of the most destructive pests that has yet been seen. It has been found in Queensland as well as in the United States, and it may be lurking amongst us, here, unidentified. It was first seen in Queensland and is believed to have been introduced

from California, where it has been known to exist for many years. It is a pest that has a taste for fruits of any kind. It attacks many kinds of deciduous fruit trees, such as almonds, apples, cherries, Japanese plums *(Prunus triflora)*, nectarines, pears, peaches, plums, and quinces. Apricots, though attacked, suffer comparatively little injury as a rule. Also it attacks roses and other plants of the same natural order, and has been reported in America as having been found on loquats, walnuts, pecans, persimmons, the grape vine, the elm, and other trees. It is not known to have been found on citrus trees or fruit in any part of the world. It breeds with alarming rapidity, and is the most active enemy of deciduous fruit trees yet discovered. As it is by no means a conspicuous insect, and is therefore not readily detected on its first appearance, it often obtains a complete hold on the tree before the grower notices that there is anything wrong, and even then the generally sickly and unhealthy appearance of the tree is often ascribed to other.

Mr. ALBUT H. BENSON wrote about it in the *Queensland Agricultural Journal* some time ago. He said that the San José Scale attacks every part of the tree, from the ground to the tips of the smallest twigs. It is seldom found on the leaves, excepting the leaf stalk, but is commonly met with on the fruit. Mr. BENSON points out how its presence may be detected. He says that in the early stage of infestation, it is sometimes difficult to distinguish the insects on the bark of the trunk or older limbs, as the colour of the insect and the bark are very much alike. However, if carefully examined, small, round, blackish scales of the size of a medium pin's head, and having a raised, round point in the centre of the scale will be seen, but there will be no discolouration of the bark. On young wood of the current season's growth the insects are much more easily seen, because, the bark being thinner, smoother, and of a lighter colour than that on the older parts of the tree, the dark colour of the scale is more conspicuous, and not only that, but on the young wood of pears, apples, peaches, and other fruit trees the scale insect is usually surrounded by a circle of red or brownish-red colour, producing an effect which is very characteristic of this particular scale, and by which it can often be definitely distinguished.

As the scale becomes more numerous, the effects are more intensified, the older bark becoming of a slatey-black colour, and the younger bark a brownish-red more or less spotted. In cases of complete infestation, the older bark takes on a very scaly or cankerous appearance and begins to crack; there is often an exudation of gum in the case of stone fruits; the younger branches begin to die back, and if a strip of bark is cut off it will be found to be thickened and discoloured right through. The leaves fall, the wood becomes completely rotten, and finally the tree dies. The presence of the insect on the fruit is, as a rule, easily determined, owing to the characteristic discolourations surrounding the scale which occurs in most fruits but not always on apples or pears having a russety or dark-green skin. The insects may occur on any part of the fruit, being often pretty evenly distributed over it; but in the case of pomaceous fruits, there is usually a larger number of scales round the eye of the fruit than on any other part. We trust that Mr. BENSON will forgive us for quoting him freely in the interests of a large body of planters. Indeed, we intend to make further quotations from his remarks at a future opportunity, to show the methods of treatment that he recommends for the extermination of the pest under reference.

INDIAN COFFEE AND PEPPER.

Messrs. Arbuthnot & Co's Agent at Tellicherry writes:—

I have the pleasure to furnish you with my Annual Statement of Exports of Coffee and Pepper for the year ending 30th June, 1901, the total figures of which approximately represent what the crops of these products in India, for the year in question, amounted to. As usual, I further show the distribution of shipments to various ports, and have added the figures relating to exports for the three previous years for the purpose of comparison.

Coffee.—The crop for the past year was some 74% in excess of that of 1899-1900, by far the larger proportion of which was shipped from the port of Mangalore. Of the total quantity shipped Cwts. 2,55,046 may be regarded as Plantation, and the balance Cwts. 1,07,137 as Native Coffee. The prices fluctuated to such an extent that I find it impossible to arrive at an accurate average value of the Coffee exported, but if the average value of both Plantation and Native Coffee be taken at, say, Rs.650 per ton, f.o.b., the total value of Coffee exported during the year amounts to Rs.1,17,70,947-8-0.

Pepper.—The total exports of this spice amounted to Cwts. 2,11,987, or some 26% more than was shipped last year, the value of which at an average of Rs.37-8-0 per cwt. amounts to Rs.79,49,512-8-0. Tellicherry is still the chief port of export for this spice.

Exports of Coffee and Pepper from Southern India during the Season ending 30th June, 1901.

To	Totals Coffee. Cwts.	Pepper. Cwts.
London	208,669	16,345
Liverpool	...	3,150
Glasgow	68	...
Marseilles	17,360	930
Havre	87,460	35,006
Rotterdam	...	1,330
Trieste	1,107	6,581
Genoa	21	6,494
Leghorn	..	200
Ancona	...	1,000
Naples	...	1,403
Venice	203	1,084
Hamburg	830	17,667
Antwerp	7,605	1,088
Adelaide	459	...
Sydney	1,151	...
Melbourne	5,460	...
Brisbane	200	
New York	401	7,133
Philadelphia	.	300
Baltimore	...	125
Chicago	81	
Mauritius	111	...
Rangoon	674	2,694
Suez	54	1,460
Turkish, African, Arabian and Persian Gulf Ports	3,373	1,442
Bombay and other Indian Ports ...	46,081	123.199
Ceylon	13,692	289
Total Cwts. ...	395,060	228,920
Less Imports	32,877	16,933
1900-1901	362,183	211,987
1899-1900	208,344	168,001
1898-1899	394.091	237,041
1897-1898	203,175	125,231

THE MADRAS GOVERNMENT CINCHONA DEPARTMENT.

Reviewing the report on the administrstion of the Government Cinchona Department during 1900-01, the Madras Government observes:—Mr. Standen's report has been prepared as usual with care and has been submitted punctually.

The Plantations.—Excepting the damage done on the Nadivattam and Hooker estates at the beginning of the monsoon, the plantations did well: in particular it is satisfactory to receive continued good reports about the recent extensions. The experiments in grassing the bark and in heavy manuring go to show that the former process will be profitable if the unit be valued at a fraction over a farthing, and that the latter will prove remunerative, if the unit value be about three farthings. The director will doubtless wait till these results are confirmed by more extended experiments before generally adopting either process in the cultivation of the plantations.

The Factory.—The introduction of a new plant and new system of manufacture somewhat hindered the work at the factory; and the bark worked up proved to be of a comparatively low alkaloidal value. The total output of quinine and febrifuge was in consequence considerably less than that of recent years. The cost of the bark, moreover, was relatively high. These circumstances combined to make the cost of the manufactured quinine Rs.16-7-0·96 per pound and of the febrifuge Rs.3-4-1·48 per pound. The short work of the factory was unavoidable in the circumstances. The high market price (As.1-10·24) per unit paid for the purchased bark was also a factor beyond control, and a factor which connot be eliminated until the new extensions come to maturity.

As regards the cost per pound of estate bark, this is calculated with reference to each year's crop by dividing the total expenditure on the old plantations and the head office by the number of pounds of bark cropped. If, therefore, a small crop is gathered on the estate when bark is cheap in the market, the cost of such a crop is compensated for by the relatively low cost of larger crops taken in years when the market price of bark is high. In the year under review, the small crops of recent years were worked up with the expensive bark purchased in the year. To minimise variations from year to year in the cost price of the quinine manufactured, the Director proposes to reserve the bark of small crops for manufacture with cheap purchased bark and the bark of large crops for manufacture together with more expensive purchased bark. It would, perhaps, be more convenient and serve the end in view equally well if all the bark in stock and gathered each year were valued together and a fresh uniform average rate struck each year. The Director should consider and report on this suggestion.

Besides the interference caused to the work in the factory by the inauguration of the new machinery, and the relatively high cost of the bark worked up the low alkaloidal value of the bark contributed in great measure to the comparatively high cost of the manufactured product. It costs as much to work up poor bark as rich bark: and the question, therefore, suggests itself whether it is not feasible to deal more exclusively with rich barks. On this question a separate communication will be made to the Director.

Issues of Quinine and Febrifuge.—The total amount of quinine issued was not only the largest on record but it also exceeded the quantity estimated as the normal output of the factory, which is 10,000 lbs. It becomes a matter for consideration, therefore, whether the issues from the factory should not be restricted and regulated. This is a difficult question which will be discussed separately. Among the items of issue is a quantity of $254\frac{3}{16}$ lbs. of quinine sold to the public in bulk. Having regard to the prior demands of Government institutions and the "pice-packet" system, sales in bulk to the public, which are objectionable on other grounds also, have been stopped.

Financial.—The balance sheet shows a profit on the year of Rs.41,815-13-7 and is satisfactory.

The Government is indebted to Mr. Standen for the great pains and attention he has bestowed on every detail of the work.

COFFEE IN DISTANT LANDS.

XXXII.

The Congo.—A Belgian correspondent, who has served in the agriculture and forestry department in the Congo Free State, writes to the *Times* to explain the means by which the Congo authorities have created the shadow rather than the reality of a great industry in coffee. In their haste to fill the country with extensive plantations they gave rewards for every area planted with more than a certain number of trees, the trees to be no less than 75 centimétres in height. The sum of money awarded was to be shared between the magistrate and the planters of the district. The result has been that trees have been planted everywhere and anywhere, in all kinds of soil and without any kind of care. Enormous numbers of trees have reached the requisite height for the reward, but either from subsequent neglect or conditions unfavourable to further development they have stopped short of fruitful maturity. The correspondent alleges that the planting of cocoa has not been in any degree more careful, and that the whole policy of the Congo authorities towards cultivation is compounded of a foolish lavishness—as in the case of these rewards—and a very short-sighted economy.

New South Wales.—Coffee planting possesses, says the *H. & C. Mail*, a fascination of its own, and the desire to grow coffee takes hold on people like an epidemic. In Australia an enterprising gentleman has for some years past been experimenting on the Clarence River, about 350 miles north of Sydney, in the direction of coffee planting. The idea is to not only produce coffee in this state, but to roast, grind, and pack it on the plantation ready for consumption. The coffee trees at Mr. Bale's experimental farm are over twenty-four years old, and measure 4 in. in diameter near the ground. The bush spreads 5 ft. or 6 ft., and is kept at a height of about 6 ft. by nipping off the centre of the tree when that growth is attained. Collecting the berries for use was first commenced about fifteen years ago, and since then the crop has attained more interesting developments each year. At the present time Mr. Bale says he finds that coffee is largely planted in the North and at the South Sea Islands. He is just in receipt of a communication from the proprietor of a large estate where 12,000 plants are growing. At this estate there are trees fourteen years old producing as high as 12 lbs. of pure coffee per tree per annum.

NOTES.

A Book on "Cocoa" Planting.

The King has graciously accepted a copy of Mr. Harold Hamel-Smith's book entitled "Some Notes on Cocoa Planting in the West Indies."

Quinine in the U. S.

The imports of "quinine and salts of" into the United States for the twelve months ended June 29, 1901, amounted to 3,660,022 ozs., against 3,113,749 ozs. during 1900.

Obituary.

Mr. William West, Biologist, Behar Indigo Planters' Association, died at Mozafferpur a few days ago from cholera. Mr. West, who was only twenty-six years old, had been only three weeks in India.

German Quinine.

The exports from Germany during the six months ended June amounted to :—

	1901.	1900.	1899.
Kilos. ...	... 111,800	100,900	128,100
Marks ...	... 5,031,000	4,541,000	4,868,000

Tea in Java.

The falling quotations for tea have had a bad effect on enterprise in that staple in Java. Tea planters there had of late larger outputs than in 1900, but their dividends are much smaller. Some of the planters talk of curtailing production as a remedy for the evil.

Brazilian Coffee Crops.

A late estimate places the Brazil coffee crop at 8,750,000 to 9,500,000 bags of Santos, 3,500,000 bags of Rio, and 1,000,000 bags of Minas—a total of 13,250,000 to 14,000,000 bags. Add the world's visible supply and the crops of mild coffee, and we have a grand total nearly double the world's requirements.

Coffee Exchange Statistics.

The figures published by the New York Coffee Exchange show a very large increase of sales in 1900-1901, which aggregated 7,333,000 bags against 5,879,500 in 1899-1900; the sales for 1898-1899 were 4,060,500 bags. The transactions for the past year exceeded those of 1899-1900 by 1,503,500 bags; the gain being partially due, it is said, to the large crops abroad.

Indian Tea Prospects.

Latest advices from the tea districts continue to report unfavourable weather for yield. No doubt that the deficiency in outturn has increased since the actual figures to 15th August were published. Similar figures to the 15th instant has been collected by the Association. They will be very interesting and will go a long way to support the impression that the crop this year is likely to be considerably less than last year.

The Flavour of Tea.

Mr. H. H. Mann, Scientific Officer to the Indian Tea Association, is investigating the scientific aspect of the flavour of tea, the variations of which may possibly admit of scientific explanation. Mr. Mann is taking the matter up during his tour in the Darjeeling district, where there are special advantages for the prosecution of such an inquiry, as the flavour in Darjeeling teas is so marked and unique, and yet so difficult to fix.

Indian Tea for Indians.

Messrs. Andrew Yule & Co. a selling tea at one pice per c through the medium of Brahmin hawkers. Swiss milk a sugar are used in the brew. This has caused some little sens tion, chiefly because of tea being offered for sale in packe at one pice each, containing about an ounce, each stamped —"Read monogram." Messrs. Yule's announcement on ea cover in English, Bengali, and Hindi is calculated to fix t native :—"Keep this cover. It may be worth Rs.50 you." Each cover bears a serial number.

Quinine.

A reduction of 2d per oz. in t "official" price of quinine is t principal feature since our last report, says the *Chem & Druggist*, writing on 5th instant and the outside market lower in sympathy. Among the speculators there a evidently "bear" sellers for distant delivery, whose idea to depress the market further, with the ultimate object covering later at a lower figure. In these circumstanc there is likely to be no immediate improvement in prices this policy should be successful, and especially if the Ja bark shipments are maintained at the present high level.

Tea in the U. S.

A Home paper writes :—"Wh is the best way to make people thi of a subject and become interested in it? That is a questi to which many persons would be glad of an answer. Obv ously reliance is placed upon two methods, those of talki and printing. If you want to disseminate views, of cours you must go to all parts of the country, and address crow at public meetings; or you must get pamphlets printed, a sow them broadcast." These remarks have been quoted offering hints for the prosecution of the Tea Campaign America.

Rubbish.

A correspondent of the *Ceyl Observer*, writing from Westrali says :—The grocers in Fremantle often supply your corre pondent with samples. Only this morning a packet of pu Ceylon tea was broken and a sample handed to me. Th tea is retailing at 1s 2d (no duty *yet*) and of all the mixtur of vile refuse, sweepings and coarse and under-fired leaf ever saw, it is an easy first. It was simply "shocking We cannot expect Ceylon tea to go ahead here or anywhe else as it should and could while such stuff as this is on t market to retard progress.

Cinchona.

The shipments from Java Europe have been as follows :—

—	1901.	1900.	1899.	1898.
August (Amsterdam lbs.)	1,067,000	977,000	1,200,000	1,047,00
January to August ,,	7,524,000	5,724,000	7,230,800	7,136,00

The exports from British India during the two months end May amounted to 528,459 lbs., against 1,201,659 lbs. for t corresponding period of 1900.

Liberian Coffee.

Liberian coffee appears to have generally realised about 20 to 26 cents per ½ kilo. in the Amsterdam market lately, but Messrs. Heijbrok & Co., of that place, refer to a lot of 15 bales, which were valued at 45 cents, as having sold well above valuation. Mean rates at Rotterdam during July last were as follows :—

Arabica ...	Java, good ordinary ...	...	31 to 32 cents.
	Santos „ ...	...	18 „ 19 „
Liberia ...	Java ...	...	20 „ 24 „
	Africa ...	...	16 „ 16½ „

The Dutch florin may be assessed at ⅛d.

Calcutta Tea Sales.

At Friday's sale 19,800 packages of tea were offered, as against 20,700 on the same date last year. All districts were well represented, and the quality in most cases showed improvement. The tone of the market was decidedly firmer, though some teas still seem to be sailing much under their value. The trade both here and at home do not yet apparently appreciate the shortness in the crop, and the prospect of an early close to the season. Advices from all districts, specially the Terai, Dooars, and Darjeeling, are that the nights are now becoming very cold indeed, which will have the effect of retarding the bushes from flushing. Advance musters have a decidedly cold-weather flavour.

Cinchona-assay.

Van Ketel recommends the following method for the estimation of the alkaloids in cinchona-bark : Four grammes of the powdered bark is mixed with 2 grammes of powdered lime and 5 c.c. of solution of ammonia, and boiled on a water-bath under a reflux condenser for half an hour with 100 c.c of ether. The solution is then filtered, and the insoluble matter washed with 80 c.c. of ether, and the filtrate shaken well with 10 c.c. of 10-per-cent. hydrochloric acid. The acid liquid is separated, and the ethereal solution well washed with water, which is added to the acid. The acid solution is then shaken with excess of solution of caustic soda and ether ; the extraction with ether is repeated, the ether evaporated, and the alkaloids weighed. The alkaloids left on evaporating the ether may also be titrated.

"Ceylon" Teas in Canada.

The Ross Tea Co. writes to the *Ceylon Observer* from Toronto :— Some packers use, in some of their packets, nothing but India teas, but still label them Ceylon. Again large quantities of China Greens are used for mixing purposes, and are put out with the Ceylon label on them. We make the above assertion, and there is no prominent packer of tea in Canada, who can successfully contradict it. There may be some dealers putting up a straight Ceylon tea. If there are, we don't know them, but if their goods were selling, or advertised, we would know their tea. We inaugurated the mixing of Green Ceylon teas instead of China Green, and no doubt many will follow us, but the complaint is chiefly against the great quantity of Indias that are put out under Ceylon labels.

Test for exhausted Tea.

Dr. Nestler, in the *Journal de Pharmacie d'Alsace-Lorraine*, puts forward a test to determine whether tea leaf has been previously used or not. Professor Tickhominow's test is said to be untrustworthy. This depends on the production of a greenish tint by unused tea after two days' standing in a solution of acetate of copper. Tea which has been twice infused, however, will sometimes give this colour. Dr. Nestler's test is as follows : A little of the tea is crushed between the fingers and placed on a watch-glass. This is covered with another watch-glass, and heated gently. On the upper glass there is soon an appearance of small drops, and after ten minutes' heating crystals of theine are visible to the naked eye. The identity of these crystals can be shown by hydrochloric acid and a solution of chloride of gold, which gives more or less yellowish prisms of a silky, long, slender character.

The World's Production and Consumption of Potash Fertilizers.

Mr. L. Grandeau in a French Agricultural Journal notes briefly the source of potash, the discovery of the Stassfurt deposits, the extraction, preparation, and production of the Stassfurt salts ; and gives tables showing the composition, production, and consumption of the different products. It is stated that the total production of crude, Stassfurt salts in 1899 was 2,737,965·38 tons (of 2,000 lbs.). This includes 64,679·877 tons of carnalite and kieserite used for agricultural purposes in Germany. and 5,082·37 tons exported to other countries for the same purpose, besides 1,385,293·041 tons converted into concentrated potash salts ; and 791,051·485 tons of kainit and sylvinite used for agricultural purposes in Germany, and 347,080·319 tons exported to foreign countries for the same purpose, besides 144,778·286 tons converted into concentrated salts.

The London Tea Market.

Cabling on the 19th instant to Colombo Messrs. Gow, Wilson & Stanton report that the market generally shows a fractional advance, that for fine teas generally being dearer, while the market for common Pekoes and Broken Pekoes is steady. The price of fair liquoring Ceylon Pekoe Souchong is 5½d (same as last week), but the average price of Ceylon tea sold on garden account this week was 7½d (a farthing up). The average of the corresponding week last year was 6⅞d. Reuter reports that generally there is a brisk demand for Ceylon tea at full prices, while common Broken Pekoe is irregular. Fair Pekoe Souchongs are quoted at 4¾d (same as last week) but the average for the week is 7½d (a farthing up). 21,000 packages of Ceylon tea were offered for sale and 20,000 were disposed of ; while of the 41,000 packages of Indian tea offered, 38,000 found purchasers, at an average of 8¾d per lb. (½d up).

Colombo *vs.* London Tea Sales.

The attention of the *Times of Ceylon* has been drawn by a local expert to the difference in price ruling between the Colombo and the London market at the present time. He quotes the case of Pekoe Souchong, of which the lowest grade at Colombo is being sold at 24 cents, equal to, say, 5d to 5⅛d in London ; similar tea is being sold to-day there at 4¼d. With regard to Pekoes, it is difficult to buy this class of tea, he says, under 28 cents, which is equal to 5⅞d to 6d ; in London it is being sold at 5d to 5¼d. In Broken Pekoe there is hardly anything to be had at Colombo with clean liquor under 35 cents, equal to 7d, while similar quality is selling at home at 6¼d to ½d. This, worked on an

average, shows an advantage in favour of the Colombo market of about 12½ per cent. Our contemporary maintains that, even should local prices decline to the London equivalent, it would still be in the interests of the majority of planters to sell locally, as by this means outside markets are opened and kept supplied.

Coffee in London.

The *Produce Markets' Review* of 31st ultimo says:—The Central American and East Indian crops having practically come to an end, supplies of these sorts are now very limited, and the auctions this week have been comparatively insignificant and contained only a small quantity of desirable quality. There was keen competition for nearly all kinds, and prices were in most cases higher, occasionally to the extent of several shillings per cwt. In the dearth of first hand supplies there has been a good business done from second hands; desirable qualities are eagerly sought and more particularly for fine Costa Rica good rates are being paid. As we have still four months of this year and probably two of next to wait before the new crop arrives in any quantity, we have presumably before us a long period of great scarcity, and still higher prices would seem to be inevitable. Receipts in Brazil continue heavy, and are, in fact, larger than ever known before, but these have very little effect on the markets, owing partly to the general scarcity of other descriptions, and partly, no doubt, to the prevalent idea that the following Brazil crop may not be a large one. As compared with a week ago, prices of Santos are about 3d lower.

Indian Teas in London.

Although the quantity offered was considerably smaller than in the preceding week, prices in most cases were easier, says the *Produce Markets' Review* of the 31st ultimo, and several of the same marks that were previously offered brought less satisfactory rates. This was mainly due to the falling off in quality, which was especially noticeable in the Assam growths, thus confirming the reports from Calcutta of inferior quality by the later shipments. From this it would appear that those who have secured teas from the earlier sales will have no cause to regret their purchases, as it is doubtful if they will be able to follow them even at enhanced rates. This, of course, applies to the fine and finest descriptions, while the next lower grades, which continue somewhat scarce at the moment and comparatively dear, will, no doubt, be in more liberal supply when buyers will be able to meet their requirements on more favourable terms. Common descriptions meet with but a moderate demand, and as there was a fairly large quantity brought forward values depreciated, and these teas are now obtainable at a lower level of prices than for some time past. From a telegram just received from Calcutta the season's crop is estimated to yield 184,250,000 lbs., being practically the same as last year, and the total available for this market is put down at 150,000,000 lbs. against 160,000,000 lbs. in 1900. At the public sales 25,750 packages were catalogued, and about 6,000 withdrawn.

Early Coffee.

The *Singapore Free Press* some while ago advanced an interesting opinion on the subject of the inferior sale of coffee as compared with that of tea giving as a reason the greater facility for making good tea in the early morning as compared with the somewhat prolonged and complex operation for makin good coffee, and suggesting as a remedy the sale of coffee a prepared form which would only require the addition hot water to make the beverage. There is another importa factor in the enhanced sale of coffee and that is the ear coffee stall on the virtues of which someone waxes eloquen

A CHARACTER.

The man wot keeps a early coffee-stall
And sells good stuff, and always is perlite,
Is wot I call the neighbour of us all,
And well I know the truth of wot I write.

You 'aven't got no baccy, and the dawn,
Though late is 'ardly showing up at all.
W'y all your bloomin' pleasures would be gawn,
If 'twasn't for the early coffee-stall.

And 'im wot keeps it—wot a lot 'e knows
From them as do not get it second 'and!
Wot nice illuminatin' 'ints 'e throws
On little things you could not understand!

A egg, a cup of coffee, and a slice,
A chat with 'im w'en things is goin' slow:
My brother, take and 'ark to my advice—
These are as good as aught that you may know.

I talk impartial, as a family man,
That do not walk nocturnal now at all:
Find me a chap more useful if you can
Than 'im as keeps a early coffee-stall.

THE IMPENITENT.

Cocoa in Hamburg.

The importation of cocoa an stocks remaining on hand at the en of last year were respectively as follows as compared with th figures for 1899, *viz.*:—

Countries whence Imported.	1899.		1900.	
	Imports.	Stock, Dec. 31.	Imports.	Stock Dec. 3
	Bags.	Bags.	Bags.	Bags.
Guayaquil	143,105	3,831	100,952	5,42
Bahia	45,070	1,075	64,102	3,14
Cape Hayti	12,004	894	11,458	65
Samana	51,447	323	52,566	34
Trinidad	8,395	219	9,687	1,37
Caracas	17,514	2,563	25,085	7,44
St. Thome and Africa ...	70,820	2,195	70,522	2,37
Ceylon and Java	12,974	472	12,169	14
Jamaica	2,750	...	2,300	...
Other kinds	13,385	1,518	13,188	1,87
Total ...	378,464	13,090	362,029	22,76

It will be seen, observes the British Consul General, that th imports of cocoa in 1900 were 16,435 bags less than in th previous year, this being due rather to smaller crops in th countries of production than to decrease in consumption her It is, indeed, the opinion that it will soon be very difficult meet the increasing demands for cocoa in Germany, unle planters are able to increase their supplies. The larg decrease in the importations of Guayaquil sorts, which wa due to the poor crop in Ecuador, was to some extent made u for last year by larger importations of Bahia and Caracas cocoa. Of Samana large quantities were again imported, an of fair quality, this sort being a special favourite in th Hamburg market.

Brazilian Coffee and Exchange.

The following remarks, extracted from an American circular, regarding the milreis price of coffee are significant:—*New Crop Prospects.*—We are entering the new crop this time at low values. The milreis price in Brazil is now much lower than it was at any time in 1890. This in itself is a very good feature. It is in the interest of the trade to keep the milreis price at the present low level until some months of the new crop season have elapsed. Then it can be seen to what extent the planters can afford to pick their crop, bring it to market and take care of their plantations in freeing the trees from under-growth while these low prices prevail. It is reported from the Rio and Santos districts, that small planters have already abandoned their plantations, probably owing to lack of funds or borrowing capacity. There is also said to be a scarcity of labour, probably caused by a considerable reduction in the scale of wages formerly paid. Other countries are suffering similarly on account of the low prices. One indication we have in a report from the German Settlement in East Africa, which reads: "The price obtained at Hamburg for Liberian coffee, of which 500,000 shrubs have been planted, is, however, not sufficient to pay for the cost of transport and the gardens are for the most part being allowed to go to weed." That plantations are being neglected in other countries is shown by the reduced crops of Java, Venezuela, Mexico, San Salvador, and Nicaragua. From everywhere comes the cry of disastrously low prices, and it seems that over-production will at last work out its own cure. A short crop in Rio and Santos would be a blessing to Brazil, as well as all other coffee-producing countries.

GENERAL ARTICLES.

TEA IN AMERICA:

WHY THE AMERICANS HAVE NOT TAKEN TO OUR TEAS.

(*Extract from last Annual Report of Messrs. W. J. & H. Thompson & Co.*)

Canada takes about 45 per cent. of its import from us, leaving some 13 or 14 millions of Japan and China tea to be displaced. There remain the great markets of Russia and the United States, using annually some 180 million lbs. Of other markets, the Russian is the more hopeful, because it requires black tea, appreciates quality, and is taking more from us every year, by direct importation or from London; it, too, is calling for better tea. Our trade with America continues to disappoint some who had not grasped the difficulty of persuading people who prefer tea uncoloured or green to drink our strong black sorts. The attempt to manufacture tea to suit their tastes is enterprising, but we fear lest it be made in a way which will give trouble and bring disappointment to a number of individual growers, without substantial benefit to anyone. It will take a decade to create a trade worth anything to us by means of specimens, unlike in make or flavour; for large distributors hesitate to introduce a new kind of tea to their customers unless they can rely upon a regular, uniform and free supply. We think that if Americans had this matter in hand on their own account they would rent for a term of years estates capable of producing, at the lowest possible cost, millions of pounds per annum, have it all made uniformly into two or three grades, procure men and materials from China for packing it in the way Americans like, give a constant supply, and undersell their rivals until the trade was made. It would cost money, but it might prove the cheapest and most effectual way of making a market—assuming, of course, that we can make unfermented tea that Americans will drink. Seeing that we have obtained less than 10 per cent. of a trade amounting to 84 million lbs. per annum, after twenty years of heavy expenditure by planters and strenuous effort by the Agents of London dealers, it is obvious that other means must be tried. It has been said that tea is not likely to become in America the popular beverage that it is here and in the Colonies; but it may be that the small and declining consumption in the United States—now only $1\frac{1}{8}$ lbs. per head per annum—is due to the astringent and unsatisfying nature of the Japan and China teas principally used, as compared with the softer and richer tea of India and Ceylon which other races of Anglo-Saxon origin find such a cheap and wholesome article of diet that their annual consumption has reached the rate of nearly 6 lbs. per head. It should be noted how largely the use of tea here has increased since the introduction of our own in place of Chinese growths.

COFFEE IN OLDEN TIMES.

Of coffee, a writer in the *Post* says:—"The introduction of coffee into England was bitterly opposed. In 1675 Charles II. attempted to suppress coffee-houses by a royal declaration, which declared that they were the resort of disaffected persons 'who devised and spread abroad divers false, malicious, and scandalous reports to the defamation of His Majesty's Government, and to the disturbance of the peace and quiet of the nation.' When the opinion of the Crown lawyers was taken as to the legality of his step, the reply was 'that the retailing of coffee might be an innocent trade, but as it was used to nourish sedition, spread lies, and scandalise great men, it might also be a common nuisance.' Down to 1690 all the coffee used and abused in Europe came from Arabia, but in that year the Governor-General of the Dutch East Indies received a few coffee seeds from merchants trading between Arabia and Java, and planted them at Batavia, where they grew luxuriantly. One of the first plants grown in that island, remote in space and time during the epoch of sailing-vessels, was sent to Amsterdam and planted in the Botanic Garden; from which place seeds were distributed at the beginning of the eighteenth century throughout the West Indian Islands. The story of the migrations of the coffee plant throws light on a curious question of natural preferences. The Dutch are a coffee-drinking race; the British, as well as the inhabitants of Greater Britain, seem to strongly prefer tea; but the people of the United States, most of whom have a drop of Duch blood in their veins, regard the rival drinks with equal affection. From one point of view the South African War is really a contest between tea and coffee. Canadians and Australians, and, in a less marked degree, the home-grown British soldier, are inveterate tea drinkers; on the other hand, the Boers are fanatic lovers of coffee. Let the historian get a firm grip of the principle suggested, and it may be that he will see yet another reason for the inevitable result of the attempt to establish Dutch supremacy in South Africa. The quantity of coffee, including both roast and ground, imported into the United Kingdom last year was 764,823 cwt., of which the value was £2,528,465. Roughly speaking, the amount annually consumed per head of population is $2\frac{1}{4}$ lbs.; a very small fraction of the weight annually used by a native of Holland or even Belgium. The British supply is largely derived from the East Indies and Central America, particularly Costa Rica. As is the case with tea, it is sold by auction in Mincing Lane. It is possible to retail coffee at a shilling a pound, but the better varieties cost from sixteen to eighteen pence. The principal wholesale firms generally employ a competent 'coffee expert,' and it is hardly necessary to say that their purchases are selected with the greatest care. Though the demand in this country for pure coffee has grown in recent years—in 1873 little

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

more than a pound per head of population was consumed—the public is still prejudiced in favour of mixtures, in which chicory is, next to coffee, the chief ingredient. In 1900 no less than 97,779 cwt. of chicory were imported into the United Kingdom. The use of chicory in connection with coffee is said by some authorities to be due to the fact that it yields a large amount of soluble matter when boiled, and thus gives an appearance of strength to what may be in reality a very weak infusion of coffee. But, though it contains no trace of the characteristic alkaloid of coffee, and has not the aromatic odour of that substance, there must be some other reason for its popularity. For more than a century it has held its own as a substitute or addition to coffee, and in Belgium and other parts of the world its pure infusion is often consumed with every appearance of gratification on the part of the consumer. In the United Kingdom the working classes will not touch coffee unless chicory is present as a 'vehicle.' The truth is that technical education has not gone so far as to teach them how to make coffee properly."

COFFEE.

To the bull clique operating in coffee the ever-increasing supplies of Rio and Santos must, says the *London Commercial Record*, have been a source of great anxiety and care, and as in spite of the heaviest supplies on record, the market has not collapsed, but, on the contrary, has steadily advanced, these operators for an advance must have congratulated themselves upon their good fortune. An increase of about 60,000 tons in the world's visible supply would, under ordinary circumstances, more than suffice to disturb the equilibrium of any market, to say nothing of coffee, which is generally regulated by figures only. But the saying invented by a well-known London coffee broker, "The bigger the receipts, the better the market," has proved correct once more, although it seems contrary to common sense that heavy supplies should form an impetus to values. No doubt the custom to discount big figures has become pretty general in every trade whose basis is speculation; bulls perceive in extraordinarily heavy receipts a quick and short road to unusually small supplies, and therefore buy. It is the same in cotton, sugar, and also in tea and many other speculative articles as well. People look ahead and operate accordingly. Yet people wonder what becomes of these enormous quantities of coffee grown every year—11 to 12 million bags alone in Brazil—and are astonished that, in spite of the increased consumption of tea and cocoa, a steady extension of coffee planting should be possible. If we look at the gigantic strides teetotalism is making in almost every country, we find an explanation of the increase in consumption of beverages belonging to this movement. People, particularly so in our island, are quickly being educated to appreciate coffee as a pleasant and stimulating beverage, as is clearly evident by the endless number of coffee palaces established everywhere. With the increased demand and the improved taste for coffee, the old-fashioned and obnoxious method of preparing the drink is quickly vanishing and with it the objectionable practice of adulteration. The black, thick, boiled concoction, largely adulterated with ground Indian corn, broad beans, rice, chicory, etc., called coffee, is almost a thing of the past, even in private houses in England, and a tasteful blend of pure coffees has taken its place. That means an increased consumption of the real article here, there, and everywhere, and with it a steady decrease of the enormous supplies. Following the ordinary course of events, every year will produce a greater request for fine coffees, the palates get spoilt and long for something better. Then the fine, colonry sorts of India will become favourites once more, and people will gladly pay the premium demanded for them over and above other descriptions. In the meantime, Indian planters have to contend against many adversities, short crops, inferior quality, and low prices, which have greatly, and, we fear, in the immediate future will still try their vitality severely, but matters at last promise to turn in their favour.

Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant the appointment of "Purveyors to Her Majesty The Queen and Empress of India" from the year 1837 until the time of her death, have now had the honour of being appointed by Royal Warrant "Purveyors to The King."

THE U. S. TEA TRADE.

It appears, from the reports of the United States Bureau Statistics, that the total imports of tea for the fiscal year endi June 30, 1901. were 90,381,270 pounds, received from the followi countries:

	Pounds.
Chinese Empire	46,867,436
Japan...	33,493,312
United Kingdom	3,491,720
East Indies	2,893,864
Other Asia and Oceanica	2,347,038
British North America	1,256,543
Other countries	31,357
Total ...	90,381,270

China furnished about 52 per cent. of the total supply; Japan, per cent.; all other countries, 11 per cent. The imports from t United Kingdom, East Indies, and other parts of Asia and Oceani (other than China and Japan) were 8,732,622 pounds, again 3,988,789 pounds two years previous. As this is mostly Britis grown tea, it is apparent that its consumption is increasing rapidl or imports would not show a gain of over 118 per cent.

The following statement shows the position of the article:

		Pounds.
In warehouses, June 30, 1900 ...	...	29,425,381
Imports, June 30, 1900, to June 30, 1901	...	90,381,270
Total supply...		119,806,651
Less exports	... 1,296.323	
Stock in warehouses, June 30, 1901	...36,753,264 =	38,049,587
Deliveries ...		81,757,064

The above represents a per capita consumption of 1·08 pound against 1·09 pounds in 1900. Ever since the 10 cents per pou duty was levied, the consumption has decreased. From 188 1897 (inclusive) the per capita consumption varied from a minimu of 1·09 pounds to a maximum of 1·58 pounds. The average for th period was 1·26 pounds, against 1·02 pounds for the last four yea Here is a serious falling off, and reason enough why the tea tra is so unsatisfactory. Evidently a higher average quality is not factor in increasing the use of tea, although it should be.—*Americ Grocer.*

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exhange, *August 10th*, 1901.—Ninety days' Bank rate on Lond opened on Monday 5th at $10\frac{3}{8}$ and closed this evening at $10\frac{1}{4}$d.

Extremes during the week ending August 9th were 10d $10\frac{23}{32}$d for 90 d/s Bank paper and $10\frac{1}{16}$d—$10\frac{3}{4}$d for private.

The average Bank 90 d/s counter-drawing rate for the we comes out at $10\frac{19}{64}$d the corresponding sight rate being $10\frac{1}{6}$ against $10\frac{17}{64}$d, the average sight rate of the *Camara Syndical*.

At Pará entries of rubber are yet small, shipments from bo Pará and Manáos during the week ending 9th instant amountin to only £85,000.

Coffee.—Compared with the previous week, entries at Rio a Santos show a falling off of 2,577 bags, owing entirely to the b weather reigning up country, which has greatly interfered with t harvesting and especially with the drying of the coffee. So far t current crop has given 1,990,638 bags or about 63% more than la season.

Declared sales were 243,000 as against 221,000 the previous we and 188,000 last year.

In spite of heavy shipments stocks are rapidly accumulating a still exceed a million bags as against only 784,398 this time la year.

The report of the *Boletim de Agricultura* of the State S. Paulo for the month of June states that at S. Paulo the temper ture was abnormal, the average having been only 13°7 as compar with 14°5 the previous average, though in 1889 the average fell low as 12°9 and 12°2 in 1894, the lowest average in June for years. The maximum temperature during June was 26° on t 30th, and the minimum 2°4 on the 17th. The quantity of ra

fallen was small, only 13·6 mm. as against the previous average of 64 mm. There, rain fell on 3 days as against the normal of 9, whilst 17 days were clear and the rest cloudy. No frost fell.

At Campinas the average temperature was 14°99 c. or 0°86 under normal, the maximum being 18°38 on the 30th, and the minimum 10° c. on the 17th.

The Inspector of the first district reports that harvesting during the month of June was well advanced and that the yield will be as great or greater than last year.

The Inspector of the 2nd district (Campinas) states that frost fell on the 11th, 17th, 18th, and 19th on low lying lands without injury to the coffee.

The Inspector of the 3rd district confirms his former prediction that this crop would be less than last, a good deal of the fruit that seemed so promising having in many instances failed to ripen or fallen off the trees.

The Inspector of the 4th district reports that harvesting commenced from April to June for which the weather was very favourable. Of the coffee already milled it was found that 75 litres produced only about 1 arroba in consequence of the large percentage of hollow berries (*chochos*).

From the 5th district the Inspector reports that harvesting is in full swing but that a good deal of green coffee is being picked with the ripe. In consequence of the large percentage of the hollow and burned (*requeimado*) fruit, the Inspector says that the crop will not come up to what was expected, but will be a good one, but that two such heavy crops must inevitably affect next year's crop.

PARÁ RUBBER IN BURMA.

The following is the text of a Memorial sent by the Planters' Association of Ceylon to the Secretary of State of the Colonies on the subject of experimental cultivation of Pará Rubber in Burma :—

To the Right Hon. Joseph Chamberlain, M.P.,
His Majesty's Secretary of State for the Colonies,
Downing Street, London.

The humble Memorial of the Planters' Association of Ceylon, and others.

Respectfully Sheweth :—

1. That your Memorialists, having received information that the Government of India is taking steps to develop the cultivation on a large scale of Rubber-producing trees in Burma notably the Pará rubber tree -- Hevea brasiliensis, Mull. Arg—in the Tenasserim division of Burma, desire to bring the question under your consideration.

2. Since 1880, when the late Director of the Royal Botanic Gardens, Peradeniya, drew up notes on some trees yielding India-rubber, considerable interest has been taken in the cultivation of rubber both in Ceylon and in the Straits Settlements, and your Memorialists now aproach you in the hope that His Majesty's Government may make such representation as will prevail upon the Government of India not to enter into the field as competitors with private enterprise in the Markets of the World.

3. In a report of the Planters' Association of Ceylon a few years ago the following sentences appear :—"The increasing demand for rubber both in Europe and the United States has again of late drawn the attention of the planting community to this product, and the area being planted with the Pará variety is rapidly increasing Several of the lower district estates have a fair acreage under this cultivation" Since the above was written the planting of Pará and other varieties of rubber yielding trees has been considerably extended and from the returns furnished for "Ferguson's Handbook and Directory" it has been estimated that there are now over 2,500 acres planted with trees of all ages and varieties in Ceylon alone.

These trees have in most cases been planted on tea and cacao estates as a subsidiary cultivation with a view to mitigate the losses sustained by planters through the serious decline in the price of tea.

The following is from a report of Mr. Willis, Director of the Royal Botanic Gardens, Peradeniya, dated 1898 :—"From what I saw of the condition of the trees and the results of the tappings, I am strongly confirmed in my previous opinion that the cultivation of rubber bids fair to form a profitable industry in Ceylon and a useful adjunct to the larger industry of tea and cocoanut cultivation." In his report for 1899 Mr. Willis points out that six or more years must elapse before any returns are forthcoming, and warns planters that in a few years substitutes for rubber may be largely used and cause a drop in the price

The above is quoted as showing that the results of private enterprise in the planting of rubber would not be apparent for some years, meanwhile it is known that considerable quantities of seed have been exported to the Straits and elsewhere, so that it can hardly be necessary to commence an extensive experimental plantation in a similar climate and under similar conditions.

4. In a recent report of the United Planters' Association, Malay States, the following sentences occur :—"Rubber (Hevea brasiliensis of Pará). This variety of rubber continues to come on exceedingly satisfactorily, the average growth of trees from nine months upwards amounting to about 1 foot per mensem, whilst at three years their average circumference at 3 feet from the ground is about 16 inches This far exceeds anything reported from Ceylon and other countries where Pará is being planted, and we consider that Mr. Curtis' description in the 1900 annual Report on the Botanical Gardens of the Colony, of the tapping of the 15-year old Pará tree in the Gardens at Penang, is conclusive evidence of the contention of the writer 'that in this cultivation lies a source of wealth of the greatest importance.' In two years 12½ lbs. of dry marketable rubber were procured 'without any apparent injurious result to the health of this tree, and the conditions under which it is growing are reported as anything but favourable. It appears in the opinion of the different Directors of the Botanical Gardens, that the size of a tree more than its age indicates its fitness for tapping, and probably a circumference of 30 inches 3 feet from the ground is the limit at which attempts to extract the rubber should be commenced. Reports from London show that prices of Pará have, of late, declined, one reason alleged being the falling off in the demand for bicycles; but in Pará rubber we have undoubtedly the most valuable and highest quality rubber in the world, and your Committee feel that the large number of trees amounting now to several millions, planted in the Federated Malay States, must, in the not very distant future, prove a source of revenue which will largely recoup the planters for the losses which they have sustained through the decline in value of Liberian coffee."

5. From the above quotations it seems plain that the success of the planting of Pará rubber in a suitable climate is apparently assured and that, therefore, no extensive experimental plantation of 5,000 acres is necessary, and your Memorialists submit that Government rivalry with private enterprise in the production of rubber is to be deprecated. The industry is already threatened with the production of cheap substitutes, and prices are declining and it is felt that the production by the Government of India of such a large amount as is likely to be secured from the plantations in contemplation would be a serious and undue competition with private growers who have, as it is, to contend with the enormous productions of the indigenous trees in the forests of South America and East and West Africa.

6. An authoritative statement that the Government of India had no intention of placing rubber on the London market nor competing with private enterprise by large operations, would, of course, tend to remove any cause for alarm. In 1882 representations were made to your predecessor Earl Kimberley on the subject of Government sales of Cinchona bark, and at that time Government was asked to obtain all possible information regarding the Indian plantations, and the intention of Government as to the future disposal of the product of the Cinchona tree. Government then gave a distinct assurance that it was not intended in any way to interfere with the ordinary course of trade or to do anything prejudicial to private interests. The two cases seem to be sufficiently analogous to call for similar treatment, and your Memorialists venture to express a hope that His Majesty's Government will respond to the representations submitted.

7. Wherefore your Memorialists pray that the present position of British-grown rubber producers may be considered by His Majesty's Government, and that any necessary action may be taken in the matter. And your Memorialists, as in duty bound, will ever pray. On behalf of the Memorialists.

(Signed) A. Philip, *Secretary.* (Signed) Edward Rosling, *Chairman.*

Kandy, Ceylon, *3rd September.*

THE AMERICAN TEA TRADE.

NEW YORK, *August 17th.*—When Sir Thomas Lipton goes to Brooklyn after his arrival in New York to take a look at "Shamrock II." he will pass a long row of warehouses which seem to have outlived their usefulness, and if he asks what they represent he will be told that they are reminders of a departed industry, one of whose features was the housing of a product which has made it possible for Sir Thomas to gain a title and indulge in international racing.

At the last meeting of the stockholders of Sir Thomas Lipton's company there were expressions of dissatisfaction at the diminished dividends, and some of the stockholders were even inclined to twit Sir Thomas, intimating that if he paid more attention to his company and less to sports his stockholders might get greater dividends, even if he himself did not win the favour and companionship of the King.

But Sir Thomas' explanation to his stockholders would furnish a part of the explanation for the deserted appearance of the warehouses along the Brooklyn water front. The idea contained in his remarks was that he grieved to discover a falling off in the fondness of civilized people for tea, and that it was a tendency which, unless checked, would some day make it unprofitable either to grow or to import tea.

TENDENCY CAUSES GRAVE ANXIETY.

It is certainly a tendency that has been noticed in this country and recently has been so strongly developed that the gravest anxiety in circles that used once to make much money in the tea trade has been created. Recently an attempt was made te discover through questions put to men of life-long experience in the tea trade what it was that had caused a depression in that trade that could only be compared with the depression that existed in all trades in 1893.

Some of the answers were given by men who have reasons, so they think, to be dissatisfied with the imposition of the tariff of 10 cents a pound, but the great majority who replied to the inquiry stated it to be their belief that the people of the United States were very rapidly giving up the tea-drinking habit and that coffee was more and more taking its place.

The recent figures that have come from Washington to some extent tend to prove the truth of this assertion, for these figures show that the people of the United States consumed nearly 800,000,000 pounds of coffee, valued at nearly, $53,000,000, in the year ended June 30th, 1900, whereas they consumed only 84,000,000 pounds of tea, valued at about $10,000, 00, and this was a considerable falling off from earlier days.

Grocers and dealers in spices, both retailers and wholesalers, do not hesitate to say that the taste of the American people is changing and that it will not avail the Secretary of Agriculture to try to encourage the tea-planting industry in that peculiar soil in parts of the South where the agricultural scientists say it may be successfully cultivated.

SOME GREAT CHANGES IN NEW YORK.

Up to six or seven year ago the great warehouses along the Brooklyn water front earned handsome dividends, part of which were obtained through the storage of tea. But these now comparatively silent and deserted buildings do not wholly or even in greater part lay their recent mercantile senility to a change in the taste of the American people with respect to their table beverage. They owe it to one of those remarkable changes so many of which have been under development in the past five or six years. And it is due in great measure to these changes that the falling off in the proportionate part of American commerce which New York city has experienced in recent years is to be traced.

Our Trades' Associations, our Chamber of Commerce, some of our Press, and the Government have recently taken occasion, in view of the figures that tell of New York's foreign commerce and that of the whole country, to attempt to agitate in favour of some legislative or commercial plan whereby this threatened loss of supremacy may be averted. It used to be the case that New York's commerce was more by a good many millions than that of all the other American ports put together, but the figures of last year show that although New York still has many millions more of foreign commerce than any other American port, yet of the increase of $30,000,000 this city gained only about $700,000.

DOWNFALL WAS FORESEEN.

Many of the influences that have caused the former profitab warehousing business along our river front to become practical dead are also accountable for this change in the relation of Ne York's foreign commerce of the whole country.

Some ten years ago the officers of one of the greater trust co panies of this city went to a man of wealth in New York, a gre merchant, a successful financier, who had also had a conspicuo part in the politics of his party, and asked him to join with othe in the underwriting of a proposition that contemplated the comb nation into one corporation of all the storage warehouses. He w shown figures that told of most tempting profits, and was told th economies through combination would increase these profits or 40 per cent. But his reply to the tempters was, "No, t steamship has put an end to the warehouse business."

They laughed at him, but his statement was true. In the d days, when the sugar importers brought their cargoes to New Yo by means of sailing vessels, they could not tell within two week or even thirty days, when they might expect the cargo. To-d the steamship arrives upon the dot, and a business amounting hundreds of thousands of dollars a year, furnished by the sug refiners to the warehousemen, is lost to them because there was longer any need of providing storage. What is called prima storage has taken its place. The same is true of cotton, and many other products, and, although the storage-warehouse schem was financed and capitalized for something like twenty millio yet, after a few years, the combination fell to pieces, for it had be demonstrated that warehousing, formerly so profitable, the mea by which several men became multimillionaires, is now almost dead as the stage coach.

BOSTON GAINS THROUGH VANDERBILT.

Vanderbilt, when he reached over into Massachusetts a captured the Boston and Albany railroad was presumed to ha done that partly for speculative purposes and partly that he mig command all of the Boston and Albany traffic to and from the We for the New York Central. Boston was frightened, however, a the authorities of Massachusetts and of the Municipality were n willing to consent to the absorption of the Boston and Albany the New York Central unless pledges were given that the Centr was not to divert traffic from Boston to New York. Vanderb and his friends looked serious, but those who were very near that group detected a merry twinkle in their eyes as they mo gravely and with utmost dignity informed the Boston and Mass chusetts authorities that they did not intend to divert traff Had the New York trades organizations or Chamber of Commer visited Mr. Vanderbilt and his associates for assurances th traffic was not to be diverted from New York to Boston there wou have been no merry twinkle in the eye, and seriousnesss would n have been seen. For the Boston and Albany was secured chie to enable the New York Central to command, if not bett at least cheaper terminal facilities for its ocean-bound traf than New York has ever permitted, and exactly what Bost and Massachusetts were pleading for was what Vanderbilt a his associates had in mind. When the terminal facilities East Boston are perfected, and when the Vanderbilts comma their own ocean steamship line, as they undoubtedly will, th New York will wake up to the fact that Boston has been the gain and the metropolis has been the loser by reason of this absorpti of the Boston and Albany.

GOULD'S EYES ON PHILADELPHIA.

Gould is believed here to intend to make Philadelphia t Eastern terminal of his transcontinental system. And the reas why he seeks Philadelphia rather than New York is that believes that natural and artificial conditions are tending more a more to build up other ports upon the Atlantic coast at the expen of New York. The terminal charges at New York are excessiv At Philadelphia, Boston, and Baltimore they are not. In additi to that it is a shorter haul from grain, cotton, coal, and tobac belts to some of the more southern points upon the Atlantic, th to New York city, and the Government itself, recognizing th has expended millions in improving river and harbours.

Just as the steamship, now so greatly used in almost all oce commerce, brought doom to the once most profitable bond warehouse of New York, so the steamship has developed t commerce of Boston, Philadelphia, Baltimore, New Orleans, a Newport News at the expense of New York.

CHINA TRADE GROWING SMALLER.

It was not this, however, that has practically destroyed or at least greatly impaired the China tea trade both here and in Boston. A few years ago the great mercantile house of which Carter was the head, and which for years had been chief among the importers of tea, gave up that business completely and took up in the place of it the importation of asphalt. Another house of world-wide fame instituted by the father of President Seth Low, and which brought to the Low family fortunes of millions, has also completely given up the tea-importing business, not because the steamship and the Pacific railway have furnished a swifter and a cheaper way of bringing tea to our market, but because the house has recognised that the tea-drinking habit seems likely to become almost as traditional as the snuff-taking habit. The reduced importation of tea and the very great change in the foreign commerce in cotton in part account for the diminution of New York's prestige as a commercial city.—*Philadelphia Post.*

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION (CALCUTTA).

Extract from an abstract of the proceedings of a meeting of the General Committee held on 10th September, 1901. PRESENT :—Messrs. H. S. Ashton (*Chairman*), A. Tocher (*Vice-Chairman*), H. C. Bagg, H. W. Boyd, W. Brown, A. C. Lawrie, R. Magor, and R. R. Toynbee.

Considered letters of 4th, 6th, and 7th September, from Messrs. Kilburn & Co., Secretaries, Durrung Tea Co., Ld.; Messrs. Kettlewell, Bullen & Co., Managing Agents, The Mothola Co., Ld.; Messrs. Octavius Steel & Co., Secretaries, Kalacherra Tea Co., Ld., Loobah Tea Co., Ld., and Eastern Cachar Tea Co., Ld., regarding the statement of the tea crop which is published annually by the Association as soon as possible after the 15th August. In each of these letters the suggestion was made that the publication of this statement should be discontinued; for the Directors of the Companies named were of opinion that it served no useful purpose, by reason of the fact that the figures given in it were always more or less unreliable. In two of the letters enquiries were made as to manner in which the statement was compiled. And in three it was suggested that only the actual returns of tea manufactured to 15th August should be published.

Judging by several of these letters, there appeared to be some misconception in the minds of members of the Association both as to the position of the Committee in regard to the statement, and as to the manner in which the latter was compiled. In order that these misconceptions might be removed, the Committee decided to forward to each of the Companies named a copy of the following resolution, which was carried at the Annual General Meeting of the Association held on the 16th August, 1898, *viz.* :—

"That with the view of obtaining greater exactness and reliability in the estimates of the tea crop, the first statement of figures shall not be issued until it is also possible to give details of the tea manufactured up to 15th August, and that no further statement be issued until the actual outturn of the crop is published."

The statement in question was issued annually by the Committee under the authority vested in them by this resolution. It was not for them to discontinue the publication of the statement or to modify it in any way while the resolution remained in force. The proper procedure to be adopted by those members who thought that the statement should not be issued again was, therefore, to propose a resolution to that effect at the Annual General Meeting which would be held in February or March 1902. The Committee, as a body, were not disposed to express an opinion upon the matter, because it was one which was entirely in the hands of the members of the Association.

Regarding the compilation of the statement it was to be pointed out to the Companies named above that the only items of production which the Committee estimated for were (1) Kumaon 300,000 lbs., and (2) "Gardens from which no returns have been received and private and native gardens" 11,500,000 lbs. The figures given for Assam, Cachar, Sylhet, Darjeeling, the Terai, the Dooars, Chota Nagpore, Chittagong, Kangra Valley, and Dehra Dun were not estimated by the Committee. They were merely the totals of the returns which had been furnished by Tea Garden Proprietors and Agents in response to the Committee's Circular No. 52 of 1st August. The items of consumption estimated for by the Committee were (1) Foreign markets 25 millions of lbs. (the actual figures for 1900), and (2) local and trans-frontier consumption 9 millions.

A letter from a firm of buyers, making certain enquiries respecting the compilation of the statement, was also to be replied to in conformity with the foregoing.

Considered a letter dated 30th August, from Messrs. Aitken Spence & Co., Colombo, with reference to the question of the respective advantages of Singapore and Colombo as ports of transhipment for Indian teas to Odessa. In the letter figures were quoted with the object of showing that more favourable terms could be secured by transhipping at Colombo than at Singapore. An offer was also made to furnish any further information that might be desired.

These figures were inaccurate as far as Singapore was concerned; and the Committee decided to point this out to Messrs. Aitken Spence & Co. A correct comparison of the terms as between the two ports was also to be sent to them. This comparison showed that the through rate *viâ* Colombo was Rs.39; and *viâ* Singapore Rs.36-8. The difference was therefore in favour of the latter. It was further to be suggested that it would be advantageous hereafter if a through Bill of Lading, between Calcutta and the Black Sea ports, could be arranged for. Reference was also to be made to the fact that some of the Liners were prepared to book tea for Russian ports with transhipment at Port Said, guaranteeing that it would be taken on in vessels flying the Russian flag. The rate quoted was 47s. 9d. Messrs. Aitken Spence & Co. were to be asked if they could offer more favourable terms *viâ* Colombo than these or those available by the Singpore route.

Considered a letter No. 1161 of 24th August, from the Secretary, Bengal Chamber of Commerce, forwarding a copy of a communication from the Government of Bengal, in which a list of those Railway projects recommended by the Chamber for inclusion in the Imperial Railway Construction programme was asked for. The Committee of the Chamber stated the recommendations which they proposed to make; and enquired if this Association wished to urge the construction of any other lines.

After discussion the Committee decided to advocate the following projects:—

(*a*) A line connecting the Eastern Bengal State Railway at Dhubri with the Assam-Bengal Railway at Gauhati. In the opinion of the Committee the construction of this line was of greater importance than that of the hill section of the Assam-Bengal Railway at present being proceeded with.

(*b*) Certain feeder lines to railways and rivers in Assam.

(*c*) A line from Quetta to Seistan on the Nashki-Seistan trade route. The Committee regarded this project as of special importance in connection with the attempts being made to develop Indian trade with Persia.

Considered a letter No. 741 of 29th August, from the Honorary Secretary to the Central Committee of the Pasteur Institute of India, asking that a suitable annual grant should be made by the Association to the funds of the Institute. The Committee fully recognised the valuable character of the work being done at the Pasteur Institute. It was not, however, an object to which, in their opinion, the funds of the Association could be properly devoted; and they therefore regretted that they could not sanction a grant.

A STORY OF THE CENTURY.

Here is a quotation from an old friend of mine and of yours—a doctor, one of the wisest, most kindly-hearted, and successful of the men who compose his useful profession.

"One thing," he says, "I have been telling my patients for the past forty years, that, so far at least as the science of medicine is concerned, the human mind is merely a name for a group of brain functions. The food in the blood acts chemically upon certain nerve centres, and this is mysteriously worked up into what we call reason. In other words, the condition of the mind depends upon that of the body.

"For example," continues the doctor, "there are people who are troubled by irritability, great mental depression, sleeplessness, mental hallucination, and those symptoms expressed by the general term '*nervousness*' (and who also fear insanity), who might either avoid such sufferings or be cured in a month, if they but knew that at the bottom of the whole business lie the poisonous products of imperfect digestion. *Ninety per cent. of all the cases of mental and nervous ailments in persons under fifty are directly due to dyspepsia.*"

Now we will listen to Mr. George Bath.

"For many years," he says, "my life was marred and spoilt by indigestion. At first only slight, the attacks became more and more severe as the years rolled by, until at last I was a mere physical wreck, a ready prey for every disease. My head was racked with pain, fierce darting, stabbing, rending pains, that almost drove me frantic. I had no relish for food, and what morsel I did swallow filled my body with wind and caused a most oppressive sense of fulness on the chest.

"What with a distressing sense of sinking in the stomach, and a constant feeling of sickness, through the foul state of my tongue, I felt, as I looked, 'of all men most miserable.'

"This wretched existence—it wasn't life—I dragged on for *twenty years* with just a short respite now and then. Each year the disease tightened its grip, sapping my strength and vitality. Doctors examined me and gave me medicine. They lightened my purse but not my ills. At times I turned quite dizzy and faint, and got so nervous and depressed that I scarcely dared venture out of doors.

"My whole nervous system seemed unstrung; the slightest noise distressed me. Why, the ticking of a clock, in *another room*, was sufficient to keep me awake for hours, and a knock at the door would make me jump and tremble all over.

"Friends shook their heads as they saw me tottering about more dead than alive, and said 'Bath has not long to live, poor fellow.' That was six years ago, but I'm alive still and very much alive too. Why, I seem to be getting younger every day. Though I am now seventy years of age, I am so brimful of energy and animal spirits that I feel equal to anything. It was Seigel's Syrup that wrought the change, nothing else; I owe my life to its wonderful power.

"Now, forty clocks ticking wouldn't spoil my sleep, and food must be very indigestible indeed to upset me. I would rather lose £50 than be without Seigel's Syrup, for it has made a man of me, and added years of happiness to my life." George Bath, Trefusis Villa, Windmill Road, New Brompton, Kent. April 25th, 1900.

No word of the writer's can add one jot or tittle to Mr. Bath's frank and eloquent statement, the truth of which is vouched for by many independent witnesses, among them being Mr. John Scrace, Relieving Officer, Medway Union, Chatham, and Mr. A. Durrant, Short Street, Luton Road, Chatham, to both of whom Mr. Bath is personally known.

Now turn back to the quotation from the old doctor, and you will learn what Mr. Bath's disease was. No, never mind, I will set it down here—it was dyspepsia. Oh, if my voice could but reach all the suffering men and women in dear old England, how I would shout to them the old doctor's deep saying and the story of Mr. Bath's illness and cure. But, as it is, we must take the chances of their seeing this report in print.

MARKET REPORT.

[*Per Mail advices of 6th September* 1901.]

COFFEE.

The London Commercial Record says:—The public market has again been very sparingly supplied during the week, and has a steady demand from the trade has prevailed prices show a further improvement of 1s to 2s per cwt., closing with firmness at the advance. Ceylon realised very firm rates, whilst the East India sold with active competition at the above advance. Nyassaland also went off readily. Washed Dumont Santos brought about valuations. The market for "futures" has shown some fluctuations, but the latest prices exhibit little alteration for the week; yesterday Santos December delivery sold at 28s 6d to 28s 4½d, March at 29s, and May at 29s 4½d per cwt. The sales to-day went off well with good demand. East India and Vera Paz of good quality 1s per cwt. dearer; supplies were restricted to 659 bags of the former and 619 bags of the latter.

London ...	Santos ...	Sept. delivery ...	27s 10½d.
New York ...	No. 7 Rio...	„ ...	4·70 cents
Hamburg...	Santos ...	„ ...	27¼ pf.
Havre ...	Santos ...	„ ...	34 franc

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900
West India ...	494	606	747	64
Ceylon ...	193	143	241	20
East India ...	4,326	2,598	10,223	4,82
Mocha ...	363	380	546	65
Brazil ...	2,819	3,557	2,435	1,63
Other Foreign ...	10,101	10,200	23,643	21,30
Total Tons ...	18,296	17,484	37,835	29,27

	Home Consumption.		Export.	
	1901.	1900	1901.	1900
West India ...	162	140	526	39
Ceylon ...	114	132	112	24
East Inda ...	2,591	2,376	4,047	2,53
Mocha ...	520	473	52	12
Brazil ...	2,222	985	1,841	2,24
Other Foreign ...	8,261	7,356	13,634	9,47
Total Tons ...	13,870	11,462	20,212	15,01

The preceding figures exhibit—

	Tons
In the Imports an increase this year of ...	8,56
Home Consumption an increase of	2,40
Export an increase of	5,20
Stock an increase of	81

Auctions this week have gone off as under:—

CEYLON.—*Plantation.*—26 casks 4 tierces 11 barrels 5 bags sold smalls 55s to 66s, middling to good middling 87s to 99s, bold 106 to 109s, peaberry 95s to 102s. *Liberian.*—21 bags sold—common bold brownish 27s.

EAST INDIA.—1,360 bags mostly sold as follows:—*Coorg*, small 33s 6d to 44s, fine ordinary 39s 6d to 44s, low middling to middling 46s to 56s, bold 60s to 75s 6d, peaberry 40s to 69s. *Mysore*, small 42s 6d to 45s, middling 51s to 53s, good middling 66s 6d, peaberry 45s to 69s 6d. *Neilgherry*, smalls 35s to 36s, low middling 42s to 43s, bold 52s 6d, peaberry 45s. *Naidoobatum*, smalls 36s, low middling 43s, bold 55s. *Travancore*, peaberry 58s. *Wynaad*, bold 50s.

NYASSALAND.—201 bags sold—fine ordinary rough nipped greenish 40s 6d, bold 47s to 48s, peaberry 45s.

JAMAICA.—20 barrels half sold—fine fine ordinary greenish 42s.

HAWAII.—Of 107 bags offered a small part sold, peaberry at 44s

COSTA RICA.—96 bags partly sold, middling greyish 58s, peaberry 48s to 68s 6d.

SALVADOR.—319 bags offered and 200 bags sold, middling dull 49s, bold 55s 6d to 65s 6d.

GUATEMALA.—311 bags about half sold, smalls 33s, good to fine ordinary 36s to 38s, low middling to middling 44s to 47s, bold 54s to 56s, peaberry 50s.

VERA PAZ.—75 bags partly sold, smalls 30s to 38s, middling to good middling 50s to 66s, bold 81s, peaberry 56s.

COLOMBIAN.—748 bags partly sold—smalls 40s 6d, middling to good middling 44s to 51s 6d, bold 66s, peaberry 49s 6d; damaged smalls 30s 6d, fine ordinary 39s, middling 44s to 46s, bold 43s to 50s peaberry 37s to 41s.

MEXICAN.—355 bags catalogued and 220 bags sold, middling 48s to 49s, bold 60s 6d.

BRAZIL.—1,561 bags washed Dumont Santos sold, small 27s 6d to 29s 6d, medium 31s 6d to 34s, bold to extra bold 37s 6d to 44s 6d peaberry 34s to 44s6d. 340 bags washed Rio realised 35s 6d to 36s landed terms for medium greenish.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99. Bags.
Rio ...	1,271,000	598,000	896,000	743,000
Santos ...	2,348,000	1,709,000	2,051,000	1,497,000
Total ...	3,619,000	2,307,000	2,947,000	2,240,000
Crop ...	—	10,900,000	8,971,000	8,772,000

Rio Exchange 10⅛d, previous day 10⅛d.

HAVRE, *September* 5.—Good average Santos September opened steady at 34f. and closed steady at 34f. December opened at 34½f. and closed at 34½f, March opened at 35¼f. and closed at 35¼f., May opened at 35¾f. and closed at 35¾f., July opened at 36f. and closed at 36f.

HAMBURG, *September* 5.—Good average Santos September opened steady at 27¾pf. and closed at 27¾pf., December opened at 28¼pf. and closed at 28¼pf., March opened at 29pf. and closed at 29pf., May opened at 29½pf. and closed at 29½pf., July opened at 30pf. and closed at 30pf.

NEW YORK, *September* 5.—Closing prices of No. 7 Rio were as follow:—

	Sept.	Oct.	Nov.	Dec.	Jan.
September 5...	4·70	4·75	4·85	5·00	5·05
September 4...	4·70	4·80	4·90	5·05	5·10

TEA.

INDIAN.—Rather more was brought forward, *viz.*:—29,800 packages (of which 7,400 packages were offered on Wednesday at the first private auction), compared with 25,600 packages in the preceding week and 32,700 packages in the corresponding time a year since.

Demand continued to run on parcels with point and character, which in the majority of instances maintained their former value. On the other hand, however, those with plain and poor liquor, were less wanted and quotations for such further declined, and now show a marked difference on those current for earlier arrivals from the same garden.

For 23,800 packages on Estate Account 8½d per lb. was obtained, contrasted with 8½d per lb. for 28.800 packages and 8⅝d per lb. for 37,900 packages in the two preceding seasons.

CEYLON.—Catalogue included 24,200 packages *versus* 25,400 packages the week before, and 21,900 packages twelve months ago.

The selections being on the whole desirable met with considerable attention from the trade and, with the exception of common leafy kinds which did not alter much, there was a firmer tone generally. Enquiry for fine and finest Broken Pekoes and Broken Orange Pekoes was strong, and in many cases after keen bidding the most attractive lines brought higher rates. Buyers for outside markets took a fair proportion of suitable lines, though orders did not appear to be so extensive as usual.

The average is 7d per lb. On the 29th ultimo it was 6⅞d per lb., and 7d per lb. in 1900.

JAVA.—In the absence of sales of direct import there is nothing to report. Nearly 1,500 packages are advertised for the 12th instant.

Deliveries.—Clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 31st August,	1901	... ...	16,316,896 lbs.
Do. do.	1900	... ...	15,412,766 „

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	25,136	4,698	29,834
Ceylon	22,868	1,323	24,191
Total ...	48,004	6,021	54,025

Also 672 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated September 6th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1901-1902	211,987	355,336	18,625
1900-1901	196,584	375,070	13,095

30,139 *pkgs.* INDIAN
24,590 „ CEYLON
267 „ JAVA
} Total 54,996 packages were offered in public auction this week.

Imports of all tea since the 1st June are less than the same period last year, while indications from India and Ceylon point to a further reduced supply.

INDIAN.—Monday's sale passed rather irregularly, any slight change being in favour of buyers; the firmest kinds were teas with good quality. On Wednesday the first auction under the new conditions was held, totalling 4,475 packages, which passed at fairly steady rates.

The official telegram estimates the season's crop at 184,250,000 lbs., against 187,527,435 lbs. last season; the quantity available for the U. K. 150 millions, against 160,487,154 lbs. shipped to U. K. last season, and gives the out-turn to mid-August as 77,250,000 lbs. Travancore is not included in any of the above figures.

Export to U. K. for second half of August (with Chittagong, 2,065,650 lbs.) was 14,105,650 lbs., against 13,700,000 lbs. same period last year, and from 1st April to end of August 50,009,330 lbs., against 55,840,000 lbs. in 1900. The following averages are worthy of note:—"Darj. Co. Phoobsering," 1/4½; "Amal. E. Co. Nagri & Dooteriah," 1/4 and 1/3½, respectively; "Brit. Darj. Co. Pussimbing," 1/3¾; "Badulipar," 1/3; and "Ass. Fron. T Co. Hilika," 1/2¼.

Week's average of New Season's Tea sold on Garden Account, 1901, 23,823 pkgs., av. 8·47d. 1900, 29,355 pkgs., av. 8·37d.

New Season's Tea sold on Garden Account 1st June to date, 1901, 127,951 pkgs., av. 8·39d. 1900, 150,931 pkgs., av. 8·14d.

CEYLON.—22,511 pkgs. were brought forward on Tuesday, and 2,079 packages on Thursday. The market was strong, and prices tended to harden, especially for better liquoring kinds; the improved quality now arriving continues to attract attention. The official telegram gives exports to U. K. for August as 6,000,000 lbs., against 7,500,000 lbs. same month 1900, making from 1st January to 31st August 73,750,000 lbs. against 81,500,000 lbs. The estimate for September is 6¼ million lbs., against 5,000,000 lbs. shipped in September, 1900.

Average for week 6·93d., against 6·81d. same week, 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 831,696 pkgs., av. 6·59d. 1900, 879,615 pkgs., av. 7·20d.

JAVA.—1,474 packages are advertised for sale next week.

Bank Rate 3 per cent. Exchange on London three months' sight:—Calcutta 1/4 5/32. Colombo 1/4 3/16.

COCOA.

The weekly auctions on Tuesday presented 5,920 bags for public competition; there was not much animation in the bidding, except for the fine grades of West India (which went off well at full prices), and the total quantity sold under the hammer did not exceed 2,350 bags. The supply of Trinidad totalled 2,509 bags of which about 1,000 bags sold; the desirable lots realised quite recent values, but common qualities were not wanted; very fine red brought 72s 6d to 73s 6d, middling to fine 66s to 70s, and common 63s to 63s 6d. Of 1,499 bags Grenada 610 bags sold—fine 64s to 65s 6d, fair to good 60s 6d to 63s; in this case also the demand ran principally on the better lots at firm prices. 56 bags Demerara mostly sold at 63s to 68s 6d for fair to fine bold red. 9 bags Dominica brought 60s 6d. Of 175 bags Jamaica 65 bags sold—good 63s, common to fair 59s to 62s. 39 bags Puerto Cabello about half sold at 81s 6d. 74 bags Caraquez Guayaquil found a buyer at 64s 6d to 66s. 304 bags Venezuelan mostly sold—unclayed 68s to 70s. Of 739 bags Ceylon about 250 bags sold at about recent rates:—good medium red 71s 6d to 72s, brownish to fair 61s to 66s, small 45s 6d to 55s, and blacks 40s to 42s per cwt. The bought in lots comprised—117 bags Bahia, 102 bags Colombian, 23 bags Costa Rica, 59 bags Pará and 211 bags Haiti. Privately a good enquiry prevails at firm prices, sales including 500 bags Trinidad at auction rates, 200 bags Grenada at 61s to 64s, 80 bags African at 60s, 200 bags Haiti at 54s, and 250 bags Guayaquil—greyish Caraquez at 65s to 66s, greyish Machala at 65s, and good Arriba at 77s per cwt.

PEPPER.

BLACK.—The market has assumed a firmer appearance, and value has improved. About 100 tons Singapore have been sold for arrival, including near at hand parcels at 6 1/16d, and Sept.-Nov. shipment at 6 3/32d to 6⅛d. Some business has also been done on c.i.f. terms for the Continent at 6d. On the spot sales of fair Singapore have been made at 6d, and a little lot of good to fine heavy Ceylon at 6d. to 6⅛d.

Auctions on Wednesday presented 80 bags light and shelly, which realised 5⅜d. to 5½d. 20 bags Ceylon, fair to good heavy brown, sold at 6d. to 6½d per lb.

To-day firm but sales unimportant.

The shipments of Black Pepper for the month of August compare as follows:—

	1ST-HALF.				2ND-HALF.			
	1901.		1900.		1901.		1900.	
	Tons.		Tons.		Tons.		Tons.	
U.K.—Sing. ...	130	170	400	420	20	20	50	50
„ Penang ...	40		20		*nil*		*nil*	
Continent ...	140		370		160		210	
United States ...	...		20		110		50	
Total ...	310		810		290		310	

WHITE—Is also dearer, and more enquired for. For arrival 50 tons Singapore are reported sold, *viz.*, Aug.-Sept. and Sept-Nov. shipment at $8\frac{5}{13}$d, and Penang Sept.-Nov. $8\frac{9}{32}$d. On the spot sales of fair Singapore have been made at 9d, and fair Penang at $8\frac{9}{16}$d per lb.

The only offering at the public sales on the 4th instant was 1 bag Ceylon; 9d. per lb. was paid for it.

The shipments of White Pepper for the month of August compare as follows:—

	1ST-HALF.				2ND-HALF.			
	1901.		1900.		1901.		1900.	
	Tons.		Tons.		Tons.		Tons.	
U.K.—Sing. ...	80	150	100	270	250	270	30	30
„ Penang ...	70		170		20		*nil*	
Continent ...	100		10		200		130	
United States ...	...		...		...		...	
Total ...	250		280		470		160	

GINGER.

COCHIN—Still hung fire, and all the wiles of holders could not extend business under the hammer. 121 cases 478 bags were offered, but only 7 bags damaged washed rough sold, at 35s to 36s 6d Bold and medium cut and scraped was held for 80s to 85s, medium and small ditto for 60s to 65s, and washed rough for 38s to 40s per cwt. Privately, however, a good business (some 2,000 bags) has passed at 38s for good washed, and 38s 6d per cwt. fo rough Calicut sorts.

No *Jamaica* catalogued.

QUININE.

The expected reduction in the official price of quinine wa announced on Saturday last, when English and German maker lowered their quotations by 2d per oz., and the latter now quot sulphate in bulk at 1s 2d. Howards' price is now 1s 3d in bulk and 1s 5d in vials, for not less than 1,000 oz. Whiffen's quote 1s 2d. Quinine salts have also been reduced, and now stand as follows, the prices referring to 100-oz. tins: Acetate 1s $8\frac{1}{2}$d benzoate 1s $9\frac{1}{2}$d, bi-hydrochloride 1s $9\frac{1}{2}$d, bisulphate 1s $2\frac{1}{2}$d, citrate 1s $8\frac{1}{2}$d, hydrobromide 1s 8d, hydrochloride 1s 8d, lactate 1s. 8d phosphate 1s $9\frac{1}{2}$d, salicylate 1s 8d, and valerianate 1s 11d. Immediately the official reduction in sulphate was announced there was a decline of 1d, in the second-hand market, the week opening with buyers of December delivery at 1s 1d. Since then, however business has been done for December at 1s $1\frac{1}{8}$d to 1s $1\frac{1}{4}$d by "bear" sellers who are apparently depressing that position, which is now weaker than other months; October has been sold at 1s 1d, and spot at the same figure. The market closes quiet, no business being reported to-day.

CINCHONA.

The *British & Colonial Druggist's* correspondent writing on the 5th instant says:—Further particulars of the bark auctions, which were held in Amsterdam last week, have come to hand, and show that the bark was divided as follows: *Succirubra*, 97,505 kilos.; *Ledgeriana*, 533,169 kilos.; *Officinalis*, 9,030 kilos.; *Calisaya*, 6,173 kilos.; hybrid and other kinds, 61,767 kilos. Of the total thus formed root bark formed 95,966 kilos. The richest parcel of bark was lot 86, consisting of 23 bales of *Ledgeriana*, which contained an equivalent of 10·67 per cent. of sulphate of quinine.

CARDAMOMS.

Mysore medium to medium bold have been in good demand at 1d to 2d above last Thursday's sale prices. Malabar, business doing at 1s 8d.

(AVERAGE FOR ALL INDIA 8·81d., SEPTEMBER 6TH.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Price.
Travancore ...	**398**	**5·35**												
Isfield T Co Isfield	120	5	...	...	56	4¾ 5	32	5¾ 6	23	4¼	...	...	9	3 3½
Riviera ...	60	3½	...	...	41	3¼	15	4½	...	...	...	...	4	2½
Trav T Est Co Pan	85	6¼	7	5½	29	5 5¼	46	7 7¾	1	4½	...	...	2	4
Vembenard ...	133 p	6¼	47	7¼	44	6	21	7½	...	...	...	...	21½c	4

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

GROSSE & BLACKWELL'S, LTD.

By Special Warrant Purveyors to His Majesty The King.

CELEBRATED OILMAN'S STORES.

[w. 1-10-98 –t.f.o.]

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

VOL. VI.] MADRAS, SATURDAY, OCTOBER 5, 1901. [No. 40.

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DOMESTIC OCCURRENCE.—The fee for inserting a domestic occurrence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 11th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad. *October 1st.—Weather*—The North-East Monsoon was very welcome when it set in last Saturday evening with 60 cents. The rain is especially welcome to the ryots on account of their paddy, which was suffering. *Works*—Fly picking, weeding and digging. *Crop prospects*—The worst crop on record. *Health*—Good. *Labour*—Abundant.

Coorg. Polli Betta, *2nd October.—Weather.*—It still continues to rain, and is wet and gloomy. 1·40 inches on Monday, 30th ultimo. *Plant diseases*—Leaf disease has not got any great hold of the trees, and coffee, on the whole, is looking very fine. *Crop*—ripening up fast in parts. All hands will be employed on picking on some places soon. Work will be over very early this season. *Interesting item*—Dr. Lehmann's lecture on Chemical manures last Friday, the 27th ultimo, at the Club.

THE CURRENCY PROBLEM.

A few planters are very anxious to keep up an agitation about the artificial rupee; another section of the community regards such agitation as almost disloyal. Our personal feelings in regard to this matter have undergone no change. The artificial inflation of the rupee was, at the best, an heroic attempt to remedy a disastrous state of affairs. It was an attempt that could only be carried out at the expense of Indian agriculturists, including planters. All theorising to the contrary notwithstanding, we take it as an established fact that the new currency policy has been detrimental to agriculture in India. Whether the benefits it has conferred upon Government and perhaps in some other quarters have fully compensated for the above disadvantage, is a question

that we cannot pretend to answer. Still, we feel that that is a very great deal to be said for, as well as against, the policy now in vogue. In former days it was doubtless very pleasant for the planter to see Exchange falling just as his crop was ripening. We can fully appreciate the joys of receiving Rs.17 for every pound's worth of produce, where once there was but Rs.10 to be had. It must be conceded, however, that a violently fluctuating exchange is, in the long run, disastrous to the trade of a country. A stable exchange is a necessity, and the Government must, after all, be guided by what it deems to be best for the country, or its trade, as a whole, not for the interests of any one community, however influential this may be. We opposed the scheme when it was put forward, and we are in opposition to it now, but the difficulty was, and is, to suggest a better way out of the dangers threatening the State, among which dangers was, at the time the currency policy was adopted, something very like a certainty of financial disaster.

In the last number of *Capital*, a well-known writer on financial topics who hides his identity under the mask of "X." makes certain remarks that all planters might take to heart. He rightly points out that when Government finally decided to act in 1893, they were standing in the cross-ways with four roads for them to choose. Road number one would have led to practical repudiation of their obligations and National Bankruptcy. Road number two would have led to the odium of excessive taxation. Road number three would would have led to economic reforms of a kind which to really be effectual would have starved and weakened the administration to a dangerous degree. Road number four led to a Managed Currency. This road they took. He adds:—"Now if a Government could only escape the odium of excessive taxation by incurring the odium of economically disastrous legislation, it should be clear to anybody that such a position was a desperate one indeed. That the Indian financial position, despite all the fair things which may be said about it, was in such a position I do not think there is the shadow of a doubt. And I am of opinion that it is just as desperate to-day. The position is, indeed, I think, worse, though the Currency stimulant is keeping the patient up." The truth of these statements appears to us to be beyond question. The solvency of the Government of India is apparent only, not real. It is absolutely dependent upon the maintenance of the rupee at an artificial gold value. Under these circumstances, is it wise to ask that the veil should be torn asunder and the truth exposed? Who would gain if India were declared hopelessly insolvent? Certainly not the planter, not even those planters who are advocating the return to an honest currency. On the other hand, there is room for the hope that, with the artificial aid now given to them, Government finances may yet recover tone and health. Is it not wise, therefore, to wait and watch? Is it not wise rather to try to help Government than to oppose it?

While saying this, we say also that planters should not remain absolutely silent. They should not cease to let it be known that they are heavy sufferers by this artificial raising of exchange. Any reasonable concession they can ask for as a sort of make-weight, should be pressed for; but the time for an agitation against the present currency policy has passed. It may return; but until it does, attempts at agitation cannot do good. We would remind planters also that every argument they have put forward against the present policy can be turned against themselves. Government m well wonder what manner of man is this who, for ye reaped unexpected, unhoped for, benefits from the declin the rupee, and now complains so bitterly because the has turned. It is but too certain that a little forethou and providence a few years ago would have saved the pla ing community from feeling, as it has since felt the pi of hard times. This is a home truth, and an unpleasant to the hearer; but it is a fact, and Government is f aware of it. Planters should remember also that, even if to itself, the rupee cannot fall indefinitely, nor can serious fall remain long unaccompanied by a correspond fall in the prices of the commodities they produce. things considered, therefore, we would urge them to end yet a little longer, profiting in the meantime by the st lesson taught them by low prices: the lesson of the neces of economy and care, of cheap production and impro quality. Every advance they can make in either of th directions will help to slacken the strain to which they h now to submit.

BOARD OF TRADE RETURNS.

AUGUST.

We take the undernoted figures from tables showing Imports, Consumption, and Exports of the undermentio articles for the 8 months ending August 31 in the pre and 2 previous years, compiled from the Board of Tr Returns, with stock in U. K. on August 31:—

Coffee.—Home consumption and Export show a v healthy expansion, but stocks continue heavy.

—		1899.	1900.	1901
Import	cwts.	874,316	663,558	817,22
Home Consumption	,,	176,532	190,538	227,44
Export	,,	394,364	357,941	475,08
Stock	,,	577,000	396,000	430,00

Cocoa (Raw).—Stocks are getting heavier, because of rapid increase of imports, which is only partially comp sated for by improved demand.

—		1899.	1900.	190
Imported ...	lbs.	36,226,199	38,730,952	41,220,
Home Consumption	,,	23,610,396	25,203,067	29,659,
Export	,,	7,566,160	6,928,016	7,313,
Stock	,,	20,191,000	18,028,000	21,040,

Cocoa (Prepared).—Very satisfactory figures all roun

—		1899.	1900.	190
Imported ...	lbs.	3,332,655	4,655,468	5,477,
Home Consumption	,,	3,546,260	4,088,687	5,072,
Export	,,	517,375	618,580	578,
Stock	,,	529,000	240,000	156,

Tea.—A relapse in Imports and a steady growth of consumption are coupled with heavier stocks. The position revealed is fairly satisfactory.

—		1899.	1900.	1901.
Import	lbs.	153,900,371	162,230,366	158,898.085
Home Consumption...	,,	157,348,450	170.259,935	172,001,484
Export	,,	19,741,688	28,514,356	28,408,327
Stock	,,	74,869,000	77,946,000	79,485,000

GREEN TEA IN CANADA.

Mr. P. C. Larkin, of the Salada Tea Co., writes us from London, under date 7th September, 1901 :—

"As you are probably aware, Ceylon has been shipping green tea to us for two years back, at first in a very small way but its a trade that has grown very rapidly and as the consumption of green tea in America is three times that of black (last year amounting to over sixty million lbs.) you can see what a field is open for exploitation. Now that India is producing *quite as fine green* tea as Ceylon (and that in low grown gardens) it is in order that they go about making their wares known to the consumer, and the only way to do this is the road travelled by all successful firms, advertise them, and do it largely, and it will cost the planters nothing, for it would bring into consumption quickly in America such a quantity of India tea that the relief the London market would get *would recoup them many times over their expenditure and it would do this, the first year.*"

As Mr. Larkin has been asked while in London to meet the Indian Tea Association and chat matters over with the members, he will, doubtless, impress these views upon them. Mr. Larkin's business is a wholesale one, and he has branches in Toronto and Montreal in Canada and also in Boston, Detroit, Buffalo, and Pittsburg in the U. S. He is in a position to speak of the manner in which Ceylon green tea has been received by those who taste it, and he says that all pronounce it the finest green tea they have tasted.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

Trade with Persia.

The following communication from Mr. E. G. Foley, who is travelling in Persia on behalf of the Association, is published by the Indian Tea Association (Calcutta) :—

Dated Meshed, 6th August, 1901.

Since my letter of the 2nd instant, I have had a long interview with the chief Mahomedan Jew merchants (who are the principal traders with Russia) at the house of the Manager of the Imperial Bank of Persia. These people made me *bonâ fide* offers for 2,000 chests of tea, Pekoe and Orange Pekoe, delivered here for cash at 10 annas average per lb. I have been holding out for 12 annas, but promised to wire to you if you would accept 11 annas *ex* duty of 5%. Besides these there are others—one man wants 500 chests Pekoe Souchong—another 2,000 chests Orange Pekoe for Tabriz, delivery at Calcutta. The Mahomedan Jew merchants also want 500 chests of Pekoe No. 1 and 500 chests green tea Pekoe, as per samples sent by Mr. Buckingham through Messrs. Begg, Dunlop & Co. to the Consul-General here last February, at the same price as the Pekoe and Orange Pekoe per my samples. These samples of Mr. Buckingham arrived only two days ago. The box in which they were packed was broken and the lead packets mostly torn. Fortunately there were triplicate samples, and one of each of the several kinds remained intact, also samples of local made brick tea. For Mr. Buckingham's green tea Pekoe the same price was offered as for his No. 1 Pekoe and our Pekoe and Orange Pekoe, as these merchants were of opinion that it would sell well at Bokhara. It is a great thing to know that for this class of so-called green tea there is a market, as it is so easy to manufacture, provided one has a Gibbs & Barry's cylinder drying machine. It might be too late for Mr. Buckingham to make any this season, but if he could, 500 chests would probably be placed here at, say, 11 annas *ex* duty, or at Quetta for 8 annas 6 pies. The samples were priced—I mean Mr. Buckingham's Pekoe No 1 and green tea Pekoe—at 10 annas per lb. Quetta, which is far too high a quotation. I say Quetta 8 annas 6 pies, for I have just had an interview with the great millionaire Banker and Merchant the Miaru-i-tizar, in the presence of our Consul-General, who will probably take up the entire business of buying tea from us in partnership with his hitherto rival the Malik-i-tizar, and would take delivery *at Quetta* and pay in cash, so saving us any trouble or running any risk ; the prices I have quoted to him are for Orange Pekoe 8 annas and 6 pies, Pekoe 7 annas 6 pies, Pekoe Souchong 6 annas 6 pies Quetta f.o.b., or half an anna under the original price. In ten days' time, on his return from the Turquoise Mines, which are leased by him from the Persian Government for about £5,000 annually, I shall hear from him definitely. In whatever enterprise these two merchants and bankers the Miaru-i-tizar and the Malik-i-tizar enter, all the rest of the merchants are guided by them, and would take their requirements and supplies from them. If this business comes off, my mission will be completed, and a success, in bringing the Persian buyers to India, and will be the making of the Nushki route, and will save us the trouble of sending Agents with tea into Persia. In the meanwhile, I will try and secure all the orders I can for other places like Tabriz, etc., delivery in Calcutta.

I am sending you samples of white Java and green tea as sold here, with prices marked. Kangra Valley green tea similar in flavour is valued at 3 Krans less or 12 Krans per man, because it is not the right colour. With the proper colour there would be a large market for this tea in Afghanistan from here. Since my arrival here I have been busy seeing merchants, but they are all shy of taking delivery at Quetta, for reasons already given in my two previous letters from here. The Miaru-i-tizar is the only one who has offered to take delivery at Quetta. On his return from the Turquoise Mines ten days hence I will receive his reply. He has taken samples with him. Should it come off, or even in the event of any arrangement being made for supplying orders as stated in the earlier portion of my letter, and if sanctioned by you, our Consul-General here will advise the Government of India to put the Nushki route in thorough order, to make a cart road from Quetta to Nushki and, if possible, lay down a light railway and construct a telegraph line from Quetta to Fort Robat, the borders of Beluchistan, to dig more wells and deepen the present ones, and lay in more provisions for man and beast at the different stages. The cost of carriage as paid by the Pathan merchant here for goods from Quetta to this is 3

Krans per man of 6½ lbs. or 14 annas = Rs.10-8 per maund Indian ; freight from Calcutta is Rs.2-7 per maund on tea ; to this has to be added the 5% *ad valorem* duty, which includes the cost of camel hire. This would be paid by the buyer in the event of orders. The cost of carriage from Moscow to Askabad during the Summer is 1 rouble and 10 kopecks, and during the Winter 1 rouble and 40 kopecks per pood of 36 lbs. From Askabad to Meshed, during Summer 1½ Krans—during Winter 4 Krans per man of 6½ lbs. The distance from Askabad to Meshed is about 160 miles. From Askabad to Meshed carts are used as well as camels. In the event of the Miaru-i-tizar taking up the business, a very large quantity of his purchases will be sent into Russian territory through the medium of the Mahomedan Jews and Armenians—more so than could be done profitably by any European syndicate.

MEMO :—The subjoined papers regarding trade with Persia are also published.

No. 1047, *dated* QUETTA, *3rd September*, 1901.

From

Captain J. WEBB WARE, I.S.C.,
Political Assistant, Chargai.

To

THE INDIAN TEA ASSOCIATION,
Calcutta.

In continuation of my circular letter of the 6th August, 1901, I would be much obliged if you would cause the following notes, regarding trade with Persia and the Persian passport regulations, to be circulated as widely as possible among such members of your Association as are interested in the Nushki-Seistan trade route.

(*a*) For purposes of calculating the 5% *ad valorem* duty which is payable on all goods crossing the frontier into Persia, the Persian Customs Officials insist on the production of the original Invoices, and decline to accept true copies.

(*b*) All Invoices should be clearly written in English.

(*c*) Merchants forwarding goods to Persia will find that it will save much time and delay if they take the precaution of having there Invoces attested by a properly qualified official in the town or place from which the goods are despatched.

(*d*) The importation of arms and ammunition into Persia is strictly forbidden.

(*e*) It has been decided that the meaning of the term 5% *ad valorem* is 5% on the original Invoice value of the goods *plus* 5%on the freight charges to the Persian frontier, in other words 5% on the value of the goods at the point they enter Persia.

(*f*) The Persian Customs Department reserve the right of buying in any goods which they consider are declared below their proper value.

(*g*) By a Persian law, which came into force on the 3rd April, 1901, all inland customs house and transit and other dues paid on imported goods transported from place to place in Persia have been abolished, and a Rahdari tax of 22 Shahis per load of 120 Kilos. has been instituted, the tax being taken on the departure of goods from the frontier, and is payable by the carriers ; the Rahdari tax is leviable in addition to the duty of 5% *ad valorem* which the Persian Government takes under the present International Customs Convention.

Although Persian law prescribes that the Rahdari tax is payable by carriers, yet merchants forwarding goods to Persia *viâ* the Nushki-Seistan route will be called on to pay the tax themselves, unless the agreement they have entered into with carriers in Quetta expressly stipulates the contrary.

(*h*) Passports :—

(*a*) Passports can be obtained on application to the Fir Assistant to the Hon'ble the Agent to the Governor-Gener in Beluchistan, and on payment of a fee of one rupee p passport.

(*b*) To save delay, applicants for passports are recon mended to apply to the First Assistant to the Hon'ble th Agent to the Governor-General in Beluchistan, one cle month before the date they are timed to arrive in Quett enclosing the accompanying Form D duly filled in, and sta ing the date of their arrival in Quetta and what their addres will be there.

(*c*) No passport will be issued to natives of India, unle they come to Quetta, provided with identity certificates mad out in the form attached, and countersigned by the Deput Commissioner of their district.

(*d*) The Persian passport regulations dated 1st Marc 1900, provide that every foreigner who may wish to travel i Persia must show his passport on entering Persian territor and if the passport is not provided with the visa of a Persia Consular Officer, he must obtain the visa and pay the fee 12 Krans prescribed (labourers 4 Krans).

(*e*) Articles 12 to 15 of the Persian order in Council 1889 lay down that every non-resident British subject arrivin in Persia at a place where a Consular Officer is maintaine shall register himself within a month of arrival in a speci register to be kept for the purpose, and obtain a registratio certificate, paying a fee of Rs.2-6 for the same, and that n one not so registered is entitled to sue or to receive the su port or protection of a Consular Officer.

D.

Form to be filled in by an Applicant for a Passport.

1. Name
2. Residence
3. Profession
4. Age
5. Place of Birth
6. Domicile
7. Nationality of Parents
8. Proceedings to
9. For the purpose of
10. Proposed period of absence
11. Members of the applicant's family accompanying him, andt o be i cluded in the same passport.

Certificate granted for the purpose of identification.

Name (in English and Urdu).	Father's Name.	Clan.	Residence. Town or Village.	Occupation.	Age.	Distinctive mark.	GENERAL

NOTES FROM CARACAS.

From the reports of the Vice-Consuls it appears, observ Mr. Acting Consul Andral in his report on the Trade Caracas in 1900, that there has been a decrease in the impor ation of every class of goods with the exception of coal an kerosene. This implies that the purchasing power of th country through the depreciation of coffee has decline sensibly, for it even appears that there has been a gre reduction in the amount of food-stuffs imported, and as

was considered that this item had been brought down to its minimum, being limited to primary needs, it shows that now the people are obliged to deprive themselves even of necessities, for it is not that there has been any increase in home production, since there are always complaints of the shortness of the crops. He proceeds to say that figures shown in the tables of exports are more satisfactory for the principal products of Venezuela; coffee, cocoa, and hides have all increased considerably in the total quantity, although at Maracaibo coffee showed a slight falling-off. The improvement, however, is not a monetary one, for the price of coffee remains very low and although that of cocoa is fairly good, the quantity produced is as yet insufficient to replace coffee which at present hardly pays for its production. That is where the shoe pinches. Statistics of exports may be read wrongly unless it is known whether the prices obtained for a particular product are or are not profitable. The following figures show exports of Coffee, Cocoa, and Quina Bark from Maracaibo—

		Bags.	Kilos.
Coffee	1899	334,328	20,268,737
	1900	345,471	20,829,464
Cocoa	1899	2,602	123,933
	1900	3,885	184,456
		Packages.	
Quina Bark ...	1899	250	10,241
	1900	95	4,099

The export of Coffee in 1898 was 441,579 bags. The average price for Maracaibo may be taken at 27s per 100 lbs. for 1898, 25s for 1899, and 26s for 1900. Shipments from La Guayra were:—

Coffee	1900	175,941	10,300,565
Cocoa	—	107,627	5,766,160

In both cases there was an increase when compared with 1899 figures.

PERFUME FARMING.

We learn from the *Queensland Agricultural Journal* that a practical start has been made in Western Australia in the direction of perfume farming and manufacturing. Our contemporary has the credit of having pressed this industry upon the notice of its readers, and some time ago, referring to the essential oils used by perfume manufacturers, it again tried to stimulate interest by remarking:—"How valuable some essential oils are may be gathered from the fact that weight for weight the essential oil of roses is worth nearly as much per ounce as gold, and finds of all botanical growths the readiest market; 300 lbs. of roses will yield 1 oz. of attar or oil, besides a quantity of fragrant saleable rosewater. One acre of land will yield 1,500 lbs. of rose petals, and this will give 5 oz. of attar worth £1 17s to £2 15s. per oz., and there will be some 300 gallons of rosewater valued at from 3s. to 4s. per gallon. Lavender will give a nett profit of £20 per acre. Pure lard saturated with the scent of flower is worth from £1 5s. to £1 10s. per lb. in London or Paris, and if the fat is cut up and digested in spirits of wine (60 over proof) and 2 lbs. of fat to 2½ lbs. of spirit, this scent-laden spirit is worth 3s. 6d. per oz. or £3 10s. per pint." Throughout Victoria, we are informed, increasing numbers of persons are turning their attention to the production of flowers for scent-making. The flowers most favoured are lavender, vera, tuberoses, rose, geranium, peppermint, lemon, thyme, violets, etc.

In Western Australia the industry has commenced in earnest. Mr. Kirton has established a perfume farm and factory on the Collie River, for the purpose of utilising the various shrubs which grow in Western Australia, in order to obtain their essential oils, as he is persuaded that the climate is especially favourable for the growth of the plants and the secretion of oils. He is at present working on the wild verbena, but intended to deal with lavender on a large scale. He has now several acres of lavender planted. Mr. Kirton points out that the price of the oil obtained from the peppermint is only a little more than one-third of that obtained from the Eucalyptus globulus, the oil not being considered by the British Pharmacopœia of much value. Our contemporary writes:—

"Some months ago we ourselves experimented with the blossoms of the Plumeria, or Frangipanni, and successfully extracted the scent from some thousands of blooms. The method was this: A box was provided with six shelves of common glass, the front closed by a glass slide. These shelves were coated to a depth of half-an-inch on both sides with absolutely pure fat. prepared by rendering down and refining beef suet, mutton suet, and lard. Every morning the spaces between the shelves were filled with fresh flowers, the old ones being removed. This work, which took very little time, was continued for about six weeks. At the end of that time the fat was removed and taken to an analytical chemist in Brisbane, who digested it (about 4 lb. weight) with 60 o. p. spirits of wine, and thus extracted the whole of the perfume. The spirit was redolent of it. This spirit could have been easily sold for £3 or £4, but, as we wished to make a complete experiment, the chemist tried to distil it, but he failed to separate the scent from the spirit, stating frankly that he had no experience in this particular class of work. Still, he did enough to prove that a large quantity of scent was contained in it."

THE CANKER (ROSTRELLA DISEASE) OF COFFEA ARABICA.

In a Dutch technical journal Mr. A. Zimmermann, describes a canker disease of coffee trees, shows that it is caused by a hitherto undescribed fungus, and suggets methods of treatment. The disease is confined to the Java variety of coffee and usually attacks isolated trees. So far it has been known to attack only trees at least 10 years old. A yellowing and sudden drooping of the leaves indicates the presence of the disease, which is further characterized by the development of brown patches in the cortex of the stem and larger limbs. Death follows soon after the leaves droop. The brown patches may extend nearly around the tree and involve the entire cortex, including the cambium layer. The mycelium has not been found in the wood. The fungus belongs to a hitherto undescribed genus of Ascomycetes, and the author names it *Rostrella coffea*. Four forms of reproductive bodies are developed, ascosporus, macroconidia, microconidia, and a fourth form which the author calls rudimentary microconidia, produced by the breaking up of hypae developed from the macroconidia and microconidia, each form being fully described.

Infection experiments were made by placing small portions of diseased tissue under the cortex of healthy trees or pieces of stem and later by inoculation with microconidia. All the infections were successful, and the checks uniformly remained free from the disease. The characteristic symptoms appeared in from 4 to 8 days and frequently all the spore forms were developed. Infection experiments made on the leaves and young twigs, as well as on the older limbs and trunk, showed that in very moist air Rostrella coffea can develop on the leaves and young twigs of Coffea arabica when fresh wounds

are present, but that the disease is checked on the young parts by the development of a cork layer. Hence the injury to the trees is always caused by the disease attacking the stem or larger limbs.

Experiments on Coffea liberica showed that while the fungus made a weak growth in fresh wounds on both stem and leaves, the mycelium did not penetrate beyond the wound. Open air experiments gave negative results. Experiments on shrubs or weeds growing in or near coffee plantations proved that the fungus would grow in wounds on Erythrina lithosperma, Albizzia molukkana, and Cedrela serrata, but only when the experiments were conducted in moist air. Open air cultures were unsuccessful. The fungus will not grow on sugar cane (Saccharum officinarum).

For treatment of the disease the author recommends burning all diseased trees ; or, if this is not desirable, cutting out the infected parts and coating the wounds with tar. Tree trunks should be coated with Bordeaux mixture or lime to prevent insect injuries. All wounds due to pruning should be coated with tar. If diseased trees are allowed to remain in the plantation, the trunks should be coated with tar to prevent the dissemination of spores.

NOTES.

Brazilian Enterprise. The Secretary of Agriculture in Brazil has remitted 600 marks to the Brazilian Consul at Hamburg to purchase samples of coffee offered in that market.

Colouring Coffee. The Hamburg Courts have decided that the custom of artificially colouring Brazilian coffees to give them the appearance of Costa Rica is not a misdemeanour as the process does not injure the coffee and is harmless to consumers.

The Position of Coffee. The coffee supply continues to increase observes the *American Grocer*. The outlook is not such as to induce the carrying of heavy stocks. In view of the enormous crop and heavy visible supply, the market holds very steady for Brazil.

South Indian Tea in London. In Messrs. Stenning, Inskipp & Co.'s Indian Tea Report, dated September 12th, 1901, we read :—Southern India has been represented by 2,10[illegible] packages, the quality in some cases showing a slight improvement

Java Quinine. At the auctions of quinine in Batavia, on September 5, 1,700 kilos. (59,500 oz.) Ed. II. were sold at an average of 20fl. per kilo. (about equal to 7¾c. Amsterdam unit), against 21½fl. per kilo. last auction. The next auction to be held at Batavia will take place on October 9.

Indian Tea for Indians. The Commissioners of the Indian Tea Markets Expansion Commission have received, through his Private Secretary, a letter from the Governor of Madras wishing every success to the movement for developing the consumption of tea in India, which seems to His Excellency to be in the right direction.

Coffee in the U. S. The *American Grocer* says :—The firm of Francis H. Leggett & Co. has an enviable reputation for carrying the largest and [illegible] varied stock of coffee of rare sorts of any house in the Un[illegible] States. The firm uses one-sixth of the imports of gen[illegible] Mocha and Java coffee. Their offering of fine grade[illegible] extensive.

Coffee in Sweden. A Consular report states :—Owin[illegible] the cheapness of the inferior-quali[illegible] of coffee, this article attracts the most attention, whereas superior qualities are neglected on account of the comp[illegible] tively high quotations. The latter article being chiefly bou[illegible] from London the import from that port was consequen[illegible] insignificant, while Hamburg delivered the greater par[illegible] the supply.

The proposed Green Tea Association abandoned. The *Times of Ceylon* understa[illegible] that the idea of a local syndicat[illegible] Association, to handle green tea[illegible] order to equalise standards and regulate supplies, is not t[illegible] pursued. It was felt by the proposers that, to be a succ[illegible] the Association must either be directly helped by the Th[illegible] Committee, or that it must control all the teas receiv[illegible] the bonus.

Theine in Tea. In the *Revue des Cultures Coloni[illegible]* Mr. J. Kochs gives the results[illegible] investigations into this subject. The percentage of th[illegible] in the teas examined was as follows : Souchong, 2·[illegible] Flower Pekoe, 4·36 ; Scented tea, 3·08 ; Pouchong, 3·[illegible] Congou, 3·83 ; Oolong, 3·66 ; Cha Morumby, a Brazi[illegible] tea, 3·11. The quality and value of tea does not dep[illegible] alone upon the composition, but also upon the appearan[illegible] aroma, and taste of both the leaf and the infusion.

Hybrid Coffee at Reunion. Mr. E. Bordage, in the *Revue des Cultures Coloniales*, gives illus[illegible] tions and descriptions of the leaves, flowers, and fruit [illegible] natural hybrid between the Liberian and Arabian coffee tr[illegible] The hybrid resembles the Arabian tree most in the form[illegible] its leaves, flowers, fruits, and the quality of the berries. [illegible] the other hand, it is much more resistant to insect atta[illegible] and fungus diseases than the Arabian coffee, and in th[illegible] respects resembles the Liberian tree.

Prices of Coffee. The following comparisons of re[illegible] prices with the rates in 1900 s[illegible] that there has not been a very great difference in the ex[illegible] to which various descriptions have suffered from the gen[illegible] decline :—

	Current.	190[illegible]
Java in Holland	31½ à 32½ c.	... 36 à 3[illegible]
Santos	17½ „ 18 „	... 25 „ 2[illegible]
Guatemala in London parit. of	36 *sh.* à 38 *sh.* 22 „ 23¼ „	... 30¼ „ 3[illegible]
Haïti in Hâvre... parit. of	43 *fr.* „ 44 *fr.* 20½ „ 21 „	... 26½ „ 2[illegible]

The figures are from Messrs. G. Duuring & Zoon's market report.

Coffee in London. The *Produce Markets' Revie[illegible]* 17th ultimo says :—The public [illegible] tions during the past week have contained only a lim[illegible] supply, which has met with a brisk demand, the greater [illegible] tion selling at full rates. In consequence of the absence desirable first hand coffee, second hand parcels continue find a ready market, the better qualities and marks fetch

very long prices. In view of the fact that further arrivals will be very limited, it is safe to predict that prices will further advance. The fluctuations in the terminal market have been slight, the market closing somewhat easier. The receipts in Brazil are exceedingly heavy.

Tea condemned in Australia.

The *Brisbane Courier* writes that twenty half-chests of tea, shipped from Sydney per steamer *Aramac*, were condemned on the 31st July, and Dr. Ham, Commissioner of Public Health, acting on the certificate of the Government Analyst, ordered its exportation or destruction. Twenty-five half-chests of the same tea, shipped from Sydney and transhipped to a Northern port, were similarly dealt with by Dr. Ham's order. It may be mentioned that samples are procured by officers authorised by the Commissioner under Section 99 of the Public Health Act, and can be ordered to be destroyed under Section 103 of the same Act. It is a great pity that we are not told from what country this tea was imported.

American Tea Imports.

The New York correspondent of *Indian Gardening & Planting* writes :—The average value per pound of the net imports of tea brought into this country during the year ending 30th June was 12·18 cents—rather less than a year ago when it was 12·45. Of our total imports of 90,381,270 pounds China furnished about 52 per cent. ; Japan 37 per cent. ; all other countries 11 per cent. The imports from the United Kingdom, East Indies and other parts of Asia and Oceanica (excluding China and Japan) were 8,732,622 pounds against 3,998,789 pounds two years ago, an increase of 118 per cent., practically all in British-grown teas. But the figures do not show any increase in the *per capita* consumption, which was but 1·08 per pound, while some years have shown a consumption of 1·58 pounds.

London Tea Market.

Cabling to Colombo on the 26th ultimo Messrs. Gow, Wilson & Stanton reports that the market generally shows a fractional advance, that for fine teas generally being dearer, while the market for teas for price is also dearer. The price of fair liquoring Ceylon Pekoe Souchong is 5¾d (a ¼d up), and the average price of Ceylon tea sold on garden account this week was 7⅞d (⅜d up). The average of the corresponding week last year was 7d. Reuter reports that the tone of Ceylon tea is generally very firm ; rather better prices, probably owing to small quantities on offer and improved quality. Fair Pekoe Souchongs are quoted at 5d (a ¼d up) and the average for the week is 7⅞d (three-eighth of a penny up). 20,000 packages of Ceylon tea were offered for sale and 19,000 were disposed of ; while of the 35,000 packages of Indian tea offered, 31,000 found purchasers, at an average of 8¾d per lb.

Calcutta Tea Sales.

The shortage in the tea crop this season was again evidenced on Friday, when only 18,400 packages were offered in the Calcutta Sale Room, against 22,000 packages last year. There was improved demand, and prices may be quoted about 3 pies higher all round. When the improved quality and shorter crop, however, is taken into consideration, there seems room for a very substantial rise yet, and prospects for sellers should soon look brighter. Advices from the manufacturing districts continue to indicate an early close, and Dooars' teas are beginning to show the nice cold weather flavour that finds so much favour with the present day blender. Export figures, we understand, by no means reflect the present position, owing to large quantities of tea having come forward this season by quicker routes. As far as we can ascertain the actual shortage to date is 12 to 14 million lbs., which should mean a firmer market from now to the end of the season.

Crop Estimates.

Indian Gardening & Planting writes :—The Committee of the Indian Tea Association have had the advisability of discontinuing their annual statement of the tea crop brought to their notice by several influential firms in Calcutta. It is suggested by the Directors of certain Companies that the statement serves no useful purpose, as the figures given in it are always more or less unreliable. The Committee explains that it has no power of its own motion to discontinue the publication and in response to other enquiries shows that the forecast is made up from returns of estimates supplied by gardens. We would point out that such a publication is both useful and interesting as the sum of the estimates of the estates have a strong bearing on the question of crop as affording an indication at least of the amount to be expected. It is only those who expect an unattainable accuracy in matters affected by so many chance circumstances who express disappointment. We would point out, however, that all returns and estimates of this kind require to be read as well as compiled with discretion. Their limitations must be understood.

"Nature Teaching."

The *Gardeners' Chronicle* says :—The Imperial Department of Agriculture for the West Indies has issued a text-book, entitled *Nature Teaching*, based upon the general principles of agriculture. This is prepared for the use of schools by Francis Watts, Government analytical and agricultural chemist, Leeward Islands. According to the preface, the book is an "attempt to place in the hands of teachers, both in elementary and secondary schools a well selected but co-ordinate body of information suitable to West Indian conditions, to be supplemented in each case by numerous illustrations and experiments in which pupils themselves take an active part." *Nature Teaching* treats of the seed, the root, the stem, and the leaf, each separately ; as regards their uses and structure both botanically and economically. There are also chapters upon the soil, plant-food and manures, flowers and fruits, weeds, and insects. The book is clearly written, but it is not intended to be read through, but to be used as a guide by the teachers in training pupils to observe for themselves, and in endeavouring to give them an intelligent interest in the everyday facts of rural life, and is very well suited for the purpose.

Indian Tea Companies.

Mr. George Seton's excellent analysis of the working results of forty-five Indian Tea Companies for the season 1900 has, usual, been compiled with the utmost promptitude, for although the 1901 season is now well advanced several of the important Companies have only just succeeded in getting out their reports for the previous year. Perhaps this is partly due to a desire to keep back bad news as long as possible, for the results have been anything but brilliant. The total capitalization of the forty-five concerns dealt with is given as

£8,759,910, against £7,964,925 for 1899, but this increase is mainly due to the inclusion for the first time of Debenture issues. The cost per acre has risen from £43 to £47, and the output has increased from 72,290,170 lbs. to 79,272,490 lbs., being an average per mature acre of 475 lbs. in the one case and 487 lbs. in the other. Owing, however, to a decline in the average price from 8·34d. to 7·32d. per lb., while it has only been possible to reduce expenses from 6·60d. to 6·47d. the net profit for 1900 was only 0·85d per lb., against 1·74d. in 1899, and as a consequence the average rate of dividends has fallen from 5·65 per cent. to 3·90 per cent. People interested in tea company investments would do well to study the figures for the different gardens in detail; they will find several very interesting and instructive contrasts.

Indian Tea in London.

The market has not materially changed, says the *Produce Markets' Review* of 7th ultimo; the quantity brought forward was somewhat larger, but, with a steadily improving demand, prices generally have remained steady. There has been a fairly liberal selection of the fine and finest sorts, and where the teas showed no depreciation in quality a firmer tendency prevailed. On the other hand, the prices of those teas showing a falling off in character have barely been maintained, but in no case has the change been important, the better inquiry being sufficient to absorb the slightly increased supply. Medium teas have been rather more plentiful, and any change that has taken place in values has favoured buyers, while the market still points to a further fall in prices, and until this takes place transactions are likely to remain of a hand-to-mouth character. The common grades continue to meet with but a moderate demand, several lots having failed to pass the hammer even at the easier rates ruling, owing to the poor and undesirable quality of the bulk of the supply. The following are the statistics for the past month and August last year:—The imports amounted to 12,850,000 lbs. as compared with 13,015,000 lbs., while the deliveries show an increase of 1,400,000 lbs., the figures respectively being 9,483,000 lbs. and 8,082,000 lbs., while the stock is still in excess of 7,895,000 lbs. There were 29,870 packages offered at the public sales, and the large proportion of 5,233 was withdrawn. There was a fairly strong competition for the finer grades, but the lower kinds received less attention, and they consequently were easier in price.

GENERAL ARTICLES.

TO MAKE GOOD COCOA.

1. Start with a pure cocoa of undoubted quality and excellence of manufacture, and which bears the name of a respectable firm This point is important, for there are many cocoas on the market which have been doctored, either by the addition of alkali, starch, malt, kola, hops, etc. The treatment of kola with alkali is to render it more miscible with water; and, therefore, a cocoa which seems to dissolve very freely in water should be regarded with suspicion If the cocoa thickens very much in the cup, even though a small quantity is used, it probably points to an addition of starch, which lowers the nutritive value of the beverage. The addition of other constituents is unnecessary and have no good effect, but, on the contrary, may be positively harmful.

2. With a little warm water or milk, thoroughly reduce the powder to a fine, thin batter, carefully crushing down all lumps.

3. Pour on boiling water as quickly as possible, stirring rapid It is necessary that the water should be really boiling; if ju below the boiling point a perfect mixture is not obtainable. milk be employed, it should also be at a boiling point.

Cocoa prepared in this way forms, with water or milk, a perfe mixture, and leaves no sediment in the cup. It is a good plan stir the contents of the cup now and again between the interva of drinking.

If cocoa is to be prepared in large quantities for catering, t best plan is to bring the water to the boil, and then gradually a the powder to the boiling water, constantly stirring.—*Caterer Gazette.*

RUBBER COLLECTING IN THE PEMBA FOREST OF ZANZIBAR.

The chief interest in the forests centres about the rubber creepe *Landolphia Kirkii* (*Mpyo*). In some places the rubber creepe grow thickly, and in the others large areas are without any rubbe The *L. Kirkii* as it grows in Pemba is not a large creeper, rare exceeding the thickness of a man's wrist. But it attains conside able length in creeping along the ground, or in linking itself ov the boughs of the trees. The bark is red and rough and when slice off liberates a snow-white latex which almost immediately coag lates into India-rubber. The process of collection requires som skill and experience to be profitably conducted. Where the vines a plentiful and rich, an experienced and industrious man will bring as much as 3 lbs. a day, while an unskilled workman will scarce gather a quarter of a pound. The general mode of collectio consists in slicing off the bark in the form of scarfs at intervals of few inches or a foot. When three or four scrafs have been mad the collector dabs the wounds with salt water, which he carries in calabash by his side for the purpose. The salt water causes th juice to coagulate as it exudes, preventing it from dripping to th ground and being wasted. He now leaves these scarfs and pr ceeds to make and treat others on the same vine or an adjacent on after which he returns to his original group. This interval give the rubber time to collect. The latex is now pure rubber and pul off clean and white. With the ball he may have already gathere the collector goes over each scarf in succession, merely rolling along. The fresh rubber clings to the ball which grows in size, bu does not cling to the fingers. If the collector has no salt wate he smears the juice at once upon his arm when it coagulates rapidl Probably the saline exudations of the skin assist the process.

A good deal of waste in the collection takes place if the men are le to themselves. They will, for instance, only operate upon those part of the vines which are within easy reach, leaving the upper region among the trees untapped. Again there is always an "aftermath upon the creepers, which collects a quarter of an hour or so after has apparently been done with. The "aftermath" consists of onl a small quantity of rubber scarcely worth the collector's while t return and gather, but the accumulations from hundreds of vine amount to a good deal in a day and in time would sensibly affec the quantity gathered.—*Zanzibar Gazette.*

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange, 17*th August*, 1901.—Ninety day's Bank rate on Londo opened on Monday, 12th instant, at 10¼ and closed this evening wit the Banks drawing at 10¼d. We have nothing to add as regard position of the market, which is one of liquidations and likely t continue until an ample supply of other bills supplements th meagre resources of those afforded by coffee.

Shipments or *Embarques* of coffee during the past week were con siderable, being 309.508 bags at Rio and Santos, as against 295,01 the previous week, and 184,608 for the corresponding week of las year. In spite of the very large volume, nearly 68% more tha last year, the value of shipments is almost the same being £432,00 for the past week, as against £417,000 for the corresponding wee of last year.

Rubber shipments at Pará and Manáos during the week ende 15th of August, amounted to 270 tons, of the value of about £10,00

Arrivals, however, seem to be increasing, and there is some hope that in September shipments may take considerable impulse.
Extremes during the week ending August 16th were 10⅛d –10 11/32d for 90 d/s Bank paper and 10 3/16d—10 5/16d for private.

Coffee.—Entries during the week ended 16th August were again smaller in consequence of the bad weather which has ruled, with a slight break at the beginning of the week. Consequently, the arrivals were 35,869 bags less than in the previous week, but 35,861 bags more than in the corresponding week of last year. From the 1st of July to the 16th of August entries were 807,494 bags in excess of last season. Declared sales were also slightly smaller, being 13,000 bags less than the previous week, but 62,000 over those of the corresponding week last year.

Stocks continue to increase from 1,099,035 bags on the 9th instant, to 1,183,202 bags on the 16th as against 946,492 bags on the corresponding date of last year.

LEEMING'S SYSTEM OF COFFEE CULTIVATION.

Mr. Robert Gompertz writes to the *Madras Mail* :—

I fear you must be sick of "Leeming's System ;" but, as it is clear, from the numerous questions I have been asked about it, that it is of the greatest interest to coffee planters, I hope that, with your usual courtesy, you will be kind enough to find space for the following letter. One man asks if I do not think it would be sufficient to dispense with pruning and handling, and to leave the trees to themselves. Is it absolutely necessary to cut out? His coffee looks so fine, it seems such a pity to sacrifice any of it. Another tells me he has cut out all the trees at once to 12 feet apart, on a block of poor soil, and is much disappointed at the result. Another man says he is willing to cut out his trees, and to let the remainder grow up, but he is sure that, if he does not handle them out, black rot will play the mischief with them. May he handle them? etc. If these gentlemen were really in earnest they would visit Yercaud themselves, and put their questions verbally to Mr. Leeming, instead of writing to me. But just as, under the old system, some men succeeded whilst others failed, so I think it is absurd to suppose that, under all variations of soil, climate, rainfall, and—above all—of superintendence, every man will achieve the same measure of success which has crowned Mr. Leeming's well considered application of the improvements he has introduced. From some of the letters I have received I should doubt if the writers would be very successful with any system under heaven. For you cannot possibly eliminate the personal equation. To be sure of success you require not only the system but the *man* I have adopted his method myself, and hope for favourable results, but if I had 2,000 or 3,000 acres of coffee I would ensure them by offering Mr. Leeming such a salary as would tempt him to come and introduce his system upon it, feeling sure that, whatever I may be able to do, he would save the money, over and over again, by reducing the working expenses to half or a quarter of what is necessary under the old system, as well as by improving the quality, and increasing the quantity, of the crop.

If we were in America, some wealthy man or Syndicate, would have done this ere now, but English capitalists are very conservative, and though the Report I read at the late Conference, by an experienced planter from the Nilgiris (which was published in the *Madras Mail* of the 2nd August and afterwards in *Planting Opinion*), and that of Mr. Elder, from South Mysore (published in *Planting Opinion* of the 21st ultimo), must have convinced many of them, not one (that I have heard of) has had the courage of his convictions, and been bold enough to accept the situation wholesale, and wise enough to ensure success by adopting the man, as well as the system. It is much to be regretted, for, while benefiting himself, he would earn the gratitude of his poorer brethren. Such a practical demonstration of faith, by a man rich enough to make it, would be invaluable, and would do more to convince the timid, and, by ensuring the general adoption of the system, to improve the prospects of Indian coffee planters than fifty letters or Reports in its favour. Let it not be thought that I am unduly prejudiced by my friendship for Mr. Leeming. At the Planters' Conference last year, when I first drew attention to his improvements, I said: —"I think he deserves our warmest thanks, for he has solved for us the problem of cheap production;" and I should certainly be pleased to see him reap some reward. In the same speech I said that, though it had been practised in Brazil, "as regards Indian planters, it ranks as a discovery of the first importance, which will probably revolutionise the culture of coffee in Southern India." Naturally, I should like to see my predictions verified as soon as possible, and to this extent I may be prejudiced; but, beyond that, it is a matter of indifference to me whether planters are wise enough to avail themselves of the means of salvation discovered by Mr Leeming, and published to them by myself, or foolish enough to struggle on, on the old system, producing their coffee at a loss until ruin overtakes them or until prices improve.

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; it is applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

PRODUCE AND PLANTING.

We are glad to find that the question of the tea duty is not allowed to slumber. The increased duty was a blow to the industry which there have been attempts to minimise, but no apathy on the subject or acceptance of the inevitable can alter the fact that an act of injustice has been committed against the tea grower. In a letter to the *Financial Times* Kar Guzar deals with this duty question, and he protests against this burden on the producer. He says: "Messrs. Finlay & Co., in their circular addressed to shareholders in their companies, and published in your issue of the 10th inst., rightly stated that the sudden increase of 50 per cent. to the duty previously levied on tea has prejudicially affected the industry. They place the amount of their losses by it at £60,000, and at the rate of 1¼d per lb. The lower the tea produced is classed the greater is its producer's loss. The quality of tea depending upon the lay of the land, the altitude at which it is grown and the qualities contained in the soil, it is not in the producer's power to vary its quality at pleasure; he may pick finer or coarser, he may improve the appearance of the tea, but its chemical qualities will remain the same to the end of the chapter. We are told that the average price of Indian tea before the levying of the surcharge was 8d without duty. To get an average of 8d a lb. much tea must have been sold at 4d per lb., some at 1s, but we must not think, because one producer received 12d a lb. for his tea and another received only 4d, that the one was intrinsically worth three times the price of the other. The difference in price is not regulated by its intrinsic properties—the prices the consumers pay the merchant are regulated by the relative intrinsic values of the teas—but the price the merchant pays producers by the amount of duty plus the price he can afford to pay to equalise its cup value to the consumer.

The inequality of the impost is pointed out. "The duty falls unequally on teas of different qualities, and it forces merchants to buy the higher-classed teas to the neglect of the others. A rate of duty which produces a revenue equal to 75 per cent. of the whole value of the industry, a rate of duty varying from 50 per cent. to 150 per cent., is out of all proportion to its value. The price to be paid to the producer will be reduced by every penny that the merchant will not be able to recover from the consumer. If the merchant wishes to sell two teas to the consumer, the one at double the price of the other, it will be necessary for him to purchase the lower-classed one at a third of the price of the other—hence we may conclude that every 2d added to the duty takes a penny per lb. off the prices received for all teas below a certain value. When, the duty stood at 4d. low-classed teas were handicapped 2d. per lb. and the average, or 8d. teas by 1d. Now that the duty has been raised to 6d. low classed teas are handicapped 3d on the pound of tea, and average teas 1½d, as against the higher-classed teas. The duty as it is now levied acts as a direct tax on the majority of us producers. The amount levied from me as a war tax I estimate

at £2,000 per annum. It would have been less had the merchants not succeeded in passing so much free of increased duty and would have been greater had my teas not been in some request for outside markets. It is, I think, much to be regretted that Messrs. Finlay & Co., limited their statement to a bare chronicle of results, and did not boldly state in what manner and why the duty has borne, and is still bearing, hardly on our industry. The Chancellor of the Exchequer, when introducing his Budget, stated his reasons for having selected tea as a fit article for increased taxation, (*a*) because it was not an article of manufacture in this country; (*b*) it is largely consumed, and (*c*) at the time of the Crimean war the duty on tea stood at 1s 6d. per lb., and that it was promptly raised 3d with practically no objection from anybody concerned. He then went on to state that even with the addition of 2d per lb. tea would still cost the consumer 2d per lb. less than it cost the consumer in 1889, before the duty was reduced from 6d to 4d per lb., and wound up by saying that he did not think the population at large will have any very fair ground for complaint at the amount which they will be called upon to bear towards the cost of what the vast majority of them believe to be a necessary war. It is very evident from what fell from the Chancellor's lips, as from the tenor of the debate in Parliament, that the Chancellor and also Parliament intended that the tax should be levied from the tea-consuming public, and not from the producers I am one of the vast majority who deem the war to have been a necessary war, but I deem it wrong to attempt to levy any special portion of its cost under a special tax from the persons we made war to protect. If we are to be taxed, by all means tax us, but levy the tax in such a manner that it will not act unequally in its incidence. Had the duty fallen to the lot of the consumer to pay, as it was intended it should have done, the reproach that it added to the poor man's burden would have been a just one. Why an article produced and manufactured by a large number of his Majesty's subject residing in his Majesty's colony, as also in a Dependency of the British Crown, should be taxed, and articles manufactured within the United Kingdom should be exempted, we can leave those who talk so glibly of consolidating our Empire to inquire into; the principal therein propounded found favour with Parliament, and with the rest we have no concern, and it is most certainly largely consumed."

The objections to the tax are urged. "At the time of the Crimean War the duty certainly stood at 1s 6d, and was promptly raised 3d per lb., but in 1852 it stood at 2s 1d, was reduced in 1853 to 1s 10d. and again in 1854 to 1s 6d per lb. Thus, when it was raised 3d it still stood at 1d per lb. less than it had previously done. A duty levied on trade will fall either on the consumer or the producer, in no instance on the merchant, and in some instances, as in the present instance, it may act to his direct advantage. In 1854-55 the consumers, acknowledging the necessity of levying a duty to meet war expenditure, could not fairly object to having the rate of duty raised, more particularly as the duty and surcharge together left them a penny better off than they had been in the habit of paying. Producers could not object, as the article taxed was of foreign origin, and they had no cause to object, as they had possession of the markets of the world. What they could not sell to us they could sell elsewhere; our custom or our values did not rule their prices. Our case at the present day is wholly different. The major portion of the tea brought for sale to the English market is of British production, owned by British subjects. It is not an article that can be increased or decreased at will, and it is an article which spoils after a time in keeping. Our home market was, until recent times, our sole market, and is still our principal market; its prices regulate the prices for all; whatever we make must come forward, and we must accept the prices offered or not sell at all. When it was suggested in Parliament to substitute an *ad valorem* duty for a duty on weight, the Chancellor vetoed the suggestion mainly on the ground that it had been tried and found wanting—I presume on the ground that it left openings to the quick-witted merchant to pass his goods through the Customs House at lower values than he should do. I cannot help thinking that where there is the will the way will be found, and that an industry which yields a revenue of several millions sterling is worth trying to do justice to, and for my own sake and for the sake of others I sincerely hope the Chancellor of the Exchequer will see his way to perfecting one. For my own part, I believe a duty of 4½d on all teas valued at 6d and under and an *ad valorem* duty of 75 per cent. on all teas from 6d to 10d (all teas over 10d paying 7½d) would more than make good the lo the revenue might incur from the acts of the quick-witted me chants, and if the Customs House officials find difficulty in assessi duty on the fractions of a penny might count as one."

Whether the views of the majority of producers are for or again "secret" or, as the supporters of the movement prefer to call the "private" sales of tea, they continue to be bitterly resented grocers. "*Spectator*," writing to the "*Grocer*," says, in t course of his letter: "Regarding Wednesday's secret sale itself, was somewhat remarkable in that it partook of a more mysterio nature than anything we have yet seen. Competition among buyers to buy their own property afforded a special feature interest, and the good old games of 'bluff' and 'puff' were merri played, to the satisfaction of all concerned. It is, however, ve apparent to the ordinary mortal that a scratch lot of Calcutta-boug tea is not the class of article which promoters of private sales ha in view. The auction might perhaps be best likened to a bir catcher's net, with many decoy birds in various false feathe hopping about and greedily picking up gilded oats. Its attractio do not, however, so far appear to have ensnared any of the wa old birds who own the bulk of the fine tea gardens; perhaps th do not care to risk having their marks prejudiced in the countr or perhaps the Ceylon merchants who have tried the scheme ma have whispered that the gilded oats are only chaff after all. understand that the Tea Buyers' Association anticipates that priva sales may 'by a more extended range of prices in some way confer benefit on the retailer.' There can be no doubt as to the questi of 'extended prices,' as they will most certainly extend dow for the merchants and up for the grocers; but with regard to t benefits to the retailers the prospects do not appear to be so clea I would, therefore, suggest, Sir, with all due deference, that t General Purposes Committee of the Grocers' Federation invite t chairman and a few other members of the committee who drew the private sales scheme, and have taken a leading part in t movement, to meet them next month and explain the advantag likely to accrue to the grocer. By this means the grocers wou be enabled to gather much valuable information, and the represen atives of the Tea Buyers' Association would not only be afforde an opportunity of gaining increased notoriety, but if their schem is found to possess the merits claimed for it, their names wou probably also be handed down to posterity as public benefactor If I recollect rightly such a meeting took place at the time of t pound-draft dispute three years ago, when, I believe, the groce were given to understand that the protection of their interes was one of the principal objects for which the London wholesa trade existed. It is probably fresh in the memory of many of yo readers the quarter from which that unfortunate disturbance em nated. In conclusion, I would venture to take the liberty of mo strongly impressing upon the General Purposes Committee t extreme importance of giving this subject of secret auctions the most serious attention, as if allowed to continue without prote or action from the country it may, although the Ceylon merchan destroyed the recent public sale boycott, yet develop into a mo dangerous situation for the retailers. I understand on good auth rity that many leading Indian and Ceylon merchants intend adhere to the policy of the 'open door,' and I know that there a several powerful blenders and many old established leading deale who look upon the new movement with suspicion, and are prepare to support the public sale room. To these firms I would mo earnestly recommend the grocers to accord their support an countenance, and, by making common cause with them, stam out once for all the most mischievous scheme that ever was concocte benefiting for a few at the expense of the many."

A correspondent of the *Daily Mail* of the 12th inst., writing o the same subject, says:—"Despite the fact that the 'tea ring' whic recently made an unsuccessful attempt to promote the secret sale of Ceylon teas was compelled to abandon its plan of boycotting th public auctions, its spirit still exists, and has shown itself in the for of secret sales of Indian teas. While it is unlikely that the old 'ring will be got together again on the same lines, the secret Indian sale were given a start last week by the action of one company in cata loguing 3,500 packages for sale behind closed doors. This compan is said by the anti-ring men to be the concern solely responsible, a least so far as estate tea is concerned, and no other large Indian Ceylon merchants are represented in the private auctions. One the most prominent of the anti-ring men in Mincing Lane sai

yesterday:—'We need not go far to find the reason for the proving action of this company. It is the agent of a group of companies. At recent meetings of two of the companies the chairman stated that the firms were interested in what he described as a 'distributing business,' which had now reached 'a paying stage,' and should prove a 'lucrative investment.' This should be of interest to grocers and retailers. It shows the reason for the interest of this company in secret sales, and the probable effect private auctions would have on the retailer and eventually on the consumer. 'No, the secret sale scheme is not yet done with,' said a representative of one of the largest Indian tea houses in London yesterday, but I really doubt if it will thrive long. When the recent agitation over private Ceylon sales was in progress, some of the merchants received ample assurances from the small dealers throughout the country that the 'open door' policy would receive almost universal support, and the wishes of the small dealer cannot be judiciously overlooked. The London trade does not appear to take much interest in this new movement, and as long as the grocers and retailers watch the sales as closely as they are doing, but few companies will risk having their marks prejudiced in the country by associating them with the little green notices marked 'Admission to this sale by ticket only.'"

COFFEE STATISTICS.

Messrs. G. Duuring & Zoon's circular of 5th ultimo gives the following figures :—

STOCKS, ARRIVALS, AND DELIVERIES.

Eight Principal Markets of Europe.

Stocks September 1st ...	1901	1900	1899.	1898.	1897.	1896.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
England ...	19,350	18,100	25,750	20,650	12,650	10,550
Hamburg ...	35,600	35,550	31,350	38,700	23.450	17,450
Antwerp ...	11.900	12,500	16,800	16,550	9,650	6,350
Hâvre	106,100	93,450	93,700	72,700	49,750	22,450
Bordeaux ...	3,950	4,700	5,150	4,600	3,250	2.900
Marseilles ...	5 250	5,450	6,200	6,000	4,100	4,150
Triest	12,500	9,400	10,400	9,650	7,500	7,800
Netherlands (Trading Co's Warrants and private 1st hand)..	40,350	33,350	34,250	25,850	14,700	8,150
Total ...	235,000	212,500	223,600	194,700	125,050	79,800
Netherlands Trading Co. unsold ...	5,000	4,150	4,350	9,100	2,450	3,850
Stocks September 1st Total ...	240,000	216,650	227,950	203,800	127,500	83,650
Stocks August 1st Total ...	244,700	223,350	227,900	207,400	132,200	91,400
Java good ordinary in Netherl. on Sept. ...1st	32 *cts.*	36 *cts.*	25¾ *cts.*	37¼ *cts.*	47 *cts.*	50½ *cts.*
Santos good average at Hâvre on Sept. ...1st	34 *frs.*	48 *frs.*	31¾ *frs.*	38½ *frs.*	42½ *frs.*	64 *frs.*

		1901.	1900.	1899.	1898.	1897.
		Tons.	Tons.	Tons.	Tons.	Tons.
Stocks January 1st ...		234,350	242,050	224,500	170,150	98,750
Arrivals in eight months.	England ...	45,620	40,120	52,290	41,140	32,490
	Hamburg ...	104,570	109.040	86,090	127,420	103,830
	Antwerp ...	19,410	18,660	19,550	28,340	21,320
	Hâvre ...	69,880	58,320	65,200	63,850	71,650
	Bordeaux ...	4,540	4,960	5,210	5,650	5,560
	Marseilles ...	15,630	12,740	15,620	17,310	14,590
	Triest ...	25,390	28,660	21,060	25,780	20,600
	Netherlands ...	56,300	47,910	48,470	53,420	40,180
		341,340	320,410	313,490	362,910	310,220
		575.690	562,460	537,990	533,060	408,970
Stocks September 1st ...		240.000	216,650	227,950	203,800	127,500
Deliveries in eight months.		335,690	345,810	310,040	329,260	281,470
Deliveries in August ...		45,590	40,900	38,890	29,990	37,210
Arrivals do. ...		40,890	34,200	38,940	26,390	32,510

Stocks, Arrivals, and Consumption six principal markets of the United States of North-America.

	Stocks on September 1st	Arrivals in August	Arrivals in 8 months	Consumption in August	Consumption in 8 months
	Tons.	Tons.	Tons.	Tons.	Tons.
1901 ..	86,588	44,588	272,410	28,117	247,115
1900 ...	49.411	16.588	197,879	17,000	211,996
1899 ...	69,176	23,235	258,819	30,647	243,644
1898	55,529	22,000	237.821	21,764	236,291
1897 ...	45,352	26,823	218,174	24,823	202,703

Stocks, Arrivals, and Deliveries in Europe and the United States of North-America.

	Stocks on September 1st	Arrivals in August	Arrivals in 8 months	Deliveries in August	Deliveries in 8 months
	Tons.	Tons.	Tons.	Tons.	Tons.
1901 ...	326,588	85,478	613,750	73,707	582,805
1900 ...	266,061	50 788	518,289	57,900	557,806
1899 ...	297,126	62,175	572,309	69,537	553,684
1898 ...	259,329	48,390	600,731	51,754	565,551
1897 ...	172,852	59,333	528,394	62,033	484,173

Consumption in January-July :

	1901.	1900.	1899.	1898.	1897.
	Tons.	Tons.	Tons.	Tons.	Tons.
in Germany	107,780	106,410	94,400	100,470	82,590
„ France	47,700	45,340	45,770	46,970	44,490
„ Austria Hungary ...	*24,300	25,410	23,010	26,030	22,890
„ United Kingdom ...	10,210	8,590	7,880	7,600	7,460
„ Belgium	17,180	16,840	16,630	19,120	14,650
„ Switzerland	*4,970	5,500	5,750	7,260	5,1100
	212,140	208,090	193,440	207,450	177,190
„ United States of N.-Amer.	219,000	195,000	213,000	214,530	177,880
	431.140	403,090	406,440	421,980	355,070

VISIBLE SUPPLY OF COFFEE,

On *September* 1st	1901.	1900.	1899.	1898.	1897.
	Tons	Tons.	Tons.	Tons.	Tons.
Stocks eight European markets.	240,000	216,650	227,950	203,800	127,500
to Europe, afloat — Brazil ..	45,200	39,170	34,770	38,380	39,950
to Europe, loading — „ ...	1,240	6,410	—	—	—
to Europe, afloat —the East...	1,940	3,370	3,450	3,000	9,290
to Europe, „ — U.S.A. ...	410	650	180	350	650
	288,790	266.250	266,350	245,530	177,390
Stocks U.S. of North-America.	86,590	49,410	69,180	55,530	45,350
to U.S.A., afloat — Brazil ...	40,240	14,590	26,590	24,180	19,530
to U.S.A., loading — „ ...	6,240	7,350	—	—	—
to U.S.A., afloat —the East ..	180	—	760	1,060	1,410
	422,040	337,600	362,880	326,300	243,680
Stocks in Rio	24,000	10,410	18,650	22,650	24,820
„ „ Santos	58,120	40.470	63,290	38,120	46,470
Total ...	504,160	388,480	444,820	387,070	314,970
On August 1st ...	451,600	340.470	399,140	338,230	266,240

THE GOVERNMENT CINCHONA DEPARTMENT.

The following are extracts from the Report on the Administration of the Government Cinchona Department during the year 1900-1901 :—

GENERAL CONDITION.

(a)—Dodabetta.

As stated in paragraph 1 the season was an exceptionally favourable one for this estate, and the general condition of the plantation throughout the year was all that could be desired. The trees on the small plots of new land continue to make good growth and the oldest trees show no signs of failing health. In some fields the growth is rather too close and these plots will be moderately thinned during 1901-1902. The pruning that was done in 1899-1900 proved very beneficial to the trees by admitting more light and air, and during the past year the area pruned was 32·90 acres. This pruning was confined to the removal of the larger branches and

* Last month estimate.

extra stems in places where the trees were crowded, and in carrying out this work the importance of maintaining a good crown to each tree was kept in view. It has long been supposed that the leaves of the cinhona tree constituted the laboratory in which the alkaloids are formed and this conjecture has now been proved to be correct by Dr. Lotsy of Buitenzorg, Java. Pruning should therefore be a work carried out with caution and discrimination. In dense plantations the removal of some of the lower branches and extra stems is decidedly beneficial as it tends to the more vigorous growth of the crowns of the trees and admits more light and air to the soil, but where the trees have ample space in which to develop naturally it may be said that pruning should be left as much as possible to nature. The difficulty experienced in recent years in filling up gaps in the plantation with seedling plants, or rather the difficulty in establishing these supplies, has been so great that it was decided to make a trial with stumps of well matured plants. 36,407 of these stumps were put out in different parts of the estate in the gaps formed by the removal of old trees, and it is hoped that on account of their more vigorous root system the stumps will succeed where seedlings failed. Allusion was made in the last report to an experiment that had been made with the object of ascertaining if the protection of the stems of old trees by means of a covering of grass increased the alkaloidal value of the bark. Bark from a number of the covered stems and from a similar number of trees on the same plot, which had not been grassed, was analysed with the result that the former yielded 6·36 per cent. sulphate of quinine, while the latter gave 5·58 per cent. The increased yield of sulphate of quinine was thus ·7× per cent. Taking the yield of dry bark at 4,000 lbs. per acre which is a low estimate, the increased number of units obtained was 3,120. The present value of the unit is $1\frac{3}{4}$d so that the gross increase in the value of the bark which had been covered was Rs.341-4-0. The cost of the grassing per acre was Rs.58-2-10 so that the net increase in value amounted to Rs.283-1-2.

The total expenditure on the estate was Rs.13,806-2-3 or Rs.42-12-0 per acre. The crop obtained was 68,411 lbs. and the cost of the bark was therefore 3 annas 2·74 pies per pound.

A peculiar condition of the roots of some of the old trees on the estate was observed during the year. The roots were found to be covered with nodules or galls. Specimens of the affected roots were submitted to Mr. C. A. Barber, the Government Botanist, who reported that they were attacked by the root gall nematode Heterodera Radicicola. This nematode attacks tea and coffee and a large number of wild and cultivated plants, but its presence in the roots of the cinchona tree has not, it is believed, been noticed before. The affected trees at Dodabetta do not show any traces of impaired vitality, although it is evident from the condition of the roots that the disease is not of recent date. Pot experiments are being made in order that the effect of the nematode on the cinchona plant may be better observed. Several cinchona stumps on whose roots the galls formed by the nematode were numerous were put into pots and in the same pots healthy cinchona and tea seedlings were planted. At the time of writing the stumps have thrown up healthy shoots and are growing freely and the cinchona and tea seedlings are doing well. The roots of these seedlings will be examined from time to time to ascertain if they have been attacked by the nematodes from the cinchona stumps. The disease has not been noticed among the old trees at Nedivattam, but the nematodes have been found on that estate in the roots of young plants on old land. The young plants thus affected were stunted in growth and unhealthy in appearance, a condition which was attributed to exhaustion of soil. It has yet to be proved whether the unhealthy condition of these plants was due to the attack of the Heterodera Radicicola or to the exhaustion of the soil by previous crops of cinchona.

(*b*)—*Nedivattam.*

The damage done by the unusually heavy south-west monsoon was to a great extent compensated for by the rains continuing later than usual and the dry season being less severe than ordinarily. In the last report, it was remarked that during the period from 1st November to 31st March rain fell on only five days. During the year under review, however, there was rain on 14 days during t period, and it is partly due to the favourable dry season that estates looked so well at the close of the year. There has bee great improvement in the appearance of the trees on this est during the year, the result of the more liberal system of cultivat that has been followed in recent years. The good effect of d digging and the burying of weeds on 129·61 acres was well mark and the pruning of plots 21 and 28 as well as the removal of d branches and twigs from the older trees improved the appeara of the estate. At the commencement of the year the remain succirubra on plot 2 were coppiced. These trees were the oldes any on the Government estates, having been planted in 1862, a it is satisfactory to note that at the end of the year the you growth from the stools was healthy and vigorous. The condit of the trees on plot VII which were coppiced in 1879 is very sat factory, and other coppiced plots on the estate show very g growth. On the Nilgiris, where the successful replanting of land is a matter of considerable difficulty, there can be little do that the most profitable method of working a cinchona plantati in order to obtain a sustained yield, is to combine the syst followed in Java with that of the coppice system. Close planti and gradual thinning out followed by coppicing offers a bet chance of success than thinning out followed by uprootal of trees, and a replanting of the ground which is the course adop in Java. The systems of shaving and stripping seriously aff the growth and vigour of the trees, and although renewed bark generally richer in quinine than natural bark the yield of quin per acre over a series of years is greater in the case of thinning a coppicing than by either the shaving or stripping system.

During the south-east monsoon 46,400 eucalyptus plants w put out on plot XI as an addition to the fuel reserve, but excessive rain, during June, July and August caused a number the plants to damp off and the planting was not a success. vacancies will be filled during the coming monsoon with well-gro plants of which a considerable stock is in the nurseries.

The expenditure during the year was Rs.15,279-0-3 or Rs.48- per acre. The crop obtained was 64,317 lbs. at a cost of 3 an 9·61 pies per pound.

(*c*)—*Hooker.*

The old estate has improved in appearance during the year. sickly and dying trees were coppiced, dead branches and tw were removed and pruning was done where it was required. T estate was sickle weeded during the monsoon and dug over bef the dry weather set in. The new extensions now consist of 2 acres, of which No. 1 was planted in 1898-1899, No. 2 in 1899-19 and No. 3 during the past year. The growth of the plants No. 1 has been rather uneven. Some portions of the 80 acres ha come on very well, but the excess of moisture during June, Ju and August proved fatal to a certain number of plants. The vacancies will be filled in during the coming monsoon with we grown plants raised from seed received from Java. Out of the plants on this plot whose height measurements are taken quarte three died during the year. The average height of the 47 survivo was 7 feet 3 inches. The tallest of these plants was 10 feet inches. These plants were from 3 to 4 inches high when put o in 1898 and the growth they have made in a little over $2\frac{1}{2}$ years very satisfactory. The No. 2 extension is more even than No and promises to do very well. The plants have made good grow and look strong and healthy. No. 3 which was opened during t year promises well. The plants were small when they were p out but owing to favourable weather in the dry season they ha already made good growth. The fourth extension of 80 acres w be planted in 1901-1902.

The total expenditure on the old estate was Rs.5,261-3-9 Rs.27-2-10 per acre and the crop obtained was 61,686 lbs., the c of which was 1 anna 4·37 pies per pound.

The low expenditure on the Hooker estate is due to the fact th it is managed by an overseer under the orders of the Super tendent of the Nedivattam estate. Taking the two estates togeth the expenditure amounted to Rs.40-6-3 per acre and the cost of t bark from both estates was 2 annas 7·29 pies per pound.

MANURE.

On the Dodabetta estate 1,875 cartloads of cattle and stab manure were put out on different plots, at Nedivattam plots 9, and 28 were manured with cattle manure and at Hooker plot 1 was thus treated. In the last administration report mention w made of an experiment with a mixture of fish and chemical manur

Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant the appointment of "Purveyors to Her Majesty The Queen and Empress of India" from the year 1837 until the time of her death, have now had the honour of being appointed by Royal Warrant "Purveyors to The King."

The mixture consisted of 1 ton fish, 2 cwt. superphosphate, 4 cwt. of basic slag, 4 cwt. of potash and 1 cwt. of sulphate of iron. This quantity was evenly distributed over one acre and lighty forked in. The cost of the manure including the cost of application was Rs.185-6-4. The stems of the trees were covered with grass at a cost of Rs.58-2-10, so that the total cost of the experiment was Rs.243-9-2. The bark of the trees thus treated yielded 6·91 per cent. sulphate of quinine, while the bark from unmanured and ungrassed trees on the same plot gave 5·11 per cent. There was thus an increase of 1·80 per cent. sulphate of quinine. Of this increase ·78 per cent. may be attributed to the covering with grass, so that the net gain from the manuring was 1·02 per cent. Taking the yield of the acre at 4,000 lbs. there was an increased yield of 4,080 units due to the manure which at the present rate of the unit (1¾d) represents Rs.446-4-0. The cost of the manuring was Rs.185-6-4 and the net gain was consequently Rs.260-13-8. It was shown in paragraph 3 that the net increase in value of bark from covering the stems with grass amounted to Rs.283-1-2 per acre, so that the total gain per acre by the combination of manuring and grassing was Rs.543-14-10 per acre. With a unit of ½d the experiment would have shown a slight loss, but with a unit of ¾d the net gain would be Rs.9[illegible]-14-10.

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION (CALCUTTA).

The following are extracts from an abstract of the proceedings of a meeting of the General Committee held on 24th September. There were present: Messrs H. S. Ashton (*Chairman*), A. Tocher (*Vice-Chairman*), H. W. Boyd, W. Brown, R. H. A. Gresson, A. C. Lawrie, R. Magor, and R. R. Toynbee.

Considered a letter No. 2338 of 20th September, from the Vice-Chairman, Calcutta Port Commissioners, regarding teas bulked in Calcutta by Mr. Apjohn's tea bulker. In this letter it was stated that arrangements had been made with the London Customs authorities whereby Calcutta tares would be accepted without limit as to variations, if, after a short trial, the weights were found to be correct. The conditions laid down in London were also detailed in the letter, copies of which were to be published for the information of the members of the Association. A copy was also to be sent to the London Committee.

Considered a letter dated 5th September, from Captain R. Kennion, I.S.C., British Joint Commissioner, Ladak Agency, Leh, forwarding samples of the brick tea in general use in Tibet and Ladak. In the proceedings of the meeting held on the 13th August, it was stated that samples of Indian brick tea—manufactured on a Dooars garden—were to be sent to Captain Kennion. This had been done, and in the letter above mentioned, Captain Kennion remarked that from a casual inspection he did not think the samples bore sufficient resemblance to the Chinese article to command a sale in the frontier markets. He would, however, report further after getting the opinions of connoisseurs. The thanks of the Committee were to be conveyed to Captain Kennion for the trouble he had taken in the matter.

NELLIAMPATHY.

Proceedings of the Annual Meeting of the Nelliampathy Planters' Association, held at the Victoria Bungalow, on the 27th September, 1901. PRESENT:—Messrs. J. C. Abbott (*Chairman*), C. Hall, A. R. Jones, A. Barnes, A. G. Murray, G. H. Welchman, and W. R. Mackenzie, *Honorary Secretary*.

Proceedings of last meeting were taken as read.

The Honorary Secretary made his Annual Statement and presented the accounts which were confirmed.

The Honorary Secretary was re-elected.

Roads and Bridges.—Read correspondence with the Chief Engineer on the necessity of repairing or renewing the Bridge between Kythode and Valavachen in Padagherry.

Honorary Secretary was instructed to again address the Chief Engineer on the subject of the roads from Kythode Bridge to Valavachen, they being impassable. Also to ask the Darbar to finally decide which road they intend to keep up, the old trace or the new diversion.

Roads.—Honorary Secretary to ask Government for a statement showing what allotment of funds for up-keep of District roads has been made, and by whom are the works being carried out, as the Association—the most interested party—is in entire ignorance of what arrangements have been made.

Police.—Read correspondence with Superintendent of Police on the subject of engaging new police officer. The Association approves of the Havildar mentioned and recommended. The Honorary Secretary to forward through the Superintendent Rs.15 for the Havildar's travelling expenses. It was noted with satisfaction that the local police against whom charges had been made had been severely punished.

Hospital.—Read correspondence. Honorary Secretary to inform Peishkar that the land for the new hospital had been acquired and should now be demarcated and a deed drawn up at Government expense.

Honorary Secretary was directed to again bring to the notice of Government, the serious delay in carrying out this work which had been sanctioned years ago.

Hospital Staff Quarters.—Honorary Secretary to ask Government to erect suitable quarters for above, as the temporary buildings are no longer habitable.

New Member.—Mr. R. K. Walker.

Reduction of Rates.—It was agreed that Mr. Barnes's resolution to reduce coolies' pay be held in abeyance till every member of the Association be consulted.

Proposed by Mr. J. C. Abbott, seconded by Mr. Cecil Hall:—That the Honorary Secretary be requested to address the Collector of Malabar with reference to the land tax in the British portion of the Nelliampathies asking that a reduction or remission of the tax might be made.

The Association passed a vote of sympathy with the Assam planters.

(Signed) J. C. ABBOTT,
Chairman.

(,,) W. R. MACKENZIE,
Honorary Secretary.

SELANGOR PLANTERS' ASSOCIATION.

Extract from minutes of General Meeting of the Selangor Planters' Association, held at the Selangor Club, on Saturday, the 17th of August, 1901, at 11 A.M.

[Subject to confirmation at a subsequent meeting].

PRESENT:—Mr. W. W. Bailey (*Chairman*); Messrs. C. Meikle, E. B. Skinner, P. W. Parkinson, H. C. Rendle. Members of Committee; and E. B Prior, *Honorary Secretary;* also Messrs. A. G. Tanner, H. M. Darby, E. V. Carey, O L. Carey, R. C. Kindersley, A. Fraser, J. Glassford, and M. Stonor.

Mr. Carey proposed and Mr. Skinner seconded a proposition that in future if the minutes be sent to local and other newspapers before having been confirmed, a note to that effect should be made on such copies, and that the minutes were subject to confirmation at a subsequent meeting. This was carried unanimously.

The Secretary then read the minutes of the last meeting.

Mr. C. Meikle proposed that the minutes be placed on the table. This, on being seconded by Mr. Parkinson and put to the meeting, was carried *nem. con.*

The following correspondence was read to the meeting:—

(*a*) With Government—

1. Letter, dated 11th July, 1901, from the Secretary to Resident to the Hon. Secretary, Selangor Planters' Association, concerning the subject of recruiting free labour.

Mr. Carey asked if the Hon. Secretary of the United Planters' Association had received a similar communication, and was informed that he had.

Mr. Meikle, on the Chairman's suggestion, proposed and Mr. Darby seconded that the matter be placed before the United Planters' Association and that the Secretary to Resident be informed of the course adopted.

This was put to the meeting and carried unanimously.

2. Letter, dated 22nd July, 1901, from the Secretary to Resident to the Hon Secretary, Selangor Planters' Association, enclosing copy of Memorandum by Dr. H. A. Haviland on the distribution of meals to Indian immigration coolies.

The Chairman asked if anyone wished the memorandum read as it had been published in the local paper, and no doubt all present had seen it. It was decided unanimously to lay the memorandum on the table, which was done accordingly.

3. Letter from the Secretary to Government, dated 6th June, 1901, to the Hon. Secretary, Selangor Planters' Association, in reply to one from Hon. Secretary, Selangor Planters' Association, of the 28th May, 1901, which was also read.

Mr. Carey considered that the Government had done all they possibly could in this matter and that for all practical purposes the Association's request had been granted. Messrs. Bailey, Skinner, and Parkinson all agreed that the members of the Association had reason to thank the Government for taking the matter in the way they had.

Mr. Carey proposed that the letter be copied *in extenso* in the minutes, and this, being seconded by Mr. Bailey and put to the meeting, was carried unanimously.

Letter, dated 20th June, 1901, from Mr. Derry, Government Plantation Office, Perak, to the Hon. Secretary, Selangor Planters' Association, enclosing copy valuation of sample of rubber sent some time ago by Mr. Tan Chay Yan, of Malacca, from Ficus elastica trees four years old.

The following is the valuation made by Messrs. W. J. & H. Thompson:—"This a good rubber and well prepared. The value is about 3/- per pound, provided the bulk is fully equal to the small sample (one kati), equally clean and equally dry."

MARKET REPORT.

[*Per Mail advices of 13th September* 1901.]

COFFEE.

The London Commercial Record says:—Supplies at auction during the se'nnight have been rather larger than those of last week, but they still continue to be on a moderate scale, and with a steady inquiry the bulk has been disposed of. Prices as a rule show a further hardening tendency, especially for fine quality. Plantation Ceylon realised extreme rates, and home-trade grades of East India sold at very satisfactory prices to importers. Dumont Santos was not so readily sold as of late. There have been some slight changes in "futures," but, in spite of the continuance of very heavy receipts at the Brazils, the closing quotations are rather higher for the week. Yesterday March Santos was done at 29s to 29s 6d and May at 29s 6d.

Auction supplies to-day comprised—107 bags East India, 40 half-frazils Mocha, 56 bags Nyassaland, 61 bags Nicaragua, 572 bags Salvador, 331 bags Guatemala, and 237 bags Costa Rica. The small auction sales went off with good spirit Bold sizes were 6d to 1s and pile lots 2s to 2s 6d per cwt. dearer.

London ...	... Santos ...	Dec. delivery	... 28s 9d.
New York	... No. 7 Rio...	,,	... 5·00 cents.
Hamburg...	... Santos ...	,,	... 28½ pf.
Havre ...	... Santos ...	,,	... 34½ francs.

The Duch Trading Company advertise their next sale to take place in Rotterdam on Tuesday the 17th instant, when 21,430 bags 320 cases will be offered. Good ordinary Java is valued at 34¼ cents.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	17,753	17,545	38,218	29,907
	Home Consumption.		Export.	
	1901.	1900	1901.	1900.
Tons ...	14,205	11,753	20,798	15,293

The preceding figures exhibit— Tons.

In the Imports an increase this year of ... 8,311
Home Consumption an increase of 2,452
Export an increase of 5,505
Stock an increase of 208

Of

Auctions this week have gone off as under:—

Ceylon.—*Plantation*—33 casks 2 tierces 24 barrels 3 bags sold smalls 40s to 65s, middling to good middling 95s to 104s 6d, bo to extra bold 105s to 121s, peaberry 82s.

East India.—1,535 bags practically all sold as follows:—*Coor* smalls 40s 6d to 43s, middling 46s 6d to 48s, common bold 53s 53s 6d, fair bold 63s 6d to 67s, peaberry 65s to 68s; *Neilgher* smalls 40s to 42s 6d, good middling dull greenish 45s to 50s 6 good middling 57s to 69s 6d, common bold 57s, fair to fine bo 70s to 88s 6d, peaberry 45s to 71s 6d; *Mysore*— smalls 35s to 38 peaberry 44s; *Wynaad*, smalls 28s, low middling 41s 6d, comm bold 52s, *Travancore*, smalls 36s 6d, low middling 43s 6d, comm bold 53s, peaberry 49s.

Mocha.—Of 199½-bales offered 60½-bales sold—good shorther 83s to 83s 6d, fine 99s to 99s 6d.

Nyassaland.—246 bags sold, smalls 34s to 46s, low middling middling 42s to 51s, bold 54s to 65s, peaberry 49s to 56s.

Jamaica.—25 bags 2 barrels bought in

Costa Rica.—Of 447 bags, about 100 bags sold—fine ordinary low middling 41s 6d to 44s 6d, middling 55s, peaberry 38s to 43s.

Guatemala.—703 bags practically all sold—smalls 32s 6d to 4 6d, low middling to middling 42s 6d to 47s 6d, good middling colo 51s 6d to 52s 6d, bold 54s to 63s 6d, peaberry 53s to 56s.

Vera Paz.—377 bags sold, smalls 34s 6d, good ordinary 39s 6 middling 48s to 55s, good middling 57s to 61s, fine middling 70s 6 to 78s 6d, bold 64s to 83s, fine colory bold 93s to 94s 6d, peaber 36s to 84s.

Salvador.—1,327 bags nearly all sold, good to fine ordinary 3 to 39s, low middling 45s 6d, middling 47s to 50s 6d, bold 55s to 60 peaberry 54s to 55s 6d.

Nicaragua.—170 bags sold, smalls 37s, low middling 44s 6 middling 47s, bold 53s to 68s, peaberry 35s to 49s.

Colombian.—Of 1,346 bags catalogued 1,250 bags sold damage small 25s to 42s 6d, low middling to middling 41s to 48s 6d, goo middling 51s to 53s, bold 47s to 60s 6d, peaberry 30s to 50s 6d.

Ecuador.—285 bags passed the hammer unsold.

Brazil.—Of 2,797 bags Dumont Santos 1,350 bags sold, smal 27s 6d to 28s, medium 33s, bold 36s 6d to 41s, peaberry 40s to 42 6d. Of 500 bags washed Santos, landed terms, 100 bags sold, goo medium colory 39s to 40s. 300 bags Bahia were bought in.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99 Bags.
Rio ...	1,431,000	680,000	999,000	838,00
Santos ...	2,654,000	1,911,000	2,235,000	1,676,00
Total ...	4,085,000	2,591,000	3,234,000	2,514,00
Crop ...	—	10,900,000	8,971,000	8,772,00

Rio Exchange 10$\frac{13}{16}$d, previous day 10$\frac{11}{16}$d.

Havre, *September* 12.—Good average Santos September opene quiet at 34f. and closed steady at 34f. December opened at 34½f. an closed at 34½f, March opened at 35¼f. and closed at 35¼f.. Ma opened at 35¾f. and closed at 35¾f., July opened at 36¼f. and close at 36¼f.

Hamburg, *September* 12.—Good average Santos September opene quiet at 27½pf. and closed at 27¾pf., December opened at 28¼p and closed at 28½pf., March opened at 29pf. and closed at 29¼pf., Ma opened at 29¾pf. and closed at 29¾pf., July opened at 30pf. an closed at 30¼pf.

New York, *September* 11.—Closing prices of No. 7 Rio were a follow:—

	Sept.	Oct.	Nov.	Dec.	Jar
September 11...	4·75	4·80	4·90	5·00	5·1
September 10...	4·70	4·75	4·85	5·00	5·0

America, *August* 28, 1901.—Deliveries are running ahead of las year, but the market continues to favour buyers. During the wee Brazil sorts have been steady at last week's quotations. No. 7 Ric spot, at 5⅝c; Nos. 7 and 8 Rio offered at 5⅛c.,c. and f.; No. 3 Ric 7¼c; No. 5 Santos, 6⅜@6½c. The visible supply is very large and grows.

In mild sorts there is a firmer market for coffee from Venezuel and Colombia, due to the political troubles there existing. Ther is no stock here of Bucaramanga. The better grades of Bogot are held from 9¼@12½c for invoices There is no stock here o Porto Rico, Liberia, Hayti, or Angostura coffee, so that quotation below are nominal Of Mocha there are only 1,500 bags in stock

held from 14@18c, and higher for extra fancy. Padang Interior, 14@19c, with fancy mats at 24@28c, and higher for extra fine marks. The sales from August 9 to 23 include 33,379 bags Maracaibo, with good Cucuta at 7½c and choice at 10½@11c; 11,596 bags Savanilla, 5,745 bags Central American, and 2,616 bags Laguayra.

TEA.

INDIAN.—Sales amounted to 32,000 packages (of which 7,200 packages were brought forward at Wednesday's private auction) compared with a total of 29,800 packages in the week before, when 7,400 packages were offered in the "ticket" room, and 33,200 packages for the same period of 1900.

There is no great change to note but full coloury teas of all grades have been wanted at rather enhanced rates, while invoices giving liquor of a "rawish" type although possessing quality, were in less favor and barely maintained their former level. The more useful common sorts here and there shewed a little indication of moving upwards, but are no doubt affected by the character of the somewhat heavy bonded stock of old import still remaining. Among the best results were:—Assam—Pabbojan Co., 152 packages, 1s 5¾d; Balijan Co., 218 packages, 1s 3¾d; Deamoolie Co., 86 packages, 1s 2½d; Mokalbari Estate, 141 packages. 1s 2¼d, and Suddia Road Co., 212 packages, 1s 1¾d per lb. Darjeeling—Poobong Estate, 137 packages. 1s 5¼d; Thurbo Estate, BDTCo., 158 packages, 1s 5d, and Selimbong Estate, 119 packages, 1s 4¼d per lb.

For 26,200 packages on estate account 8¼d per lb. was obtained, against 8⅛d per lb. for 31,400 packages and 9⅛d per lb. for 37,600 packages in the two foregoing seasons.

CEYLON.—Not quite so much was printed, *viz.*, 22,600 packages contrasted with 24,200 packages in the previous week, and 26,500 packages a year ago.

A stronger tone was observable in the bidding, and with more enquiry from the Continent quotations for nearly all descriptions tended in favour of sellers, partly due to further improvement in the style of manufacture now usually apparent. Leafy kinds for "price" were firm, while medium and fine hardened in value, sometimes marking a rise of ¼d to ½d per lb. The position of Broken Pekoes under 9d per lb, excepting those with thick liquor which were in good request and occasionally dearer, did not on the whole alter appreciably, but over that they often denoted an advance. All finest and choice lines attracted attention and sold well, some of the top figures, secured being:—West Holyrood 1s 6½d, Talawakelle 1s 4¼d, Concordia 1s 3d, and Kotiyagalla and Mount Vernon 1s 2½d per lb.

The average is 7¼d per lb., on the 5th instant it was 7d per lb. and also twelve months since.

JAVA.—Catalogues included 1,400 packages of direct import which went with spirit, though in several instances limits were not reached and the lots had to be withdrawn.

Deliveries.—Clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 10th Sept.	1901	5,322,077	lbs.
Do. do.	1900	5,130,786	„

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	28,187	3,789	31,976
Ceylon	20,981	1,644	22,625
Java	384	590	1,474
Total	50,052	6,023	56,025

Also 270 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated September 13th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1901-1902	244,331	378,302	20,099
1900-1901	232,338	402,135	14,307

32,344 *pkgs.* INDIAN
22,966 „ CEYLON
1,474 „ JAVA
} Total 56,784 packages were offered in public auction this week.

Reports from both India and Ceylon continue to indicate a probable reduction in the output. Still, so much land has recently been brought into cultivation in India that young Tea is now coming into bearing; every effort will therefore be required on the part of Planters to reduce the out-turn. According to the Indian Government Report—in 1897, 36,838 acres were added, in 1898, 31,561 acres, in 1899, 13,978 acres, and 1900, 6,829 acres.

INDIAN.—Auctions continue to be on a moderate scale, while indications point to a more active tone among buyers. The market has been very steady for all descriptions, medium Teas occasionally showing an advance of ¼d. to ½d., while Teas for price were also slightly dearer. Public auctions were held on Monday and Thursday, and on Wednesday 7,245 packages were offered under the new conditions. The following averages are worthy of note:—"Pabbojan T Co.," 1/5¾; "Poobong," 1/5¼; "Brit. Darj. Co. Thurbo," 1/5; "Selimbong." 1/4¼; "Balijan T Co.," 1/3¼; "Deamoolie T Co.," 1/2½; "Mokalbari," 1/2¼.

Week's average of New Season's Tea sold on Garden Account, 1901, 26,930 pkgs., av. 8·15d. 1900, 30,742 pkgs., av. 8·07d.

New Season's Tea sold on Garden Account 1st June to date, 1901, 154,881 pkgs., av. 8·35d. 1900, 181,673 pkgs., av. 8·13d.

CEYLON.—The volume of auctions has been gradually diminishing during the last few weeks, while a still further reduction appears likely to take place next week. Bidding was very general, all grades meeting with good attention, the better kinds frequently making an advance of fully ½d. per lb., while Teas for price were occasionally ¼d. dearer.

Average for week 7·19d., against 6·76d. same week, 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 853,129 pkgs., av. 6·61d. 1900, 905,965 pkgs., av. 7·19d.

JAVA.—Offerings comprised some Teas of very useful quality which were fully appreciated by the Trade. Prices reflected the improvement noticeable in other growths. The best average was made by the "Goalpara" Estate, 108 packages selling at 10¼d.; "Tanawattee," 120 packages, 8¾d.; and "Djati Nangor," 216 packages, 7¾d.

Bank Rate 3 per cent. Exchange on London three months' sight:—Calcutta 1/4 5/32. Colombo 1/4 3/16.

COCOA.

Auctions on the 10th inst. presented 3,621 bags, which moderate quantity experienced a fair demand at full rates to an advance of 1s per cwt. Of 1,086 bags Trinidad catalogued 750 bags were placed, at 71s to 74s for very fine red, 69s to 70s for good to fine, and 67s for middling, being about 1s dearer. Only 74 bags Grenada were offered, and these sold at valuations—65s to 65s 6d for fine. Of 633 bags Jamaica 520 bags sold firmly at 60s to 64s for good to fine fermented and 54s to 57s for ordinary. 3 bags Dominica brought 56s 6d. A small portion of the 63 bags Caracas offered sold at 86s for fine clayed. Ceylon was not very brisk and of the 871 bags brought forward only 240 bags sold—fine bold red at 85s 6d to 88s, but principally pickings at 51s 6d to 59s, and blacks at 42s to 47s 6d per cwt. 50 bags Bahia, 44 bags Colombian, 193 bags Para, 3 bags Maracaibo, 509 bags Haiti, and 3 bags Seychelles all passed the hammer unsold. Privately the following sales are reported:—250 bags Trinidad at 70s to 71s, 20 bags St. Lucia at 63s for fine, 50 bags Caracas at 96s for fine clayed, 800 bags Guayaquil at 70s for red Caraquez and 77s to 79s for good to fine Arriba, and about 700 bags Ceylon, fine at 80s to 88s, good 70s to 75s, and medium 60s to 65s per cwt.

PEPPER.

BLACK.—A fair demand has been experienced since our last, and full prices have been paid. Singapore has been sold on the spot at 6d for fair, and at same price for shipments near at hand; September-November quoted at 6⅛d.

At auction on Wednesday 120 bags Singapore were bought in at 6⅛d per lb. 24 bags Estate Penang withdrawn.

To-day quiet.

To arrive business has been done in Tellicherry to Genoa at 56s to 56s 6d per cwt. c i f. delivered weights, per September-October (s.).

WHITE—In more demand, and about 50 tons Singapore sold for arrival—at 8 15/16d near at hand, and at 8 15/16d to 9d for October-November shipment.

At public sale on the 11th instant 26 bags Estate Penang were taken out.

GINGER.

COCHIN—A firm tone exists, but not much business has passed this week. 120 cases 160 bags offered, of which only 18 cases very bold branchy rough Calicut, but much mouldy, sold at 45s per cwt.

JAMAICA.—32 barrels sold steadily—middling to fair bold washed 43s to 45s, good ordinary 38s to 40s per cwt.

ST. LUCIA.—10 bags small plump dull sold at 35s per cwt.

CINCHONA.

The Amsterdam auctions to be hld on October 3 next will consist of 4,550 packages, including 2,728 bales Ledgeriana, 951 bales and 307 cases Succirubra, 385 bales hybrid, 93 bales Calisaya, and 86 bales officinalis. A supplementary catalogue will also be p lished. Six bales of coarse and broken Calisaya quill sold at fr 8¼d to 8½d per lb. in auction.

QUININE.

The market has been very flat throughout the week, and val in second-hand are again easier, especially for forward delive small transactions of good German sulphate in bulk being repor at 1s 0⅜d to 1s 0⅞d per oz for December, and October at 1s 0 The spot price is nominal, at 1s 0¾d, but there are few, if a sellers for prompt delivery, and the market in this position is fi The next Amsterdam cinchona-sales will again be heavy, in wh case there is likely to be a further decline in the unit.

(AVERAGE FOR ALL INDIA 8·44d., SEPTEMBER 13TH.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Du and Various	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Pric
Travancore ...	**1284**	**5·72**												
Balamore ...	179½c	5	...	...	123½c	4½ 5	44½c	5¾	..	..	7½c	3¾	5½c	3
Corrimony ...	200½c	5	...	...	73½c	4¾	83½c	6	40½c		1½c	3	3½c	3
Glenmore ...	200½c	5	...	...	112½c	4½	82½c	6 6¼	...	...	2½c	2¾	4½c	2
Poonmudi T Co B	79 p	6	14	6¾	19	6	17	7½	15	4¾	11	5	3½c	3
,, Poonmudi	95 p	6½	19	7⅞	37	6½	18½c	7½	18	5¼	...	...	3½c	3
Seafield ..	168½c	5½	...	...	105½c	4¾ 5	60½c	6½	...	...	2½c	3½	1½c	3
Sthn Ind T Co KK	110	6¾	47	6½	...	...	31	7¾	20	6	...	...	12	5
S T T Co Venture	136 p	5¾	...	...	65	5¾	32	7	27	4¾	...	...	12½c	3
T T E Co M Mal ...	17	6¼	17	6 6½	...	...	.	..	...	...	...	...	...	
Vembenard ...	70 p	6¾	18	7¼	25	6	15	8¼	...	...	...	...	12½c	4
W	30½c	4	...	...	30½c	4	...	...	...	...	...	.	...	
TRADE AUCTION. (AVERAGE 6·81d.)														
Travancore ...	**422**	**6·88**												
Kan Dev H Co A	6	3½	...	...		...	...	...	...	...	...	...	6	3
,, Gundamallay	125½c	5½	20½c	6¼	28½c	5¼	23½c	6¾	39½c	5	3½c	4	12½c	3 5
,, Perai Vurrai	170	7¼	32	8½	53	7¼	23	8¾	62	6¼	...	...	...	
,, Sevenmally	121	7¼	...	...	53	6¾	32	9¼	36	6	...	...	...	..

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[m. 15-7-99—t.f.o.]

PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 18th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Coorg.

Polli Betta, *9th October.*—*Weather*—Occasional heavy north-east showers, more or less overcast. Coffee looking very fine. Crop being gathered on the western side. *Labour*—Plentiful. *Health*—Very fair. *Interesting item*—Camp of Exercise commences 15th.

TREATMENT OF SCALE PESTS.

In continuation of recent remarks upon the San José Scale, we now proceed to make further use of Mr. Benson's article in the *Queensland Agricultural Journal*, to show the treatment he recommends. We need scarcely say that it will doubtless be found equally applicable in the case of other scale pests than the San José, and these, at least some of our readers are familiar with. Mr. Benson states that although this scale multiplies so rapidly it has been found possible to keep it in check by constant and systematic spraying, as has been proved by years of experience. There are (in Queensland) two main periods of spraying, one during the winter after pruning, when the leaves are off the tree and every part of it can be reached by the spray, and the other when the young scales are hatching out during spring and summer. The most important treatment is the winter spraying, as this can be carried out at a time that the tree will stand the strongest dose without injury, and also on account of the fact that the tree can then be much more effectually sprayed than when it is covered with foliage, as, no matter how carefully the spraying is done when the tree is in leaf, some part is sure to be missed and to become a breeding ground from which the scales rapidly spread over the whole tree. The best winter

spray is the sulphur lime and salt wash, which is made as follows:—

Take 40 lbs. of unslaked lime, 20 lbs. of sulphur, 15 lbs. of salt, and 50 gallons of water.

To mix, take 10 lbs. of lime, 20 lbs. of sulphur, and 20 gallons of water; boil for not less than one-hour-and-a-half, or until the sulphur is thoroughly dissolved, in a strong iron (not a thin copper) boiler; when the mixture will be of a light amber colour. Slack 30 lbs. of lime in a barrel with hot water, and when thoroughly slacked but still boiling add the 15 lbs. salt; when this is dissolved the whole should be added to the lime and sulphur in the boiler, and the whole boiled for half-an-hour longer, when water to make the whole up to 50 gallons should be added. Strain through a wire sieve, and keep well stirred whilst in use.

In making this mixture be careful to use a strong iron boiler, for if made in a copper wash boiler, the sulphide of lime which is formed will rapidly eat away the copper, and thus destroy the boiler. This wash connot be applied by means of a copper knapsack pump for the same reason. As the wash is very hard on the hands and clothes, use strong leather gloves and cover the body with a sack in which holes have been cut for the head and arms. Good bamboo extension rods are also essential, and the best nozzles to use should be strong, simply constructed and easily cleaned.

One great advantage of the spray over all others is that it is an excellent fungicide as well as an insecticide, and will destroy all moss, lichen, or canker on the bark, and prevent to a great extent the spread of the black spot of the apple and pear, and of the shot-hole fungus of the apricot. Another advantage is that when the spray dries it is readily seen whether the work has been carefully carried out or not, and any parts of the tree that have been missed can receive a second dressing, thus securing the treatment of every part. The remedies used for the destruction of the young scales when hatching out are not as caustic in their effects as the above, and in order to obtain the best results from their use they require to be applied several times at short intervals so as to catch the succeeding crops of scales as they hatch out, as the younger the scales are when treated the more readily they are destroyed.

Mr. Benson states that the following remedies have been found effectual, *viz.*:—

WHALE-OIL SOAP AND BLACK LEAF TOBACCO EXTRACT.

Dissolve ¼ lb. of whale-oil soap in 1 gallon of water, and add 2 fluid oz. of black leaf tobacco extract, and apply with sufficient force to reach and wet every part of the tree.

SULPHIDE OF SODA AND WHALE WASH.

Boil 6 lbs. of sulphur and 3 lbs. of concentrated lye in 2 gallons of water till thoroughly dissolved and of a dark brownish green colour. This dark liquid is sulphide of soda. Dissolve 30 lbs. of whale-oil soap in 48 gallons of water, add the sulphide of soda to it, boil to thoroughly mix, and add water to make 120 gallons in all and apply.

Moreover, in severe cases it is found advisable to apply as a paint to the trunk and branches a mixture prepared as follows:—

A PAINT FOR THE TRUNKS AND MAIN BRANCHES.

Boil 2 lbs. of sulphur and 1 lb. stone-lime in 2 gallons of water for an hour-and-a-half. Then add 3 lbs. more stone-lime and boil half-an-hour. Make up with boiling water to 2 gallons, and add enough fine flour or fine clay to the mixture to make it of the consistency of thin paint.

Mr. Benson prefers these remedies to the use of kerosene sprays, though the latter are recommended by many orchardists, as he considers that there is less likelihood of danger to the tree, and also that those washes in which lime is used leave such a mark on the tree that it is easily seen whether the work has been carried out properly or not.

THE PROSPECTS OF COFFEE.

It must be confessed that Coffee has held its head up fair well in the face of an adverse statistical position; but it is sadly diminished head as regards price. As to the futu there is at least as much uncertainty as usual. The Bahia R crop of 1900-01 amounted to 242,600 bags; the Victoria cr to 201,500 bags. The 1901-02 crops are estimated at 400,0 and 500,000 bags respectively. Estimates for 1901-02 p crop at 3¾ to 4½ million bags, Santos at 7½ to 8 million together 11¼ to 12¼ million bags. The general idea appea to be that 12 millions may be regarded as a minimum. A regards the next year's crops there are already rumours of reduction. These were expected for, after two years of hea bearing, a lighter crop is always looked forward to. It however, impossible to draw any reliable conclusion. Pro pects of the Venezuela crop are unfavourable; in Guatema only about half an average crop is expected, and that som what late. Costa Rica advises, also predict, a small cro The present Java crop is short, but all this is practically ou weighed by the fact that the total visible supplies a enormous.

NOTES.

Rubber in the Amazon District. An expedition has been despatche from Washington to study the rubb resources of the Amazon basin.

Ceara. Good crops of Maniçoba rubb are being obtained in the Coi district, where more than 20,000 trees have been planted.

Assam Planters and the Chief Commissioner. Recent meetings have laid stre upon the desirability of appointing Commission to report upon the cond tions of the tea industry all over Assam.

Samoa. The attempt to cultivate coffee the Samoan Islands was a failur Cacao can be successfully grown almost everywhere in t islands except on the summit of the mountains.

Pepper in Turkey. The Singapore and Penang peppe are imported direct into Turkey fro those two places and Jamaica pepper from Liverpool. Abo 800 bags arrived from Penang and 500 bags from Jamai during 1900.

Cocoa in Barcelona. The principal feature in cocoa the market in 1900 was the gre falling-off in the supply from Cuba, but, on the other han the quantity imported from Fernando Po has quadrupled the last six years.

More Indian Tea for Persia. Mr. T. J. Greensill, representi the Kangra Valley planters, is takin 100 camel-loads of tea to Meshed a leaves for Quetta almost immediately. He is also takin some indigo from Multan district.

Australian Tariffs. The Australian Commonwealth Tariff Bill introduced in the House of Representatives provides for a new duty on tea of two pence per pound, *plus* twenty per cent. *ad valorem*; cocoa, two pence, *plus* fifteen per cent.

Where to cut in Pruning. Mr. C. A. Keffer, in the Univ. Tennessee Record, expresses the belief that the best method of cutting off limbs is through the base of the shoulder parallel to the trunk or limb on which the branch to be removed is growing.

Bolivia. During 1900 Bolivian exports included the following items :—

	Bols
Rubber	2,049,389
Coco	398,629
Coffee	94,819
Quinine (Cinchona)	47,306

Indian Tea Exports. The following figures of tea exports taken from the Calcutta Customs daily entries and received periodically from Chittagong are issued by the Indian Tea Association :—Quantity of tea entered for export to the United Kingdom for the second half of September, 1901, Calcutta, 11,119,342 lbs.; Chittagong, 952,470 lbs.; as compared with 14,095,562 lbs. entered during the corresponding period of last year.

The Value of Advertisement. Apparently as an additional inducement to the Canadian public to buy Ceylon and Indian Black and Green Teas, an advertisement in the *Canadian Grocer*, which sets out the claims of the teas and the names of sellers at Montreal, includes this remark :—"In addition to their unquestioned merits, remember how they are advertised—*See* the daily papers." It is a curious appeal!

Ceylon Tea Exports, U. K. The following has been wired to London by the Ceylon Chamber of Commerce Committee :—

September shipments	6,000,000 lbs.
October estimate	8,000,000 ,,

The estimate for September was six millions to six and a quarter millions. The estimate for October is two millions less than shipments of the same month last year, and nearly three millions less than in 1899.

Ceylon Tea Exports. The *Ceylon Observer* writes anent "our black tea exports for three-quarters of the year." The comparison of total exports stands as follows :—

		lbs.
January 1st to September 30th,	1900 .. .. =	109,662,605
Do. do.	1901 ... ... =	106,533,166
	Decrease ...	3,129,439

Mr. P. C. Larkin in London. A special cable to the *Times of Ceylon* states :—Mr. Larkin has addressed to the Tea and Produce Committee of the Ceylon Association in London, a most encouraging account of the progress of Ceylon tea in Canada and the United States, especially in greens. The Committee is writing to the Thirty Committee suggesting an increased cess, and the devoting of a larger proportion of the funds to the fostering of the green tea industry.

Borneo Coffee. It may interest our "coffee-men" to know that the Borneo Coffee Co. advertises that it will ship pure Borneo coffee on orders being sent to Messrs. Shand, Haldane & Co., London. Raw at 1s per lb., roasted whole berry at 1s 3d, roasted and ground at 1s 3d, and Borneo coffee, mixed with Chicory, 1s 1d "The charge for postage or carriage on 1 lb. will be 3d.; on quantities of less than 5 lbs. 6d.; 5 lbs. or more will be sent carriage free. Terms :—Cash with order."

Tea in Australia. The *Age* remarks :—The market is firm all round for Indians and Ceylons. For quick shipment to Sydney some further good business has been done in both these lines, the market there being much above this centre; 300 packages have been sold. The Customs Bill, now nearly through the Federal Houses, contains rather more drastic sections in relation to tea than the State act. The provisions are worthy of consideration—especially by those interested in the importation of "commonest" descriptions.

Commercial Cinchonine. According to Jungfleisch and Léger (*Pharm. Zeitsch.*, 1901, 595), commercial cinchonine sulphate contains as much as 20 per cent. of hydrocinchonine. By treatment of the sulphate with 95 per cent. alcohol, then converting into the basic sulphate, and, finally, recrystallising several times from water, a product containing only 3 per cent. of hydrocinchonine is obtained, and after ten recrystallisations the product contains only one per cent. of that base. The melting point of the thus purified product is 264·3° C. (corr.), and the optical rotation is always higher than that of the commercial salt.

Indian Tea Crop Prospects. The following telegram with reference to the tea crop in the various districts has been despatched by the General Committee of the Indian Tea Association in Calcutta to the Committee of the Association in London, *viz.* :—Assam, outturn last month poor; immediate prospects fair. Cachar, outturn last month poor; weather generally too cold for time of year, and is checking leaf. Sylhet, outturn last month poor; immediate prospects fair. Dooars, outturn last month about normal; immediate prospects fair. Terai, outturn last month poor; immediate prospects bad. Darjeeling, the outturn is stated to be 5 per cent. under last year; immediate prospects fair. Deficiencies increasing generally.

The London Tea Market. The weekly special telegram dated 3rd instant from Messrs. Gow, Wilson & Stanton to Colombo reports that competition is general and well distributed, and that the market for fine teas as well as for teas for price is dearer. The price of fair liquoring Ceylon Pekoe Souchong is $5\frac{3}{4}$d (same as last week), and the average price of Ceylon tea sold on garden account this week was 8d (up $\frac{1}{8}$d). The average of the corresponding week last year was $7\frac{1}{4}$d. Reuter reports that Ceylon tea generally realised full rates, but medium broken Pekoes were irregular. Fair Pekoe Souchongs are quoted at 5d (the same as last week), and the average for the week is 8d ($\frac{1}{8}$d up). 19,000 packages of Ceylon tea were offered for sale and 18,000 were

disposed of; while of the 52,000 packages of Indian tea offered, 50,000 found purchasers, at an average of 8½d per lb. (¼d less than last week).

Tea in Australia.

Messrs. Alfred Harvey & Co., of Melbourne, in their September Tea Report state that shipments from Colombo to date were 8,840,588 lbs., as against 6,323,000 lbs. at the same time last year. Shipments from Calcutta to date were 2,254,718 lbs., as against 3,319,000 lbs. at the same time last year. "Arrivals," say Messrs. Harvey & Co., "have been on a smaller scale than usual, the high Calcutta costs no doubt tending to restrain operators from shipping freely. A few breaks have shown good quality and strength, but on the whole the new crop is distinctly disappointing, and in the lower grades is barely able to compete with similar class Ceylons. One or two small sales have been held during the month, but, except for a few stand-out lines, sales have been difficult to effect, and the result has been disappointing to importers. Stocks in bond on the 7th instant were 658,293 lbs."

A Bye-Product.

"Bananas and plantains," write a Honduras correspondent of the *Boston Herald*, "are, of course, grown almost everywhere; and while in camp it was my custom to purchase bananas for our party. And such bananas! of red or yellow variety, just as we might select, but in every case large bunches, almost as high as a man and weighing over a hundred pounds each. One of the many purchased was of the red variety, and contained by actual count 262 bananas, and was over five feet in height. Some of the bananas measured 8¼ inches long and 9 inches round. They were brought from the plantation of an Indian, who travelled with the bunch on his back and held to his head by a leather strap. He crossed the Chiquilla River five times, and his price for this bunch was 10 cents in our money. Our custom was to eat raw when ripe, or fry them. Our cook's way was to roll them in flour so as to avoid their sticking to the pan."

Calcutta Tea Sales.

At the Calcutta tea auction on the 4th instant 19,800 packages were offered, as against 22,000 on the same date last year. These figures again show the shortage of the crop. There was a strong and active tone throughout the sale, the firmest features being lower grades, which showed an advance of 3 to 4 pies, and in some cases as much as half an anna. For really good Dooars, a few invoices of which had cold weather flavour, there was very keen competition, but in view of the evident sign of the early close of the season in this district, it is more than likely that this class of tea will go a good bit higher yet. Assam Broken Pekoe kinds well selling much under the rates ruling at this time last year, and seemed to offer unusual value for the quality now being offered. Taking, as a whole, yesterday's sale was a distinctly more encouraging one for growers, and there seems every prospect now of season 1901 winding up more satisfactorily than at one time appeared likely. The sale is the last to be held this side of the Puja holidays.

Estimating Cinchona Alkaloids.

In the *Pharmaceutische Centralhalle* the following method of estimating the alkaloids in cinchona bark is given: Four grammes of powdered cinchona bark are trit rated with 2 grammes of calcium hydrate until the wh particles of the latter are no longer visible. Five c. of ammonia are then added so as to impregnate all the powd The whole is placed in an Erlenmeyer flask, with 100 c.cs. ether, and exhausted for half an hour. The liquid is th filtered through cotton wool, the flask and the filter bei washed with 80 c.cs. of ether. The filtrate is next shaken three minutes with 10 c.cs. of 10 per cent. hydrochloric ac allowed to separate, and the alkaloidal solution drawn o after which the ethereal portion is again shaken with 5 c of water. The acid solution of the alkaloids is introduc with 70 c.cs. of ether into a separator and made alkaline wi caustic soda. The alkaline solution is run off, and aft washing with 2 c.cs. of water the ether is evaporated in weighed flask. The residue is dried and weighed. V Ketel suggests this method, which is applicable to all t fixed alkaloids soluble in ether.

A German Report on Coffee.

Messrs. Scheffer & Dracher, Hamburg, in their report dated 14 ultimo says:—"The stocks of coff in Brazil last week have become unusually large, and up now from the beginning of the season, they are 4,267,0 bags against 2,718,000 last year. Fortunately the shi ments are also heavier. The quantity sent from Brazil North America and Europe is distinctly greater than ev before and as by far the larger part of this goes direct retail traders, the balances on hand will be soon furth diminished. The market kept steady all the week and clos a shade higher which was the more surprising as suppli came in so fast. The improvement will make faster progres should the reduction of the stock in the end of September the beginning of October coincide with unfavourable news the plants. On every side it is stated that the Brazilia coffee plants are in a bad state and suffer in many places fro some sort of leaf disease. This is likely enough, as the plan bore so abnormally last year, that they must be exhauste They require now good manuring and great care, but t planters are not able to give them this. For this reaso managers expect but a poor crop."

Coffee in London.

The *Produce Markets' Review* 14th ultimo says:—The auctions th week comprised moderate quantities, mostly Central Amer can, and, with a strong demand still prevailing, the who was readily sold at full to again higher prices. Privatel the demand for Costa Rica and fine Guatemala and Salvad continues and further substantial advances on recent valu have been paid. There is no longer any Costa Rica in fir hands and the Continental demand for this description, whic continues strong, has had, to a large extent, to be satisfie from London home trade stocks. The quantity availabl from now until the arrival of the new crop next year ha consequently become unsually small, and it seems likely tha still higher prices must eventually be paid. The sam remarks apply to the fine qualities of Guatemala and Salvado and these are also sharing in the rise in values. Receipts i Brazil continue on an unprecedentedly large scale, but hav little effect on the market, which is no doubt supported b the prevailing good demand for all kinds and the general u willingness of speculators to sell at the present low price

Santos in the face of the uncertainty as to the next Brazil crops, as to which rumours will probably be current next month.

Phosphorite and Green Manuring.

In an Austrian technical paper Mr. A. N. Engelhardt refers to 3 years' field experiments and concludes that the soils which responded to applications of fine-ground phosphorite were those in which the phosphoric acid was in form of apparently unassimilable organic compounds not set free by calcium carbonate (chalk). The fine-ground untreated phosphate was especially effective on cereals, the effect depending upon the percentage of calcium phosphate in amorphous form. The finer the meal the more effective the phosphate. The best results were obtained with rye, but the following crop of oats was also benefited. When the phosphorite was applied to rye, or flax, and these crops were followed by a crop of rye to which barnyard manure was applied, the yield of the latter was much greater than that of rye which had received only an application of barnyard manure. The ground phosphorite can be profitably used to supply a deficiency of assimilable phosphoric acid on all soils which contain a sufficient amount of nitrogen, potash, and lime. On soils which give a good yield without barnyard manure it does not prove profitable. An application of chalk improved the action of the phosphorite. How long the application of ground phosphorite may be continued with profit is a matter of doubt. When its action ceases, green manuring should be resorted to. Other mineral substances, especially marl, should be used in connection with the phosphorite.

Indian Tea in London.

With a moderate supply and a steady demand prices have not materially changed, says the *Produce Markets' Review* of 14th ultimo, most descriptions remaining firm at last week's rates. Although the late estimate of the outturn up to date shows a falling off to the extent of 6,000,000 lbs., the imports for the past month were practically on a par with those for the same month last year, which is reported to be due to the quicker despatch from the different Tea districts. The arrivals for this reason will probably not show any material deficit for some time, notwithstanding the reported shortage in the crop, part of which, if not the whole, may be made up should the more favourable weather continue for the remainder of the season. So long as imports continue about equal to the quantity of last year, coupled with an excess of stock of about 7,800,000 lbs., there is not likely to be any upward movement of importance in prices; at the same time the better grades will, no doubt, well maintain, if they do not improve on, present values. The total quantity of all tea in the bonded warehouses on the 31st August was 5,300,000 lbs. larger than at the same period last year, the respective figures being 74,221,000 lbs. and 68,878,000 lbs., those showing an increase being of Indian and Java growths, while the stock of Ceylon has decreased 2,700,000 lbs. There were 32,344 packages offered at the sales and the small proportion of 3,200 withdrawn. The bidding was active for the better Assam and Darjeeling teas, prices favouring holders, but for the other growths, which are generally of a disappointing quality, there was a steady demand and no appreciable change in values.

GENERAL ARTICLES.

TEA IN THE U. S.

A correspondent of the New York *Journal of Commerce* says: "It is well to note the fact that the present prostration in tea comes from the interposition of Providence. Atmospheric influence decimated the production of fruits and vegetables to an extent almost unprecedented. This is an industry in which every grocer in this country is involved. The capital employed in canned goods is enormous, exceeding all other lines. The light production of any food indispensable to the needs of the people renders it necessary to provide means for that particular one to the exclusion of all others; hence no surplus capital for tea. The evolution develops the fact that tea, like all commodities, is governed in price upon the principle of supply and demand. This is demonstrated daily, and on this basis the future of the tea business will be conducted. Reduce the duty, increase it to 20 cents, make it free—the result will be the same to the consumer. Its removal would produce a revolution, destroy the trade for twelve months, and wreck many operators."

Alluding to the duty, he says: "Without the duty the United States was the dumping ground of the world. We have endured imposition long enough. It is not an unjust law. It is not onerous. Why open the door again? The duties imposed in other countries are: Russia, 45 cents per pound, Portugal, 48 cents; France, 25 cents; Germany, 11 cents; Spain, 26 cents; England, 12 cents. Others average 18 cents. Before the duty was imposed consumers paid 25, 30, 40, 50, 60, 75 cents, and $1·00 per pound on the lower grades of impure tea, retailers profiting 100 to 150 per cent.; now they pay 30, 40, 50, 60, 75 cents, and $1·00 per pound on pure tea, retailers profiting 50 to 75 per cent. Herein find the incentive. Consumers have not protested since the duty was imposed, nor do they substitute coffee, which was done during the influx of impure tea."

CEYLON TEA ON THE CONTINENT OF EUROPE.

Mr. J. H. Renton has written as follows to Mr. Rosling on pushing and making known Ceylon Tea in Germany:—

Konigsberg i Pr., 1*st September*, 1901.

My dear Rosling,—I last wrote you from Stettin on the 28th. I have been over a month wandering round the summer bathing places of the German public on the Baltic, and also seeing if there was any greater tea consumption in the northern provinces of Brandenburg. Pommerania, West and East Prussia. The consumption of tea is even less than it is in some other parts of Germany. I had thought that perhaps amongst the fisher population I should find tea consumed, but beer, coffee and schnapps form the drinks of the people, and in the winter schnapps form the main consumption, I am told. The sea-side bathing places all along the coast are innumerable, and have all been crowded this year as the summer has been a very fine one. In most of these places big hotels,—open only in the season, June to 15th September,—have been built close to the little villages and hamlets, but in some others again the primitive hotels still exists, and they are primitive. In all of them tea is procurable, and I should say that at breakfast in the mornings 5 to 10 per cent. of the visitors drink tea, and, as a rule, very poor China tea it is. Occasionally, but very seldom you see tea ordered in the afternoon. The hotel-keepers say their guests would not drink a strong Ceylon tea. They buy and give the public what it is accustomed to. There is room here for a

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THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

demonstrator to go round the small towns and give the tea away in cup, and I have put this suggestion before a Bremen importer, but he does not believe in it yet, and I daresay it would be better to wait till we get tea-rooms established in the big towns, and let example and habit filter from the classes to the masses. Even here in East Russia, and close as we are to the Russian frontier, tea is not drunk by the people; it is all coffee and beer, but when you cross the frontier tea takes the place of coffee at once, so the tea dealers here tell me. In this hotel though, which is quite full, I noticed the usual order of things in Germany was reversed, $\frac{7}{8}$ths of the visitors drinking tea at breakfast, and the tea is not the usual thin watery liquor, but a strong thick dark tea. It is drunk out of *glasses*, but the hot water jugs are twice the size of the teapots You fill the glass about one-third full and then add water. The tea is good and is not pure China; I should say a blend with Ceylon. In the cafes and restaurants tea is served per glass, also in the *theatres*, and is as easily procurable as beer. It is all strong tea, not pure China.

So much for the general aspect of the trade. To come to details. In Stettin and Danzig, the capitals of Pomerania and West Prussia there are no purely wholesale tea dealers. Even in the directory no retailers are entered as tea merchants. For vendors of tea you are referred to Colonial merchants. In both cities I found only two wholesale men in each handling tea with other articles. The Stettin men do not touch Ceylon and do not care to at present, though one of them admitted to me that he might take to it. Böhringer, from Stuttgart, had already supplied this gentleman with Bamber's book and other literature on Ceylon tea. The few retailers I called on admit they buy it and use it for mixing, but do not sell it pure. Of the Danzig firms one had already been supplied by Mr. Föllen, in Bremen, with his book on Ceylon tea, but said he had no wish to introduce it. The other firm, who get their teas through another Bremen importer, will not go in for Ceylons. In Danzig there are four large retail tea and coffee shops. They all say they keep Ceylon, use it principally for mixing, and sell next to nothing pure. But one of them offered of his own accord to issue Bamber's book in the form of a circular to his clients and I at once promised that the expense of doing so would be refunded to him *by the Hamburg importers*, through whom he gets his teas. I know the firm well, and this will, I hope, show them that in helping their clients I am helping them. All these 4 retail Danzig firms buy direct from the Bremen and Hamburg importers.

Here in Konigsberg things are somewhat different. Years ago it was the centre of a very large tea trade, all of which practically went to Russia. According to some the opening of the Suez Canal, according to others the introduction of the Russian Government randerole, has forced all the trade into Russia itself—and the trade of Konigsberg is practically *nil* in tea with Germany. There are four wholesale houses here—one still a very large one with a branch in Moscow, but the branch is really bigger than the parent-house They have their correspondents in Colombo and buy some 1,600 chests per annum of Ceylon tea, the bulk of which is for Russia. Another smaller firm buy their Ceylon tea all on the London market and their business is entirely Russian. Then there are two others, both doing a local trade. One of them is an old employee of the once famous Bandelsverein, who has an old connexion on the frontier and in Russia. The last is run by a pushing man, who has advertised largely and issued a great deal of literature on tea with a view to getting it more largely consumed in Germany. He likes Ceylon and says no China tea can be drunk without an admixture of Ceylon, but that the time has not yet come for the sale of pure Ceylons in Germany. He makes five blends, Ceylon tea is in all, the lowest 10 per cent. the highest 40 per cent.—average in the five 25 per cent. I have offered this man some support for his advertising campaign this winter. This is going beyond my rule, but the man is so favourably disposed to Ceylon that I am in hopes that on my next visit I will get him to run a pure Ceylon tea and give it a special advertisement. All the dealers here say that in Russia all the tea contains 25 per cent. of Ceylon. I called on three retailers. One said they sold a little; one a great deal; the other one, the biggest, none. He kept only Indian, and found it kept better.

I think, however, my visit in these provinces has done good. I hope my long conversation with some of them will induce them to give Ceylon a fair trial, and I think the retailer in Danzig and the dealer here will push it more now.

THE "COFFEE-STEALING PREVENTION ACT IN MYSORE."

The Inspector-General of Police in Mysore submitted to t Secretary to the Government in Mysore a report on the worki of the "Coffee-stealing Prevention Act" for the past season. T Durbar has passed the following order:—"Four cases were repo ed during the year as against eight during the previous year. A four ended in convictions against five during the past year. Sev persons were prosecuted during the year, and all of them were co victed. No case was reported in the Hassan district under t provisions of the Coffee-stealing Prevention Act during the yea The two cases that were pending with the magistrates at the en of the previous year ended in conviction during the year, and bo the persons concerned were fined a rupee each. The Deputy Co missioner attributed the absence of cases under the Act to t depression in coffee trade; but there were 20 cases of ordina thefts of coffee under the Penal Code. The amount of fines inflicte on persons was Rs. 358 during the year under report, against Rs.2 during the previous year. This increase is reported to be due t the fact that the three persons concerned in a case in the Mudge taluk were fined Rs.100 each. The Deputy Commissioner of t Kadur district reports that from December, 1900, to March 1, 190 14 constables were lent to private individuals on the usual cond tions of payment, that this was chiefly in the taluks of Kopp Mudgere and Chickmagalur. He further reports that a few me were, as usual, detailed in each taluk for special duty, with instru tions to visit coffee estates, markets and petty shops, and tha their constant itineration produced the desired effect on dishone coolies and receivers of stolen coffee. It would further appea that the account books kept by dealers in coffee were examined i some cases. Inspector Shama Rao, of the Koppa taluk, was give a reward of Rs.5 by the Amildar of the Koppa taluk for the goo work done by him."—*Madras Times.*

OUR TEA EXPORTS; GREEN TEAS, ETC.

The expert who prophesied 5 per cent. decrease in export of a teas in June states now that "he failed to take into account th large quantity of surplus tea from 1900 brought forward for expo in January and February, 1901. He feels certain it will be 5 pe cent. by end of 1902, though he gives up the 7 per cent. idea, as h understands there are now makers of coarse teas in Ceylon. It i to be hoped they will get into the same tight corner as India men. For now the Indian Tea Stocks are increasing, while th Ceylon Stocks are decreasing. What does Mr. Andrew Yule sa to this fact? It does not bear out his impudent statement regard ing Ceylon coarse and inferior teas.

"*Green Teas.*—In September averages published in Messrs Forbes & Walker's last circular

Udabage green tea 76½ chests fetch 26 cents per lb.
add Tea Cess bonus 5

Total 31

Udabage black tea 97 packages fetched an average of 32 cents. Green tea costs at any rate 1 cent more than black, and even wit the bounty has an average sale price of 1 cent *less.*

"So all this fussing of Mr. McK. in regard to Green Teas and th wish of some of his backers to increase the tea cess, so that bounties may be more largely given, are likely to land us in trouble. If th green tea dealers in America through their agents here, are onl to give us 26 cents and the makers of such green teas are to b recouped by bounties, we have indeed come to a sad plight Mr McK. had better try remaining out in America for the whole yea than donkey-galloping for three months, divided into visits of on month each."—*Ceylon Observer.*

Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant th appointment of "Purveyors to Her Majesty The Queen and Empres of India" from the year 1837 until the time of her death, have no had the honour of being appointed by Royal Warrant "Purveyors t The King."

PROPOSED EXTENSION OF THE BANDONG QUININE FACTORY.

Since the introduction of the co-operative working arrangement between the Bandong quinine-works and the Java cinchona-planters, the factory has been fully employed, and is now even working day and night to keep pace with the deliveries of bark. The total quantity of bark worked up in one year comes to about 30,000 to 40,000 tons, and is equal to about one-eighth or one-tenth of the total annual production of Java, the remaining seven-eighths being exported and sold to the European quinine-factories. The low-grade bark, which, as a rule, was not exported, is now also worked up with advantage, as contracts have recently been made with American firms for the sale of such by-products of the quinine-industry as cinchonine and cinchonidine.

It is said that the opinion prevails in Europe that if about three-quarters of the annual production of Java bark is exported to Europe, and the remaining quarter manufactured into quinine in Java, the situation would be satisfactory to all parties concerned. But in view of the growing output of other countries, and notably the increasing production of high-grade bark in British India, and the possibility that this may ultimately have an unfavourable effect on the quinine-market, it is advocated in Java that a larger proportion of the bark grown there should be worked up in that country. With this view, it is recommended that the works of the Bandong Company should be extended by the erection of a second factory, and that the required capital, which is estimated at about 20,000*l.*, should, at least in part, be subscribed by the Java planters. It is further considered essential for the success of the undertaking that the cinchona-planters who agree to send their output to the new factory should undertake to continue to do this for a period of not less than five years.

PRODUCE, PLANTING, AND COMMERCIAL NOTES.

Commenting on the table published by Mr. George Seton, giving results of Indian tea companies during the season 1900, the *Financial Times* says: "It will be observed that despite an increase in the output of tea amounting to nearly 10 per cent., the profit per lb. has fallen to nearly one-half of what it was last year, the working cost being little under that of 1899. There is, however, one encouraging feature. Over-production is admittedly the root of the evil, and it is therefore gratifying to find that notwithstanding the failure of the scheme to effect a combined reduction in the output, there is evidently a disposition on the part of the companies to follow out this principle individually. A glance at the figures representing the acreage shows that the increase in the area planted is only a little over 1 per cent. This can only be regarded as a very moderate proportion to meet the depreciation in the gardens, and goes to show that the different managements have fully realised the folly of large extensions. As to the outlook for the current season, it is as yet too early to express any reliable opinion. We are informed that in all districts, with a few exceptions, there was a considerable shortage in the tea crop at the end of August, owing, to a large extent, to the weather, which curtailed the pickings, and this being the case it is certain that unless this falling off is made up by the end of September the crop will be materially reduced. It must not be overlooked, however, that there was a large surplus from the past season at the end of May, and the question is as to what stocks are held in private hands. The opinion expressed by an authority is that it is now but small, and in that event, if there should be, as is not unlikely, a shortage in the current crop, it is not improbable that we shall see better prices at Mincing Lane before very long. This view is corroborated by Messrs. Gow, Wilson & Stanton in their weekly report, issued yesterday, but, at the same time, they emphasise the warning that as young tea from the recent extensions of tea plantations in India is now coming into bearing, every effort will be required on the part of planters to reduce the output. In the meantime it is interesting to note that the direct export of Indian tea to places outside the United Kingdom for the first half of the year was largely increased, no fewer than 5,774,600 lbs. having been shipped, as compared with 3,344,200 lbs. in the corresponding period."

A writer in the "Trade Press List" published at Boston, U.S.A., seems more scornful than hopeful on the subject of tea-growing in the Southern States. He says: "For over a hundred years different individuals have used the United States Agricultural Department as a nursing bottle to draw funds from the Treasury, to let them pose as tea-planters. Secretary Wilson has lately slopped over in a statement, 'we are succeeding admirably in producing tea in the United States.' As a fad, supported by the Treasury of the United States, it is a very pretty occupation, but, from a commercial stand-point, the quality of the stuff as yet produced, makes his remarks rank nonsense."

"Mr. R. V. Webster, of Colombo, Ceylon," says the *Canadian Grocer*, "who is now pretty well known all over Canada as a dealer in Ceylon tea, is on his regular trip through the United States and Canada, and is in Montreal this week. He finds that everywhere he goes there is a steadily increasing demand for Ceylon tea, and he visits almost every point in the world."

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Analyzing the late course of Exchange, *Le Moniteur des Intérêts Matériels* says:—

"It is quite certain that a great many other factors than the simple balance of trade act upon the course of exchange, and particularly the abundance of paper money, and the course of coffee prices. We said two months ago that, if the fluctuations of exchange regained a normal condition, it would fall until June, and rise again gradually until it attained its maximum in the autumn, at the close of the coffee season. Instead of that, ever since May exchange has done nothing but fall from 12 to 10d, and even lower. We can only conclude, thereby, that the coffee market is not in a normal condition."

What the *Moniteur des Intérêts Matériels* understands by a "normal condition of the Coffee market," we are at a loss to understand. Coffee is always either going up or going down; but very seldom indeed does it keep level.

The prices of Coffee obey the condition of supply and demand, and, as the supply has of late years largely exceeded the demand, the tendency, with the exception of a few spasmodic reactions, has been generally downwards. Such is the normal condition of Coffee of late years, and that, therefore, cannot be sufficient cause to explain the reaction of exchange. In point of fact, whilst carefully taking into account the well-known factors which contribute activity to the exchange market at certain times of the year, notably the Coffee and Rubber seasons, our contemporary entirely neglects the most powerful of all the causes of oscillation—speculation.

In February of this year the liquidation of last year's speculation for the rise was complete, and the balance of trade being largely in favour of the country in consequence of extraordinarily large and simultaneous Coffee and Rubber shipments, amounting in March to over £4,000,000, exchange was rising of itself. Speculation recognizing the fact that the supply of bills was for the time larger than the demand, and a consequent upward tendency of exchange, commenced selling heavily towards the end of February, and continued till the 14th of May.

In that time they had succeeded in overselling to the amount of nearly £4,000,000 and when the banks shut down in June and commenced to demand delivery, precisely in the month when exports were at their very lowest, the conditions were reversed, and the demand for bills scarcely satisfied by the supply, leaving little or nothing over for the speculative market. Of course a slump ensued.

Were Coffee prices not so extremely low as they actually are, three months' shipments on the present scale would have sufficed to clear off the arrears, but under the present circumstances there seems every probability of the liquidations being dragged on until the end of the year, when Rubber bills will be again available. Not until then can any considerable reaction be expected.

It is this flux and reflux of speculation that the *Moniteur des Intérêts Matériels* does not take into sufficient account; but that, if indeed it does not control the ultimate course of exchange, is unquestionably the most powerful factor of its oscillation.

Coffee reshipped.—A telegram received by the *Prensa* of Buenos Aires, states that the arrival of 233 bags of Brazilian coffee *viâ*

New York at Porto Rico has almost caused a riot. In view of the popular indignation, the consignees decided to reship the Coffee, and a meeting was called at which it was determined to boycott any one importing Coffee for sale in the island. Whilst Porto Rico coffee is sold at 10 and 12 *pesos* an *arroba*, Brazilian can be sold at 7.

Alfalfa.—The samples of *Alfalfa* (Lucerne) exhibited at the Hortulania in the rua do Ouvidor, grown by Dr. Victorino Monteiro on his *Estancia* in Rio Grande do Sul, show what a future there is for this important branch of agriculture. At present we import all our *Alfalfa* from the River Plate to the amount of over 600 Contos annually.

Sao Paulo.—The Carruncho pest is said to be doing a good deal of damage in several districts.

Exchange, *Saturday, 24th August,* 1901.—Ninety days' Bank rate on London opened on Monday, 19th inst. at 10¼d. rose to 10$\frac{1}{32}$ on the 22nd and closed this evining at 10⅜.

Extremes during the week ending Aug. 23rd were 10$\frac{3}{16}$d.—10$\frac{1}{32}$d. for 90d/s Bank paper and 10¼d—10½d for private.

Coffee.—During the week ended August 23rd the value of Coffee shipments (embarques) here and at Santos amounted to £492,000 as against £431,000 for the previous week and £571,000 for the corresponding week last year. The value of the Coffee sailed since the 1st August is £1,410,985 as against £1,607,262 for the same period last year and for the season (1st July to 23rd August) is £2,851,875 as against £2,779,077 last year.

In spite of unfavourable weather and the occurrence of a holiday, the week's entries show an increase of 75,088 bags compared with last week's, entirely at Santos, and of 68,460 bags compared with those for the corresponding week last year.

Entries for the current month up to the 23rd were 1,353,076 bags as against 1,142,941 for the same period last year, and for the current crop amounted on the same date to 2,807,814 as against 1,931,860 last year of 45% more.

Shipments (embarques) were also somewhat larger than the previous week's and 66,842 in excess of last year's for the corresponding week.

Declared sales, on the contrary, were smaller, 222,004 as against ,000 the previous week and also for the corresponding week t year.

Stocks on the 23rd inst. show an increase of 103,704 bags com- ed with the previous Friday and 291,357 compared with the same date last year.

In Sao Paulo the impression seems to be general that the coming crop of 1902-1903 will be much smaller than the current one, and under the average. Planters are, therefore, advised by the local papers to dispose only of what is necessary to meet expenses and hold the balance for better prices.

We hear that the coming crop on the Dumont Estates will this year be the largest ever produced. It is expected to reach 450,000 *arrobas*, or 112,500 bags.

Rubber.—The shipment of Rubber of all descriptions from Pará and Manáos during the week amounted to 271 tons of the value of about £100,000, so that so far, Pará bills cannot assist this market very much. On the 22nd, Stoks at Pará and Manáos were 467 tons

CEYLON GREEN TEA IN AMERICA.

Mr. C. Shand writes from London to the *Ceylon Observer* :—

I enclose copy of a letter I have written to Mr. Leake. It is only as a feeler, and to induce planters to think over the subject. Exception is sure to be taken to my statement, that Japanese tea holds in America an impregnable position—so I may as well anticipate criticism, and give my reasons for so pronounced an opinion, though in doing so I shall only be repeating what I have already written to you.

There is, to begin with, the very important advantage of 30 per cent. in the difference in exchange. This I know is partly compensated for, by the bonus now paid on the export of Green Tea. It now amounts to above 15 per cent., but it still leaves an appreciable advantage to the Japanese. Ceylon planters can, and do undoubtedly, make better Greens than the Japanese, and on their merits they should realise much better prices; but alas, we are told authoritatively, that for a time, Ceylon planters must be content with lower prices, than those obtained for Japans; and moreover they must make their Greens resemble in every way, Japans, even to the appearance of the packages. Now I have heard of people passing off inferior goods, as superior, but I confess I hav never known goods of superior quality passed off as inferior Is this a promising outlook for those planters who wish to ge better prices than if they kept to Black tea?

There is no difficulty whatever in making Greens, as cheaply a Blacks, if it were not for the fact that there is no way of disposin of the lower grades, such as yellow leaf and fannings and dust, a prices which would cover cost of boxes and transport. Thes grades will not be admitted into America, so the cost of Ceylo Greens is enhanced considerably by having to throw them away The Japanese consume this themselves, but I do not suppose the would buy Ceylons. I doubt, if the three first grades, or rathe two first grades, can be put F.O.B. under 35 cents per pound Then to make superior Greens, the best leaves must be used, *i.e* fine plucked. Well, even now good broken Pekoes and Pekoe show a profit equal to any that is likely to be obtained for Green if it were not for the bonus which after all cannot be depende upon, if they are made on a large scale.

Last week some 70 packages of Greens were sold here at auctio and realised fair prices, considering all things, but no better tha if they had been made into Blacks :—

Chs.		d.	Chs.		d.	
10	Young Hyson sold at	7½	7½	B. P. Fns at	3½	Dubli
13	Hyson No. 2 (? Simpton) do	6¼	11½	Dust	2	do
			3	Young Hyson at	5½	do
16	Hyson No. 2 Nuevo do	4	8	Hyson Sift at	3½	do
10	Nuevo do	6¾				

These lots were, I suspect, bought in Colombo by a well-know buyer who probably made more out of them than the planter Messrs. Larkin & Co. say :—"We again predict that, in the cours of a very few years, Japan teas in Canada will be a thing of th past, and we will be supplying their place with at least ten millio pounds of Ceylon Green Tea per annum!"

If this prophecy were fulfilled, what would be the result? Wher would the over-production of Black Tea be and where would be th necessity of making Green?

I think we are more likely to see Canada taking 10 millions Ceylon Black, instead of that quantity of Green, judging from pas experience. If I were a prophet, I would predict that half-a-mi lion of pounds of Greens will not be exported from Ceylon withi the next six months! I do not think planters can afford to be ph lanthropic enough to try and undersell the Japanese for th benefit of those who may come in after the war of competition.

If this letter I am merely trying to justify my opinion tha Japanese tea holds an impregnable position in America, and tha planters would do much better by diverting their means and atten tion to unappropriated fields.

I know, of course, that—in thinking the capture of the America market, by supplying it with Green Tea, is a game not worth th candle,—I differ from the opinions of far more intelligent men wh can see into the future much better than a man whose sight an intellect are dimmed by old age. My excuse for discussing the sub ject at all, is that I have to find occupation for my time Thinkin too much is the very devil for an individual—supposing that i dividual to be one's own animal nature.

P.S.—By unpractical methods—I mean talking and writin Strongholds are not to be captured by the use of such weapons, an they are the only ones with which the Commissioners are furnishe What is the use of inviting a person to buy an article you hav not got, if he wants it? The result is the talkers get the credit f the effect of what practical men have done—in the way of pushin the consumption of tea. Who captured the English and Australia markets? Not the officials of the C. P. A. Who pushed the Russia trade? Rogivue. And now when the battle is half won, an offici steps in!

To the Secretary of the Ceylon Association,
London.

London, *September 9th.*

Dear Sir,—As I am one of those who have suffered most severe from the effect of last year's over-production of Indian and Ceylo tea, I naturally watch with anxiety the progress of the metho now in operation, for counteracting the consequence of that di aster, and to turn the British Tea Planting Industry back in its normal state of prosperity. The remedial forces now at wor are as every interested person knows, Restriction of Productio and Expansion of Consumption.

As regards Ceylon the year is so far advanced that the progress of the application of the first of the remedies can be gauged with some degree of accuracy, and so far it has been very effective, and there is also some evidence that Indian planters are adopting the same methods of restricting output, as those in Ceylon, namely by finer plucking where practicable, and abandonment of planted areas which cannot at present be profitably cultivated. Restriction of production, though a drastic remedy, is not a permanent one. It acts like quinine in intermittent fever, being curative only as long as it is employed; it does not prevent a recurrence of the complaint. The specific is undoubtedly to be found in the Expansion of Consumption, especially in countries outside the United Kingdom. It is, therefore, cheering to learn from recent Indian advices, that the planters there, have at length discovered, that in the North-Western Provinces, in Persia, and Afghanistan, they possess most promising fields for a great increase in the consumption of their tea.

The inhabitants of these countries are nearly all Muhammedans, whose religion forbids the use of intoxicating liquors. Their habits of life, consequently, peculiarly adapt them to the use of tea, if it is placed within their reach.

There is, therefore, every probability that the operations about to be carried on under the management of Messrs. Andrew Yule & Co., to distribute tea amongst the towns and villages of the respective countries, will be very successful.

If the Ceylon Tea Planters' Association were to relinquish their costly and unpractical attempts in America, to oust the importers of Japan tea from their impregnable position, and direct their resources and attention to increase the use of their tea in such tee-total countries as Turkey, Egypt, and North Africa, they would, I believe, do more within a year or two after commencing work, to counteract the effect of Ceylon's over-production, than is likely ever to be accomplished by their present mode.

The American Campaign may now, I think, be advantageously left in the hands of those private firms already engaged in the Black tea trade in that country.

The object of this letter is to ask you to be so good as to submit to the consideration of your Tea Committee my proposal that the Planters' Association's Tea Campaign in America should be abandoned, and their resources and attention be diverted to more appreciative countries; and if your Committee think the idea a judicious one, to invite them to endeavour to induce the planters in Ceylon, to carry the change out. I also venture to suggest, that they might themselves take steps to promote the consumption of Ceylon tea in the countries I have mentioned, by appealing to the proprietors of Ceylon Estates in this country for their co-operation in forming a Joint Stock Company to purchase tea, ship it to the principal seaports, whence it could be hawked through interior towns and villages in vans or on camels loaded with packets of cheap tea, and thus place it within the reach of those who would otherwise be unable to obtain it; or perhaps some of the large Tea-Distributing Companies in this country would undertake the business, if subsidised for a limited period, out of the Ceylon Cess Fund which is formed by the contributions of all proprietors.

C. Shand.

COFFEE TRADE IN DOUBT AS TO THIS YEAR'S STANDARDS.

A matter which is the source of considerable discussion in the coffee trade is the alleged inequality of standards. Particular complaint is made against Standard No. 5, which, it is asserted, is altogether too high, and shippers in Brazil are, in some instances at least, refusing to recognize this year's No 5 standard and will only do business on last year's No. 5 It appears that there has this year been considerable delay in establishing the standards but that they have now been satisfactorily arranged, except in the case of No. 5.

Price differences on standards are established by a Committee of the Coffee Exchange every year in the fall and when once established usually remain unchanged the entire year. They are based on No 7, and are this season ½c per pound apart, as follows:

		No.			No.
No. 1 Prime	...	3·00 above 7	No. 6 Ord.	...	50 above 7
No. 2 Good	...	2·50 „	No. 7 Low o	...	
No. 3 Fair	...	2·00 „	No. 8 St g. c	...	50 below 7
No. 4 Low f	...	1 50 „	No 9 Gd cm.	1·00	„
No 5 G. o	..	1·00 „			

While these differences govern transactions on the Exchange they are not conclusive so far as trading in spot coffees outside the Exchange is concerned. If the spot month on the Exchange for No. 7 is 5c, for instance, a dealer who sells a contract there can deliver any kind of coffee; and naturally as the Exchange differences are higher than differences on the actual spot market (the Exchange differences, as already noted, being ½c per pound between grades while the differences in actual trading are but about ¼c) the man who sells the coffee contract will naturally deliver the higher grades in order to obtain the premium on the Exchange over what he can get for the actual coffee by private sale. This condition, of course, enters into the calculation when the trade is made, and the buyer pays a proportionately lower price for No 7.

The discrepancy between the Exchange differences on grades and the actual value of the various grades of coffee is receiving official attention by the management of the Exchange; but many members of the trade seem to take the part of the Committee and argue that the Exchange differences should remain as they are notwithstanding the discrepancy. To change them, it is asserted, would be to disturb the trade of the Exchange. It would in fact work a revolution in regard to contracts dealt in on the Exchange, for long-time contracts would be affected and it is the practice on the Exchange to deal as far as a year ahead.

All importers do not admit that Brazilian shippers are discriminating against the No. 5 Standard "The largest exporters in Brazil to-day," said a large importer on saturday, are "selling coffee to be graded in New York in the usual way on the existing types. This means the types issued on May 31st this year. Furthermore, as those types have been forwarded to Brazil promptly the exporters have now got the types before them, and the coffee bought since the types have been issued will in the majority of instances be graded under the new types. It may be that some disadvantage

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CELEBRATED OILMAN'S STORES.

may result in respect to No. 5, but there is a wide difference of opinion as to how much the new No. 5 standard is superior to the old No. 5."

Other members of the trade argue that the Brazilian exporters are not finding fault so much with the price they get for No. 5, as with the price they get for their coffee on any basis of grading. These people assert that coffee is now below the cost of production. In this connection it is of interest to note that, according to a statement made by the Brazilian manager of the Dumond Coffee Association, it costs them four milreis per arroba of fifteen kilos. to produce coffee. On this basis a Brazilian planter getting $6·00 per bag in Rio and Santos at present values shows a margin of $2 for railroad freight and final profit. A despatch to a leading local coffe house from a member of the firm in Hamburg declares that careful enquiries including S. Paulo coffee estates, are convincing that present milreis prices are remunerative for large well-conducted plantations and are without loss for the smaller planters.—New York *Journal of Commerce.*

A UNIQUE ADVERTISEMENT IN CANADA.

Slowly, quietly, soberly a procession of six of the strangest looking folk that have been seen in Toronto for many a day, walked up Yonge street. The people on the street were immediately interested. Curiosity was aroused, for not only were each of the six of a dark, nut-brown complexion, and garbed in the fancy costume of the Cingalese from their broad turban to their long-toed shoes, but each bore a tea-tray, kettle and cup, as if serving some of the finest of pure Ceylon teas.

The colouring of the costumes was bright and attractive, and the procession so quiet and stately that everyone stopped to have a look, and heads appeared, as if by magic, in doors and windows.

"Who are they?" was the frequent query.

Sometimes the answer was not forthcoming, but more often it was: "Why, dont't you recognize them? They're the men whose pictures are in the Ross Tea Company's advertisement, and on the packages of Ross's Tea. That's the way they dress in Ceylon where that tea comes from."

The advertisement was unique, and proved a hit—in fact, one of the best hits that have been made in Toronto for some time. It was, too, one of the hits that have to be seen to be fully appreciated. —*Canadian Grocer.*

CEYLON TEA ON THE CONTINENT.

The following are extracts from a letter from Mr. J. H. Renton, dated "Bückeburg, Germany, 11th Sept., 1901":—

I am sending you by this mail a little

PAMPHLET IN GERMAN

which gives a short, but clear account of the rise of the Tea Industry in Ceylon, the culture of the tea bush, and the manufacture. This is known in Germany as the defence pamphlet ("Abwehr Brochüre"). It was written as a reply to the numerous libels on Ceylon tea which appeared in numerous Continental market reports in the early part of this year. It does not enter into any controversial points, nor does it attack China tea. It simply shows our teas are clean, well-made teas and that our cultivation is good and sound. This pamphlet has been distributed to every wholesale tea dealer, most of the wholesale colonial produce dealers, 3,000 newspapers and 1,000, hotels in Germany. The demands for more copies are numerous and the notices which have been received are very flattering.

Well, now to give a very brief summary of what I have done this year:—

I visited Western and Southern Germany, Austria, Bohemia, Hungary and Trieste, Northern Italy, Southern and Western France and Paris in the first four months of this year. In May I went to Hamburg, Berlin, Leipsig, Dresden, Magdeburg and I have now been round the Baltic and Eastern Germany, going as far north as Konigsberg. These visits have not only been made to thoroughly acquaint myself with the tea trade in these places, but also with a view to preach Ceylon tea to the dealer and the grocer, leaving as I do copies of your book and of Bamber's pamphlet. Apart from those visits I have been carrying on the campaign in Switzerland and Scandinavia by correspondence.

IN GERMANY,

a Bremen importer furnished me with the names of all the who sale dealers in the inland towns, and although several of the have been induced to give small orders for Ceylon tea, only thr of his friends have been found willing to take it up, make a spe ality of it, and put *their own money* into the pushing of it. The three firms are in Breslau, Strassburg and Holstein. A spec circular (I sent you one in the book marked Talanda tea) has be printed for these firms. The circular is illustrated and they be two-thirds of the cost. The same firm in Bremen has also induc (K—— Co.) the great coffee distributing firm, with their 780 sho throughout Germany, to take up Ceylon tea. They get 500,0 circulars and a special mark and label. They bear half the cost of this expenditure. Their campaign does not open till November the teas are all put up in ¼ lb. and ½ lb. packets. If proper managed and run, we want no better agencies in Germany. addition to these firms I have secured other wholesale dealers w are making a speciality of Ceylon tea—one important firm in Fran fort, a smaller one in Berlin, another beside Böhringer in Stuttga Böhringer is doing excellent work in Stuttgart. In Dresden a Konigsberg there are two firms who use it largely in their mixtur but will not advertise it, because they maintain that, owing mai to ——'s Association with Ceylon, and the poor teas he has put on t German market, the name Ceylon has got into bad repute for t In Münich a lady,—'s sister, carries on an active propaganda pure Ceylon tea.

IN AUSTRIA.

Mr. Marinitsch has done well in Karlsbad and got the g medal at the Exhibition. We have three agencies in Vien A dealer in specialities, who has for years imported it direct a sold small quantities, is now getting aid to advertise it. Marinitsch has associated with himself a wholesale coffee dea with a conection amongst town and country grocers and is worki hard, not with much success though, Toifl the client of the Brem importer, is doing better. He promised me to place the tea w 500 of his clients throughout the Austrian provinces. He has 350 up to date, he has to pack the tea in $\frac{1}{16}$ lb., ⅛ lb. and ¼ packets for them; and then the Anglo-Continental Company Paris are working from Trieste, so is also anothor house in Tries

IN FRANCE.

We have three Paris houses, and in Marseilles two smaller fir at work. The Paris firms are working hard; one has specia distinguished itself by its enterprise in starting the big new rooms in the Rue Caumartin, by its display at the Exhibition the Petit Palais this year, and at the Exhibition Culinaire, a by its handbill posters, bills and general advertising. Anoth has done very well in various advertising schemes; but mo particularly by taking up at my express wish a demonstrati scheme. A man is going round the Provinces, and in all the l towns where he can get the grocers to buy the tea, he gives demonstration of from four to ten days. It is advertised in t local Press that free teas will be distributed in cup at that groce shop from 4 to 7 o'clock. Samples of the tea are given aw free—and lots of literatures on how to make it, etc., and Bambe book, in French. Here is a resumé of the wok done in June a July in Normandy:—Six towns visited. Tea distributed in c on 28 days. 4,425 cups tea served; tea sold to the public 2,0 people: advertise in 11 local papers; tea sold. 650 kilos. N grocers secured, 24. Printed matter distributed, 41,500. Placar posted in and on windows of shops, 110. Both these firms are spen ing far more than three times my grant on their work this year.

IN SWITZERLAND

we have four firms at work, in Sweden two, in Chirstiania two, Copenhagen two.

IN ITALY

in Naples one, in Florence one. The arrangements I made Genoa have fallen through, unfortunately.

I go to

SCANDINAVIA

to-morrow to inspect the work there and on my return st immediately for Frankfort and Stuttgart. In the latter town client of Böhringer's opens a tea room on 1st October. Fr Stuttgart I proceed to Switzerland to inspect work and accou and then to France. I shall go to all the towns in France wh the demonstrator has been, to see personally how the work agr with his report. In Paris I inspect accounts and talk over schem for next year.

I then go to London to see the British Commissioner for the
ST. PETERSBURG EXHIBITION
and obtain letters of introduction from our Foreign Office to the British Embassy there. End of November I shall probably go to St. Petersburg to inspect the land and make the necessary arrangements for our show in the Autumn of 1902. From Germany, Austria, and France I receive *half-yearly reports* and an abstract of accounts and expenditure. All vouchers in these three countries are examined and compared with the accounts in my visit in each town. From Scandinavia and Switzerland the vouchers are sent to me and then returned. I keep a most watchful eye on all expenditure and I feel quite certain the Committee get full value for their money. In Germany I know I could get an agent in each large town to run, push and advertise Ceylon tea; *but* then I should have to bear *all* the expense. The difficulty is to get them to put their hand into their own pockets and bear even half the expenditure.

ANGLO-AMERICAN DIRECT TEA TRADING COMPANY, LIMITED.

At last we have been able to get sight of the report of this Company for the year ended November 30th last, but it has not illuminated us much. It is printed on the same coloured paper as the reports of other subsidiary Companies of the Consolidated Tea and Lands parent and the directorial report signed by "James Finlay & Company, Secretaries," is divided into the same kind of paragraphs telling us about the quantity of tea marketed, the extensions of the acreage cultivated, the balance at credit of profit and loss, and sundry other matters, but into the true position of the Company we get not the slightest glimpse. Very little profit has come from the Company's estates in Ceylon, we are told, because of the fall in prices, but the directors are glad to state that Ceylon produces generally are now "plucking much finer," therefore it is hoped that on enhanced average price will be realised by the Company in 1901. Even so, we cannot think it will be benefited much, for coffee is falling in price, and the Company does seem to produce a little of that berry, although its directors are careful to avoid confinding to their shareholders how much. What, though, has become of the "direct trading" portion of the business? It is all very well to inform shareholders that "Cardamoms are produced in the form of three-celled capsules, containing numerous seeds which yield an aromatic pungent spice with a peculiar but agreeable taste." This is interesting and quite nice, but where is the market for the Company's teas in America of which so much was originally made? There is not a syllable about the subject in the report, nor can we trace anything relating to it in the accounts.

In order to bring the statistics of these various and fascinatingly peculiar emanations of Sir John Muir's Company—framing industry into uniformity we have drawn up table to exhibit the figures of this Company on the same lines as those laid down for his other Companies in last week's issue. These tables show that the Anglo-American Direct Tea Trading Company offers as good an example of the financial "rake's progress" as any one of them. It has extended the acreage under cultivation somewhat in the year ended November 30th last, and marketed a much larger crop of tea, but the price exhibited a disastrous fall and, worse than all, the Company has to lean more and more upon borrowed money, while dividends on the ordinary shares have become impossible. Twelve months before the directors boldly paid a 5 per cent dividend, with a 4 per cent. bonus, making 9 per cent. for the year on those shares, and for last year they got nothing, in spite of the large amount of additional money poured into the business. This "manœuvring with capital" has become quite appalling. The paid up share capital remains much as it was twelve months before, but loans and advances from shareholders have risen from £156,000 to £233,000, and advances by bankers from £171,000 to £202,000. The Company thus owes £108,000 more than it did twelve months previously, and has not a rag of a Scotch £1 note to show for the money. All that we can discover is a slight increase in the value of the tea pledged to the bankers against advances, but that increase left the bankers uncovered at the date of the balance-sheet to the extent of £145,000. What have they got for that money? Adding it to the debt of the other Companies over £500,000 has been advanced by bankers to the various Companies known as the Muir group, apparently without security unless the "investments" paraded in the accounts are pledged to them. But these investments have all shrunk in value, so far as we know, and probably could not now be realised at one-half their cost price. It is only necessary to state facts of this description to indicate what a bottomless quagmire of unstable credit the accounts of these Companies present. We must, however, congratulate the directors on being able to write off £434 on account of preliminary expenses during the past year, although this is almost balanced by the increase in the suspense account for coolies, etc. That, however, is the only word of commendation it is possible to utter, and against it we must place a decrease of over £2,700 in the cash, the total of which is now down to £1,117. No wonder it was deemed prudent to abstain from declaring any dividend on the ordinary shares. Who holds these ordinary shares? Not the public, it is to be hoped. If the public, may the gods help them—Sir John won't.

ANGLO-AMERICAN DIRECT TEA TRADING COMPANY.

	1899.	1900.
Cultivated area (tea, coffee, cardamoms)	14,449 acrs.	15,222 acrs.
Tea crop	2,955,750 lb.†	3,520,332 lb.
Average price	9·83d.	6·37d.
Proceeds of tea and coffee sold	£ 92,666	£ 95,987
Transfer fees	—	3
Dividends and interest	10,792	10,889
Balances brought up	17,047	6,449
Total	120,505	113,327
Working expenses	75,410 *	84,313 *
Commissions on profit	438	392
Interest, etc.	5,719	5,120
Net profit	38,930	23 552
Preferred share dividend	14,849	16,543
Ordinary share dividend and bonus (5 per cent. and 4 per cent.)	17,631	—
Balances forward	6,449	7,010

ITEMS IN THE ACCOUNTS, CAPITAL AND DEBT.

	1899.	1900.
Dr.	£	£
Paid-up share capital	528,788	529,440
Loans and advances by shareholders, etc.	155,869	232,691
Bankers' loans	170,970	202,003
Sundry creditors	4,918	7,175
Reserve	13,600	13,600
Current charges unpaid	11,419	7,528
Cr.		
Cost of properties	672,229	735,895
Value of tea pledged to bankers	42,974	57,095
Stores	4,405	5,297
Suspense a/c for coolies, etc.	4,201	4,792
Preliminary expenses	434	—
Loans in India and Ceylon	49,266	54,865
Cash	3,838	1,117
Sundry debtors	18,407	12,281
Sundry investments, at cost	121,536	135,769

—*Investors' Review*, Sept. 14th.

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION.

TEA OUTTURN AND ESTIMATES.

A Special General Meeting of Members of the Indian Tea Association was held on Monday.

There were present:—Messrs. H. S. Ashton, *Chairman, presiding;* L. C. Baines, H. C. Begg, H. W. Boyd, W. Brown, G. S. E. Colville, R. H. A. Gresson, D. King, R. Magor, H. R. McInnes, Norman McLeod, W. H. Miles, H. Roxby, C. A. Stewart, E. S. Stewart, H. W. Sutcliffe, A. Tocher, and R. R. Toynbee.

* Including £2,073 commission paid to Finlay Muir & Co. and £1,047 to P. R. Buchanan & Co. in 1899, and £2,045 and £1,023 respectively in 1900.

† Coffee crop not given in either year, only estimates of coming crop and estimates of price, the latter 44s. per cwt. in 1900, against 63s. in 1899.

The following notice convening the meeting was read by the Secretary :—

I am instructed by the General Committee of the Indian Tea Association to convene, under Rule No. 9 of the Rules of the Association, a Special General Meeting of members of the Association, on Monday, the 30th instant, at 12 o'clock noon, for the purpose of considering the question of the publication of crop estimates by the Association, and, if so decided, to pass a resolution on the subject.

The resolution under which the General Committee at present act was passed at the Annual General Meeting held on 16th August, 1898, and is as follows :—

"That with the view of obtaining greater exactness and reliability in the estimates of the tea crop, the first statement of figures shall not be issued until it is also possible to give details of the tea manufactured up to 15th August, and that no further statement be issued until the actual outturn of the crop is published."

I am desired to add that this meeting is called in consequence of proposals having been made by members that a fresh statement of actual crop either to 15th or 30th instant should be compiled.

Yours faithfully,
W. Parsons,
Secretary.

The Chairman said :—

The subject before the meeting was one on which the Committee were not altogether unanimous, and therefore no proposition with regard to it could be put before the meeting as from the Committee. He would therefore suggest that a member who was interested in some of the concerns dissatisfied with the existing instructions to the Committee should make some kind of definite proposal. He would suggest that any proposal that was made should simply have reference to what the Committee should or should not do now, and that the Resolution should not be one dealing with the matter for subsequent seasons. It would probably be necessary to get the views of their friends in London before dealing with the subject beyond present time.

Mr. Boyd said he had no suggestion to make with regard to the alteration of the procedure in connection with the issue of the figures and the estimates. He thought that might very well be left over until the next Annual meeting of the Association. He was prepared with a resolution with regard to the statement of revised figures of crop up to the 30th September, which he would be glad to put before the meeting.

Mr. Boyd then proposed the following Resolution :—

"That the General Committee be requested to call upon all agents and others interested for a return of tea manufactured this season up to date, and also for a return of the comparative figures to corresponding date last season; and that such figures when ascertained be issued to members as customary."

This was seconded by Mr. C. A. Stewart.

The Chairman said he would like, before putting the Resolution to the meeting, to put one point before them. Supposing that the Committee found that a large number of gardens did not send in any returns, should they publish those sent in giving a comparative statement? He thought it would be as well for the members in meeting to instruct the Committee as to what they were to do under those circumstances.

Mr. C. A. Stewart thought there would be very little fear of any one objecting to give actual figures.

The Chairman said he was of course putting a hypothetical case. But supposing Mr. Stewart proved not to be right, in his supposition, he would like to know what the Committee should do.

Mr. McLeod said the Committee should certainly publish what they got.

The Chairman then asked if any members had any further remarks to make.

Mr. E. S. Stewart said it should be left to the Committee to see if the actual returns from the districts were fairly averaged. For instance it might be that the returns were all from Cachar and Sylhet, and none from Duars and Assam, that would give a false average.

Mr. Tocher said he presumed the returns would be issued by districts as hitherto.

The Chairman answered in the affirmative. He then put the Resolution proposed by Mr. Boyd, and seconded by Mr. C. A. Stewart, to the meeting, and on a show of hands being taken was declared carried.

Mr. Tocher suggested taking an expression of opinion of members as to the future method of dealing with this matter.

The Chairman said if any gentlemen had any opinions to expr about the future, they would be very glad to hear them. T Committee proposed to advise the member of the Association incl ing their London friends what the feeling was here, and give th an opportunity of expressing their views before the next ann meeting come on.

Mr. C. A. Stewart said his instructions were not give any es mates at all in future; nor to give any figures which would held frame an estimate.

Mr. E. S. Stewart enquired whether it would not be possible get the actual outturn at the end of every month to the end of t season.

The Chairman said it was possible, but it was a question wheth it was advisable, and the Committee would like the sense of t whole meeting. There was a considerable difference of opinion be in regard to actual figures and estimates.

Mr. E. S. Stewart then proposed the following resolution: —

"That the figures of output, at the end of October, November a December, be collected and published by the Association."

There being no seconder to the Resolution, it could not be put the meeting.

With a vote of thanks to the chair, the proceedings terminated

WYNAAD.

Proceedings of a General Meeting held at Meppadi Clu on Wednesday, 2nd October. Present :—Messrs. Abbo Atzenwiler, Mackenzie, Taylor, Trollope, Winterbotham, a W. Mackinlay, *Acting Honorary Secretary.* Mr. Abbo *in the chair.*

1. Proceedings of last meeting were taken as read.

Two members again complained that they had received no copi of the previous proceedings.

2. **Labour Law.**—Read U. P. A. circular, s. 78.

3. **Tea Cess.**—Messrs. Parry & Co., Peirce, Leslie & Co., a Mr. Romilly have already sent in their subscriptions. Other pr prietors promised to do so shortly.

4. **Ceylon Import Duty on Tea.**—Read U. P. A. S. I. circular, No. Approved.

5. **Coffee.**—Read U. P. A. S. I. circular, No. 73, on rail freights.

Read Circular No. 80 on a general cess for coffee.

The Honorary Secretary was instructed to ascertain what M Barber's actual proposal is, as the circular is not perfect understood.

6. **Differential Duties.**—Read correspondence between the Hono ary Secretary and the Chairman, U. P. A. S. I., regarding the advis bility of publishing a précis of the correspondence already receiv on this subject. The Chairman of the U. P. A. S. I. after consulti with the Secretary thinks that it will be wiser to await the public tion of the book of the U. P. A. S. I. proceedings, as the Secreta promises "that the correspondence published therein will be mo instructive than any précis could be."

Resolved that this Association sees no reason to alter its previous expressed opinion, and hopes that the publishing of the book proceedings will be expedited.

7. **Proposed visit from Mr. de Niceville.**—Resolved that the Hono ary Secretary be instructed to write to the Secretary, U. P. A. S. saying that we shall be glad if Mr. de Niceville can arrange to vi the district in January and will undertake to make all arrangemen for his tour.

8. **Assam Planters and the Commissioner.**—Read U. P. A. S. circular, No. 77. Resolved that this meeting unanimously expresses i sympathy with the Assam planters in the great difficulties they a experiencing with their labour and the seeming want of considerati shown them by the Chief Commissioner of Assam.

9. Draft rules under the Madras Coffee-stealing Prevention A Read and recorded.

10. The following papers were laid on the table :—

Sale notice of Karawan Tode Estate.
Circular *re* sale of tea at St. Petersburg Exhibition.
I. T. A. Circulars. Committee Proceedings.
Trade with Persia.
Green Teas.
Declaration of Value of exported Teas.
Madras Government Cinchona Department Annual Report.
Tea Eelworm disease, Bulletin No. 45, by C. A. Barber.
Agricultural Ledgers—
No. 3. Piper nigrum.
4. Reh, the nature and value of alkali lands.
5. Sugar diseases.
6. Geranium nepalense.
7. Blassica (mustard).
13. General index.
Department Land Records and Agriculture, N.-W. Provinces.
Bulletin No. 12. Irrigation wells.
14. Housing cattle.
13. Sugar beet.

A vote of thanks to the chair terminated the proceedings.

(Signed) C. E. Abbott,
Chairman.
(,,) W. Mackinlay,
Acting Honorary Secretary.

The next meeting will be held on Wednesday, 6th November.

NATURE AT HER BEST.

We love Nature! Our regard for her, with her sweet and varying moods, is undying, and our love such that it is beyond the art of man to quench. The promise of Spring is one great message of Hope. The fragrant breath of Summer whispers "Paradise"; the mellow touch of Autumn's hand ripens recollection; and crisp-biting Winter brings merry, ringing laughter, and rosy cheeks.

But of all, Summer is most dear.

It was in Summer that Tennyson found Rose, the gardener's daughter, "standing in a porch of roses." "Who had not heard of Rose, the gardener's daughter?" asks the poet.

Why did he not also find a gardens's wife, of rosy cheeks, whose buxom figure might tread with us down the ages as a picture of what a gardener's wife might be—not a woman "languid and weary," whose plaintive cry is that "every little duty is a trouble, and takes all the joy out of life."

Such women there are, even "gardener's wives," like, let us say, Mrs. Martha Herriott, whose very words we have written above. Who continues thus: "Morning, noon, and night, my head was racked with pain; often for days together I scarcely got a moment's freedom from it. Sometimes, when the attacks were very severe, my left eyeball became quite shrunken and small, and my head would swell right across the top. The pain I suffered then was intense; I cannot properly describe it, but shall never forget it so long as I live. I consulted the doctor and tried all kinds of medicine recommended by my friends, but, until I commenced taking Mother Seigel's Syrup, got no real benefit from anything."

A happy illustration is given us now of Nature quickly changing from decay to health, "for" continues Mrs. Herriott, whose address is 24, John Street, London Road, Sheffield, "after taking it a short time, I felt much better, and the improvement continued until I was *free* from pain. Mother Seigel's Syrup completely cured me.

When I am tired and worn out, after a hard day's work, nothing so soon revives me as Seigel's Syrup. It seems to strengthen every part of the body, and is, indeed, a splendid tonic."

That was in the Summer of 1900. And *now* Nature is herself again! Life is gladness indeed.

We love Nature as she is portrayed in the fields and flowers, but we ourselves, who are part of Nature, must be in perfect health to be in harmony with the countless beauties around us.

The keynote of contentment is good digestion, and Seigel's Syrup awakens into life, by its nutritive and medicinal properties, those dormant digestive organs of the dyspeptic.

He or she can then say, "Nature is at her best."

MARKET REPORT.

[*Per Mail advices of 20th September* 1901.]

COFFEE.

The London Commercial Record says:—Since our last public sales have been held on only one occasion, when there was a continued steady demand, and full to rather higher prices were paid, Dumont Santos being especially well competed for. In "futures" a generally stronger tone has prevailed in conjunction with a rising Exchange, but at the close the market is dull at a decline of 3d per cwt. from the late highest point. Yesterday business was done in Santos, September delivery, at 28s 9d, December at 29s 3d to 29s, March at 30s to 29s 6d, and May at 30s per cwt.

A good market to-day and at auction nearly all offered sold at full prices to here and there 6d to 1s dearer. Catalogues embraced—181 bags East India, 113 bags Nyassaland, 91 barrels 18 bags Jamaica, 530 bags Mexican, 102 bags Nicaragua, 67 bags Costa Rica, 434 bags Colombian, 190 bags Guatemala, 48 bags Coban, 375 bags Vera Paz, and 406 bags Santos

London ...	... Santos ...	Dec. delivery	... 29s 0d.
New York	... No. 7 Rio...	,,	... 5·15 cents.
Hamburg...	... Santos ...	,,	... 29¼ pf.
Havre ...	... Santos ...	,,	... 36 francs.

At the Duch public auctions held in Rotterdam on Tuesday, 20,911 bags Java, 500 bags Macassar, 28 bags 310 cases Padang offered and sold; good ordinary Java realised 35c against 34¼c valuation, and 32c last sales held in Amsterdam. The following are some of the particulars :—

Lying in Rotterdam.

No.	Bags.	Valued at. Cents.	Result. Cents.
1	748	34	35¼ @ 35½
2	297	33½	34¾ ,, —
6	611	34½	36 ,, 36¼
7	432	15	14¼ ,, 14½
10	248	33½	35 ,, 35¼
11	96	33	35 ,, —
12	156	33½	35½ ,, —
13	116	34	35¼ ,, —
18	1,486	43	42½ ,, 46½
19	595	41	43 ,, 43¼
20	405	42	43¾ ,, 44

Imports, Deliveries and Stock of Coffee in London are as follows :—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	17,142	17,463	38,722	30,233
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	14,558	11,985	21,556	15,467

The preceding figures exhibit—	Tons.
In the Imports an increase this year of ..	8,489
Home Consumption an increase of	2,573
Export an increase of	6,089
Stock a decrease of	321

Auctions this week passed off as follows :—

East India.—1,322 bags partly sold as follows :—*Mysore*, smalls 25s. *Coorg*, smalls 34s to 41s, low middling to middling 45s to 54s, good middling 60s, common bold 55s to 59s, fair to good bold 67s to 75s, peabery 47s to 75s. *Nelliampathy*, smalls 37s, low middling 45s 6d, bold 55s 6d, peaberry 44s 6d to 50s.

African.—10 bags Liberian bought in.

Costa Rica.—Of 28 bags 8 bags damaged sold at 40s to 45s 6d.

Guatemala.—Of 385 bags offered 250 bags sold—smalls 26s, ordinary to good ordinary mixed greenish 33s to 37s 6d, low middling to middling 43s 6d to 47s 6d, bold 53s 6d, peaberry 31s.

Salvador.—172 bags mostly sold, smalls 36s, middling 47s to 47s 6d, bold 55s to 55s 6d, peaberry 57s 6d.

Nicaragua.—47 bags sold—good ordinary foxy greenish 37s 6d.

Mexican.—229 bags sold—smalls 41s 6d, good middling 52s 6d to 53s, bold 64s, peaberry 65s to 66s.

Colombian.—741 bags offered, and 600 bags sold—damaged, small 35s to 41s 6d, good ordinary 38s to 39s, low middling to

middling 40s 6d to 48s, good middling 53s 6d, bold 49s to 63s, peaberry 40s to 50s.

BRAZIL.—2,165 bags washed Dumont Santos sold—small 26s 6d, to 33s 6d, common to fine medium blue 31s 6d to 45s, bold 36s 6d to 55s 6d, peaberry 33s to 59s.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99. Bags.
Rio ...	1,606,000	770,000	1,098,000	935,000
Santos ...	3,044,000	2,213,000	2,494,000	1,887,000
Total ...	4,650,000	2,983,000	3,592,000	2,822,000
Crop ...	—	10,900,000	8,971,000	8,772,000

Rio Exchange $11\frac{5}{16}$d, previous day $11\frac{7}{32}$d.

HAVRE, *September* 19.—Good average Santos September opened steady at $35\frac{3}{4}$f. and closed quiet at $35\frac{3}{4}$f., December opened at 36f. and closed at 36f., March opened at $36\frac{3}{4}$f. and closed at $36\frac{3}{4}$f., May opened at $37\frac{1}{4}$f. and closed at $37\frac{1}{4}$f., July opened at $37\frac{1}{2}$f. and closed at $37\frac{1}{2}$f.

HAMBURG, *September* 19.—Good average Santos September opened steady at $28\frac{3}{4}$pf. and closed dull at $28\frac{1}{2}$pf., December opened at $29\frac{1}{2}$pf. and closed at $29\frac{1}{4}$pf., March opened at $30\frac{1}{2}$pf. and closed at 30pf., May opened at $30\frac{3}{4}$pf. and closed at $30\frac{1}{2}$pf., July opened at $31\frac{1}{4}$pf. and closed at 31pf.

NEW YORK, *September* 18.—Closing prices of No. 7 Rio were as follow:—

	Sept.	Oct.	Nov.	Dec.	Jan.
September 18...	4·90	4·90	5·00	5·15	5·20
September 17...	4·85	4·90	4·95	5·10	5·20

TEA.

INDIAN.—Auctions were larger, *viz.*:—41,300 packages *versus* 32,000 packages in the week previously and 45,100 packages for the corresponding time a year since.

A better tone was evinced throughout, partly due to the saleable character of many of the arrivals. Assams, although generally of a desirable standard, were not always so very attractive as some of the earlier receipts. Cachars and Sylhets inclined to improve and some useful invoices appeared. Dooars teas have been most irregular and in many instances showed a decided falling off, latest shipments however are again more promising. Darjeelings were not uniformly good but when choice full prices resulted. The chief want was again for "coloury" sorts of all grades and such close firmer; light brisk kinds sold quietly. Commonest descriptions kept about steady, while those above this level favoured sellers. Medium to fine thick broken Pekoes are dearer, but low brokens with small leaf and inferior Fannings went cheaply.

At home trade is by degrees recovering from the "Duty Scares" and other hindrances it has recently experienced.

For 32,800 packages on Estate Account $8\frac{3}{4}$d per lb. was realised compared with $8\frac{1}{4}$d per lb. for 37,600 packages, and $8\frac{3}{4}$d per lb. for 40,400 packages in the two antecedent seasons.

Entries for export (including Chittagong) to Great Britain from 1st April to 15th instant, were 60,949,000 lbs. contrasted with 64,980,000 lbs. for the same period of 1900, but it is reported that the deficiency in the output is increasing so that the discrepancy in shipments should be more marked later on.

CEYLON.—A somewhat smaller amount was brought to the hammer, 20,600 packages against 22,600 packages in the week before and 30,600 packages twelve months ago.

There was a strong all-round demand, parcels with ordinary liquor ruling firm, while those marking improvement in quality brought in some instances very full rates. Common to fair Pekoe Souchongs and Pekoes were in request, and usually the turn dearer. Medium and fine "leafy" kinds for the most part received good support, especially those suitable for the Continent. Broken Pekoes without special point did not alter much in value, but on the other hand there was brisk bidding for those and also B.O. Pekoes possessing fine flavour and strength, quotations often denoting a rise of $\frac{1}{2}$d and 1d per lb., among the best being:—Goatfell 1s $5\frac{3}{4}$d, Cranley, Henfold and Ingestre 1s $4\frac{1}{4}$d, Talawakelle 1s $3\frac{1}{4}$d. and Holmwood 1s $2\frac{3}{4}$d.

The average is $7\frac{1}{2}$d per lb. On the 12th instant it was $7\frac{1}{4}$d per lb. and $6\frac{7}{8}$d per lb. in 1900.

JAVA.—Slightly over 1,300 packages of direct import comprisi a varied assortment were brought to the notice of buyers, a taken up freely.

Deliveries.—Clearances of all tea (on which duty has be paid) from the London warehouses, as per official returns are, *viz.*:

From 1st to 17th September, 1901 ...	...	9,267,684 lbs
Do. do. 1900 ...	...	8,848,391 „

During the week the following have been printed for sale public auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offere Pkgs.
India ...	35,426	5,860	41,286
Ceylon ...	19,402	1,208	20,640
Java ...	1,185	133	1,318
Total ...	56,013	7,201	63,214

Also 424 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Jav Tea Report, dated September 20th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE

	Indian. Pkgs.	Ceylon. Pkgs.	Jav Pkg
1901-1902	285,146	399,317	21,4
1900-1901	277,888	432,938	15,7

40,815 *pkgs.* INDIAN
21,015 „ CEYLON
1,318 „ JAVA
} Total 63,148 packages were offered in public aucti this week.

The market expansion which has been quietly going on f several months past in the re-export of Indian and Ceylon Tea fro the United Kingdom has perhaps been hardly sufficiently apprecia ed. The following are figures from 1st January to end of Augus

	1901.	1900.	1899.	1898.	1897.
Indian ...	8,422,618	5,093,465	4,213,753	4,329,045	3,281,6
Ceylon ...	11,871,757	8,946,997	7,553,903	7,644,380	6,837,7
	20,294,375	14,040,462	11,767,656	11,973,425	10,119,4
	1896.	1895.	1894.		1893
Indian ...	2,083,717	2,314,494	2,067,138		1,780,6
Ceylon ...	5,206,535	4,599,615	3,267,813		2,609,8
	7,290,252	6,914,109	5,334,951		4,390,4

Countries in Europe are now taking important quantities; ever effort should be made to foster these outlets. Russia is one of t principal, and considering the weight of Tea used in that mark the attention of planters might well be directed towards it.

QUANTITY OF INDIAN AND CEYLON TEA RE-EXPORTED FROM THE U. K. FROM 1ST JANUARY TO 31ST AUGUST.

INDIAN.

	1901.	1900.	1899.	1898.	1897
Countries in Europe...	4,286,372	2,560,707	2,237,546	2,206,641	1,490,7
United States ...	878,378	304,357	314,816	490,463	444,5
Canada	1,039,999	740,007	905,365	796,544	764,2
Newfoundland ...	76,713	59,749	52,780	22,208	27,7
Other Countries ...	2,141,156	1,428,645	703,246	813,189	554,3
Total lbs ...	8,422,618	5,093,465	4,213,753	4,329,045	4,281,6

CEYLON.

	1901.	1900.	1899.	1898.	1897.
Countries in Europe...	6,466,237	5,474,037	4,712,951	4,216,686	3,692,6
United States ...	1,606,584	701,521	748,225	1,013,329	1,337,4
Canada	1,431,029	1,254,020	1,095,983	1,265,527	986,5
Newfoundland ...	250,135	176,951	133,304	120,683	109,0
Other Countries ...	2,117,772	1,340,468	863,440	1,028,155	711,8
Total lbs ...	11,871,757	8,946,997	7,553,903	7,644,380	6,837,4

Countries outside Europe and America are also showing the appreciation of our produce to a remarkable extent, having take nearly treble the amount they did two years ago.

INDIAN.—The better tone noticed last week has been still furthe accentuated, while some improvement in prices was again record

or medium and better liquoring Teas, common kinds being also a rifle firmer. This improvement was especially noticeable in Assam growths, some of which were very attractive. The Official Wire gives exports to the United Kingdom for the first half of September, including 1,180,000 lbs. from Chittagong, as 10,910,000 lbs., against 9,140,000 lbs. for the same period last year, making the total from 1st April to 15th September 60,919,330 lbs. against 54,980,000 lbs. last year. The following averages are worthy of note:—"Pabbojan T Co. Pabbojan," 1/6; "Seeyok," 1/5; "Pabbojan Co. Dhoedaam," 1/4¼; "Tingri T Co. Keyhung," 1/3½; "Rungmook" and "Tara T Co.," 1/3¼.

Week's average of New Season's Tea sold on Garden Account, 1901, 33,521 pkgs., av. 8·78d. 1900, 38,267 pkgs., av. 8·14d.

New Season's Tea sold on Garden Account 1st June to date, 1901, 238,402 pkgs., av. 8·42d. 1900, 219,940 pkgs., av. 8·13d.

Ceylon.—Auctions were again smaller, and as the better quality previously noticed was maintained, general attention was attracted to these Teas with a still further slight rise in quotations, buyers being ready to pay some what better prices for all kinds, more specially desirable Teas Private Telegraphic advice from Colombo gives exports to U. K. for first half of month as 2,500,000 lbs., against 3,600,000 lbs. same period last year.

Average for week 7·51d., against 6·83d. same week, 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 872,174 pkgs., av. 6·64d. 1900, 934,534 pkgs., av. 7·18d.

Java.—The 1,318 packages sold with fair spirit at prices fully up to last week's quotations.

COCOA.

Auctions on Tuesday, when 5,024 bags were presented, produced very little change in prices, but there was somewhat of a falling away in the demand. Under the hammer about 1,800 bags changed hands. Of 1,224 bags Trinidad catalogued 575 bags sold at about valuations—fine 70s to 71s, middling to good 66s 6d to 69s. Grenada gave way a little in value as far as regards the finer grades, but medium and good qualities sold steadily; 935 bags offered and 710 bags found buyers at 64s to 65s for fine red, 62s 6d to 63s 6d for good, and 59s 6d to 61s 6d for common to fair. Of 31 bags St. Vincent 5 bags were placed at 61s. 2 bags Dominica realised 59s. Of 112 bags Samana 25 bags sold at 57s 6d. 79 bags Colombian mostly sold at 72s for good bold red. Guayaquil quiet but steady; 1,042 bags offered and 105 bags sold—Esmeralda 58s 6d, Caraquez 67s to 70s. Of 595 bags Bahia 150 bags were placed at 64s 6d for fine red, and 54s for very common gray. Ceylon has been extremely quiet, and only 170 bags sold out of the 666 bags catalogued, at 88s 6d for fine bold red and 63s 6d to 69s per cwt. for brownish to good fair. The bought in growths consisted of 80 bags Jamaica, 5 bags St. Lucia, 23 bags Costa Rica, 57 bags Caracas, and 173 bags Haiti. The private sales include 750 bags Trinidad—fine at 70s 6d to 73s, good 68s to 69s, 200 bags Grenada at the auction range, 125 bags Haiti at 54s, some Samana at 57s 6d, 150 bags Ceylon at 60s to 64s for fair estate and 67s to 69s for good, and 1,000 bags Guayaquil—Caraquez at 66s to 69s, Arriba at 77s to 79s per cwt.

PEPPER.

Black.—The spot trade continues very quiet, but prices are unchanged; the few sales reported have been in fair Singapore at 6d per lb. For arrival values have improved, about 100 tons having changed hands at $6\frac{1}{32}$d to $6\frac{1}{16}$d for Singapore near at hand and $6\frac{3}{32}$d to $6\frac{3}{16}$d per lb. for October-December shipment.

At auction on Wednesday 170 bags Aleppy were bought in at 6d per lb.

To-day, Black firm. Sales of Tellicherry, September-October shipment at 57s to 57s 3d c.i.f. Genoa, now 57s 6d asked.

The shipments of Black Pepper for the first half of September compare as follows:—

		1901.		1900.	
U. K.—Singapore	... ...	70	80	70	70
,, Penang	... ...	10		*nil*	
Continent	... ...		170		290
U. S.	... ...		260		*nil*
Total tons	...		510		360

In *White* more demand experienced for Penang on the spot, and 250 bags of this description sold at $8\frac{5}{8}$d for fair limed and $8\frac{9}{16}$d for brownish, with retail lots of Singapore done at 9d. For arrival a firmer feeling rules, there being buyers of near at hand Singapore at $\frac{15}{16}$d and distant at $9\frac{1}{8}$d per lb., while 25 tons Penang December-February (s.) have been done at $8\frac{3}{4}$d per lb.

Nothing offered at auction this week.

The shipments of White Pepper for the first half of September compare as follows:—

		1901.		1900.	
U. K.—Singapore	... ...	90	130	220	320
,, Penang	... ...	40		100	
Continent	... ...		140		270
U. S.—	... ...		90		...
Total tons	...		360		590

GINGER.

Cochin.—Only 220 bags of washed rough were catalogued, and these retired at 42s 6d for fair plump medium and small, and 38s per cwt. for mouldy. Privately business done at 38s 6d per cwt. for medium and small washed.

Jamaica.—The uninteresting display of 17 barrels partly sold at 36s 6d per cwt. for common dull wormy.

QUININE.

The market last week closed fairly active, good brands of German sulphate in bulk changing hands for October delivery at 1s $1\frac{1}{8}$d, and 1s $1\frac{3}{8}$d for December, but on Monday, when it was found the bark shipments from Java for the first half of the month were heavier than had been expected, the market opened flat and declined quite $\frac{1}{2}$d, October selling at 1s $0\frac{1}{2}$d, and December at 1s 1d. Subsequently the market became firmer, with small sales of October at 1s $0\frac{3}{4}$d to 1s 1d, and December at 1s $1\frac{1}{8}$d to 1s $1\frac{1}{4}$d, andthe market closes at the outside figures. Imperial brand is quoted 1s $0\frac{7}{8}$d spot, and 1s $1\frac{1}{2}$d forward.

CARDAMOMS.

At last week's auctions 410 packages were offered, and 222 sold, about half of which at irregular, but firm to slightly dearer prices. and extra bold sizes of good quality, splits and smalls were in good demand. *Mysore*, extra bold pale fetched 3s 5d to 3s 6d bold pale 2s 9d to 2s 10d, medium bold palish 2s 6d to 2s 8d, dull medium bold 2s 3d to 2s 5d, medium pale 2s 2d to 2s 3d, small medium pale 1s 8d to 1s 11d, small 1s 4d to 1s. 7d, splits 1s 4d to 1s 9d according to quality, shells 3d, and seeds, grey to good, 2s 3d to 2s 5d, being a 1d dearer. *Malabar*, barely fair, 1s 4d to 1s 5d. The unsold lots of *Mysore* were partly disposed of directly after conclusion of the auctions, and a good shipping demand has prevailed since that date.

VANILLOES.

The record quantity of 1,530 tins brought to auction to-day comprised a large proportion of mediocre and common quality. At time of going to press the sales were still in progress, but the bulk of the quantity that had passed the hammer sold. The few stand-out lots of prime quality realised very full rates, while grades just below were steady, but the prices accepted for the medium and poor character beans were 1s to 2s per lb., and in some cases 3s, lower.

Fine crystallised Seychelles ("Cascade") 8 inches brought 24s, $7\frac{1}{2}$ to 8 inches 22s, 7 to $7\frac{1}{2}$ inches 18s, 7 inches 16s, $6\frac{1}{2}$ to 7 inches 15s to 15s 6d, 6 to $6\frac{1}{2}$ inches 13s 6d to 14s, $5\frac{1}{2}$ to 6 inches 11s 6d to 12s, 5 inches 10s to 10s 6d, $4\frac{1}{2}$ inches 9s 9d. Good color and flavour, 8 inches 18s 6d, $7\frac{1}{2}$ to 8 inches 18s 6d, $7\frac{1}{2}$ inches 17s 6d, 7 to $7\frac{1}{2}$ inches 17s to 17s 6d, $6\frac{1}{2}$ to 7 inches 16s; fair, 7 to $7\frac{1}{2}$ inches 14s, $6\frac{1}{2}$ to 7 inches 11s 6d, 6 to $6\frac{1}{2}$ inches 9s 3d, $5\frac{1}{2}$ to 6d inches 8s 6d per lb.

INDIA-RUBBER.

The Market for Pará keeps steady and a fair business has been done in soft cure fine 3s $8\frac{1}{4}$d to 3s $8\frac{1}{2}$d and hard at 3s $8\frac{3}{4}$d, spot and near delivery; sellers are now holding for 3s 9d both hard and soft. Negroheads, scrappy sellers at 2s 9d, and small sales of Cametas at 2s 2d. Peruvian quiet; ball 2s $6\frac{1}{2}$d, and small sales slab 2s $1\frac{3}{4}$d.

At auction to-day moderate supplies were brought forward and only a small part sold at rather lower prices.

(AVERAGE FOR ALL INDIA 9·03d., SEPTEMBER 20TH.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Du and Various	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Pric
Neilgherry ...	**338**	**7·00**												
COA ...	55 p	6¼	...	...	37 p	5½ 6¾	...	...	...	..	...	...	18½c	4
Curzon ...	45	6	...	...	30	5¾	15	6¾	...	.	...	.	...	...
Glenfruin ..	20	4½	5	5 5¾	15	4¼ 4½	...	...	...	...	...	...	...	...
Kodanaad ..	136 p	8¼	56½c 1	1¾ 1/0¼	80	6¾ 7	...	...	...	...	...	...	...	...
Mount Gordon ..	82 p	6¼	32½c	7¼	37	6	...	..	13	5½	...	...	...	...
Prospect ..	76 p	7½	12	7¾	24	6¾	40 p	7¼ 8	...	...	...	..	...	.
Travancore ...	**985**	**6·25**												
Carady Goody ...	70	6	25	6½	25	5¾	20	5¾	...	...	...	..	..	...
Merchiston ...	121 p	5¼	10	6½	46	5¼ 5½	10	7½	...	...	34	4½ 4¾	21½c	4
Penshurst ...	114 p	7½	35½c	8	38	6¾	21½c	9	...	...	...	...	20½c	3
Sthn Ind T Co KK	100	6¼	35	6¼	...	...	48	7	17	4¾	...	...	...	..
Stagbrook ...	261 p	5½	137 p	6½ 7¾	48	5 5½	4	5	48	4½	24	4½	...	...
S T T Co Venture	158 p	6	...	...	117	5¾ 6	25	7¼	...	...	...	...	16½c	3
Vembenard ...	85	7½	53	7¾	23	6½	9	8½	...	...	...	...	...	...
Wynaad ...	**127**	**6·47**												
Chulika ...	30 p	8	12½c	9½	18	7½	...	...	...	...	...	...	...	...
Wynaad T Co Per...	97 p	6	31	5½	...	...	49½c	7½	15	4¾	...	...	2½c	6
TRADE AUCTION.														
Wynaad ...														
Perindotty ...	86 p	5½	...	...	23	5	38½c	7½	25	4¼	...	...	...	...

ROAD, MINING & ESTATE TOOLS.

MASSEY & CO. *Madras, 1st May, 1900*

	RS.	A.	P.
Picks, best steel, Miners', 5 lbs. ... ...per dozen...	17	0	0
Do. do. 6 „ ... ... „ ...	20	0	0
Headed Shafts for Miners' picks ... ... „ ...	15	0	0
Picks, best steeled, Road, 6 lbs. ... ... „ ...	17	8	0
Do. do. 7 „ ... ... „ ...	19	12	0
Mamooties, all steel, 9″ x 7″ ... ... „ ...	11	0	0
Do. do. 10″ x 8″ ... ... „ ...	11	8	0
Do. long-neck, steel, 5 lbs. ... „ ...	15	8	0
Do. do. 6 „ ... ... „ ...	23	0	0
Do. do. 7 „ ... ... „ ...	26	0	0
Quintanies, all steel, 12″ x 5½″ ... ... „ ...	16	0	0
Do. do. 15″ x 6″ ... ... „ ...	17	0	0
Felling Axes, round eye, 4 lbs. ... ... „ ...	26	0	0
Bill Hooks ... ... „ ...	16	0	0
Pruning Knives ... ... „ ...	12	0	0
Do. **Saws** ... ... „ ...	25	0	0
Cross Cut Saws, 4 feet long ... ... each ...	5	0	0
Do. 5 „ ... ... „ ...	9	0	0
Digging Forks, 3 prong .. ..per dozen ..	27	0	0
Do. 4 prong ... ... „ ...	29	0	0
Mamootie Forks ... ... „ ...	23	0	0
Shovels, Ordinary, all steel ... ... „ ...	17	0	0
Hammers, best steel, Riveters, flogging, etc., over 2 lbs. per lb. ...	0	8	0

	RS.	A.
Hammers, best steel, Miners' Drilling (Anchor) .... per lb. ...	0	6
Do. do. Sledge ... ... „ ...	0	8
Hammers, steel, Road, over 3 lbs. (Tennis) ... „ ...	0	4
Do. do. do. 3 lbs. and under ... „ ...	0	6
Crowbars, iron, steeled points, English muster ... per cwt. ...	19	0
Do. do. do. ordinary „ ... „ ...	15	0
Pitting Bars, iron, steeled points, ⅞″ x 3′—0″ 1¼″ wide at point, 6½ lb., per doz.	13	0
Do. do. do. do. 3″ „ 7 „	14	0
Do. do. Octagon steel ⅞″ x 3′—0″ 1¼″ „ 6½ „	20	0
Do. do. do. do. 3″ „ 7 „	25	0
Do. do. do. 1″ x 3′—6″ 1¼″ „ 9¾ „	28	0
Do. do. do. do. 3″ „ 11 „	33	0
Steel Jumpers ... ... **SB** ... per doz. ...	26	0
Road Rammers, cast iron, under 12 lbs. ... „ ...	9	0
Do. do. do 15 „ ... „ ...	8	0
Do. do. 15 lbs. and over ... „ ...	7	0
Wheel Barrows, galvanized ... ... each ...	23	0
Carpenters' Adzes ... ... each Rs. 2-8 and	2	12
Anvils, best warranted ... ...per cwt ...	26	0
Grindstones ... ... 24″ x 4″ Rs. 10 — 30″ x 6″ Rs.24 — 36″ x 6″ Rs.28		
Bench Vices ... 3½″ jaw, Rs.15-0; 5″ jaw, Rs.34; 6″ jaw...	45	0
Single Splitters ... ...each ...	7	8

PLANTING OPINION.

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 25th instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad. *October 9th.*—*Weather*—Wind varying from West to South-West. Rain in heavy showers from the North-East. Days generally overcast and moderately cool. *Works*—Preparing for crop. *Coffee*—exceptionally healthy, and next year's prospects very bright. *Health*—Good. *Labour*—Abundant.

Munzerabad. *October 14th.*—*Weather*—Fine with local showers from the N.-E. *Crop*—ripening up fast. *Coffee*—very healthy. *Works*—Cleaning up and getting ready for crop. *Health*—Good. *Labour*—Abundant.

Coorg.. POLLI BETTA, *16th October.*—*Weather*—Last shower on Sunday afternoon. Fine and bright yesterday and Monday. Total rainfall about 55 inches since January. Bright sun will hasten on crop which will be got over with early. Weeding is still being done. All other works are finished. *Labour*—is very plentiful and *General Health*—Fair. Volunteer Camp opened yesterday.

STATISTICS AND REMARKS.

TRUTH may lie at the bottom of a well, but it is by no means always to be found in official statistics, no matter how deep we dive. Statistics are not merely misleading sometimes, they are contradictory. Here is a specimen of the misleading kind. In a statement of the progress of large industries from 1887 to 1899 the Director-General of Statis-

tics shows the capital employed in Coffee works as Rs.50,000 in 1892 and 1893 (previous columns are blank), Rs.3,50,000 in the next four years, Rs.2,00,000 in 1898, and Rs.50,000 once more in 1899. Then as to labour, the average number employed throughout the year and the average number employed during the working season are shown as follows :—

	Year.	Season.
1887	1,176	8,078
1888	1,617	8,417
1889	1,429	6,166
1890	1,059	5,426
1891	1,400	4,221
1892	1,414	5,548
1893	1,099	6,289
1894	1,145	5,800
1895	5,514	2,580
1896	1,233	6,822
1897	2,142	5,883
1898	4,963	
1899	5,081	

These figures are certainly not in harmony with those that refer to the amount of capital employed. Nor are the following figures, showing value of production year by year :—

1887	1,17,92,863
1888	2,20,91,044
1889	1,04,83,394
1890	1,28,24,618
1891	1,08,80,060
1892	1,14,50,879
1893	1,28,57,666
1894	1,39,59,044
1895	1,54,93,851
1896	1,58,65,249
1897	1,09,56,803
1898	1,33,76,286
1899	1,58,07,370

Doubtless there is an approach to accuracy in figures relating to new planting companies started and companies that have wound up in 1899-00. In Bengal there were working in 1899-1900, 126 tea companies; in the North-West Provinces and Oudh, 3. The whole paid-up capital of tea companies at the end of 1899-1900 stood at Rs.3,25,38,118. Of Coffee and Cinchona companies (which are, unfortunately, grouped together) there were 4, all in Madras; and at the close of the year the total capital invested in companies of these classes was only Rs.1,96,800. Of "other" planting companies 5 were working during the year in Assam, 2 in Bengal, 1 in the Punjab, 2 in Bombay, 5 in Madras. At the close of the year the total paid up capital of planting companies other than those classified under the heads of tea, coffee, and cinchona was Rs.18,39,660. Of course, a comparison of these figures with those relating to other industries would be useless, for, as is well known, the Tea industry is largely financed by companies registered in London, whereas the above figures relate solely to those registered in this country. The number of companies registered during the year was as follows :—1 tea company in Bengal, with a nominal capital of Rs.2,00,000 and no figure given under the head of paid-up capital; 2 coffee and cinchona companies in Madras with a paid-up capital of Rs.1,16,000, and 3 "others" (2 in Bombay and 1 in Madras) met a paid-up capital of Rs.13,703.

During the year 8 companies ceased to work, *viz.*, 6 companies in Bengal, 1 in Punjab, and 1 "other" in Bomb Paid-up capital of the first batch Rs.10,06,000, of the last lots *nil*.

The following table shows number and paid-up capital rupees) of each class of company in existence at the end each official year since 1881-82 :—

—	Tea and other Planting Companies.							
	Tea.		Coffee and Cinchona.		Others.		Total.	
	No.	Capital.	No.	Capital.	No.	Capital.	No.	Capita
1881-82 ...	113	2,75,89,930	5	1,97,500	4	1,81,360	122	2,79,68
1882-83 ...	121	2,92,22,180	2	1,28,240	7	5,02,580	130	2,98,53
1883-84 ...	121	3,05,91,970	7	3,81,720	5	4,61,870	132	3,14,35
1884-85 ...	127	3,30,56,050	8	4,13,110	3	4,52,270	138	3,39,21
1885-86 ...	130	3,27,73,950	7	4,42,030	5	4,57,190	142	3,36,73
1886-87 ...	131	3,52,48,430	7	4,67,430	5	4,84,180	143	3,62,00
1887-88 ...	127	3,54,36,070	7	4,81,810	7	5,60,480	141	3,64,78
1888-89 ...	129	3,52,91,400	7	5,14,290	9	5,41,830	145	3,63,47
1889-90 ...	133	3,55,17,340	7	5,26,710	4	4,58,280	144	3,65,02
1890-91 ...	140	3,54,62,510	6	4,61,890	8	4,62,420	154	3,63,86
1891-92 ...	144	3,64,88,340	5	3,83,290	9	6,31,000	158	3,75,02
1892-93 ...	142	3,63,68,980	5	3,83,390	10	9,56,280	157	3,77,08
1893-94 ...	148	3,71,30,890	5	3,89,990	12	9,56,280	165	3,84,77
1894-95 ...	154	3,67,23,550	5	3,91,990	13	10,07,250	172	3,81,22
1895-96 ...	156	2,52,20,590	3	2,76,800	13	12,47,250	172	3,67,44
1896-97 ...	156	3,60,04,640	2	1,61,500	13	12,42,250	171	3,74,08
1897-98 ...	371	3,21,85,020	1	39,000	14	12,31,660	152	3,34,55
1898-99 ...	135	3,21,23,100	2	39,000	13	10,92,860	150	3,32,54
1899-1900 ...	129	3,25,38,118	4	1,96,800	15	18,39,660	148	3,45,74

The next table we have to give is a very long one t shoul dprove permanently useful for reference. It states value (in rupees) of principal articles exported from Bri India to the United Kingdom from 1853-54 to 1899-1900

	Coffee.	Tea.		Coffee.	Tea
1853-54 ...	4,75,980	Included under "Other articles."	1876-77 ...	77,19,310	2,60,18
1854-55 ...	3,82,650		1877-78 ...	74,58,780	3,03,72
1855-56 ...	6,84,100		1878-79 ...	99,46,500	3,12,62
1856-57 ...	6,99,130		1879-80 ...	1,04,50,710	3,03,51
1857-58 ...	4,01,620		1880-81 ...	93,31,410	2,99,43
1858-59 ...	5,71,260		1881-82 ...	93,94,190	3,52,09
1859-60 ...	4,86,040		1882-83 ...	98,08,080	3,45,74
1860-61 ...	11,96,470		1883-84 ...	1,06,21,380	4,03,84
1861-62 ...	24,27,100		1884-85 ...	76,02,080	3,95,02
1862-63 ...	26,23,320		1885-86 ...	83,52,150	4,18,39
1863-64 ...	38,43,910		1886-87 ...	90,33,130	4,61,47
1864-65 ...	47,36,270		1887-88 ...	99,81,890	4,99,07
1865-66 ...	36,09,480		1888-89 ...	1,00,69,070	5,07,78
1866-67 (eleven months) ...	22,05,490	35,46,870	1889-90 ...	72,53,450	5,03,10
1867-68 ...	45,84,470	68,45,650	1890-91 ...	66,90,550	4,92,64
1868-69 ...	70,66,110	95,13,260	1891-92 ...	94,31,580	5,52,47
1869-70 ...	43,43,810	1,04,78,130	1892-93 ...	96,06,660	5,99,25
1870-71 ...	49,44,980	1,12,10,560	1893-94 ...	99,61,630	6,11,44
1871-72 ...	1,00,99,900	1,45,07,570	1894-95 ...	1,04,25,020	6,97,11
1872-73 ...	73,98,530	1,56,00,270	1895-96 ...	1,06,15,810	6,93,82
1873-74 ...	80,61,920	1,73,42,700	1896-97 ...	83,34,071	7,48,38
1874-75 ...	78,19,940	1,93,27,830	1897-98 ...	83,63,386	7,45,60
1875-76 ...	82,88,320	2,16,29,530	1898-99 ...	1,13,72,874	7,32,00
			1899-1900 ...	95,16,769	8,29,11

This shows very plainly how completely Tea has outstrip Coffee in the race.

BRAZILIAN FINANCE.

By his latest annual report the Brazilian Minister of Finance has again secured the support of the Press of Rio de Janeiro. He gives a *résumé* of all that has been done since 1898, and refutes the criticisms brought against the financial measures taken by the Government. Recapitulating the services rendered by the Government, the report shows that 100,000 contos of paper currency have been redeemed. The Government has instituted a fund for guaranteeing the paper currency, to which £1,500,000 has been assigned. With the rise in the rate of exchange the gold value of the currency has increased from £19,000,000 to £30,000,000. The foreign payments in gold have been resumed, the Government having had over £2,000,000 at its disposal for this purpose. The Government has redeemed £700,000 worth of the foreign debt, and also £2,500,000 of the internal gold loans and 6,200 contos of internal paper loans. It has, moreover, improved the collecting of inland taxes. The revenue from stamp duties has risen from 9,000 to 15,000 contos, and that from the tax on retailed goods rose from 14,000 to 36,000 contos The railways, which before they were leased were worked at a loss, are now bringing in revenue to the Treasury. Besides rendering these services, the Government has also paid over £2,000,000 of unconsolidated debts already existing in the country and outside. Owing to the Government's policy the value of the paper currency has been enhanced so that now, taking 10d. as the rate of exchange, 45,680 contos will suffice to pay the interest on external loans amounting to £1,903,000, whereas in 1898, with the exchange at 6d., to meet the same payment, which then amounted to £1,549,000, a sum of nearly 62,000 contos was required. At the same rate of exchange, the guaranteed interest cost the Treasury over 44,000 contos, but to-day this expense amounts to less than 27,000 contos. This is a grand record, but, unfortunately, it is to a very large extent only a paper record. If the present system can be continued until Brazil has paid off her gold debts, all will be well ; but, any hitch midway might cause all the progress now recorded to be wiped out. In regard to railways, the report mentions the advantages of their redemption by the Government, and praises the services rendered by the agent commissioned to negotiate this operation in London. Alluding to the sudden rise in the exchange, it states that the banks are in part to blame for this, for they did not exert their influence on the market in order to regulate the offer and demand of bills, having in view the times of abundance or scarcity of coffee and rubber bills. Sometimes they oversell during the time the crop is being exported and try to cover themselves just when bills are becoming scarce, thus favouring speculation. The report declares that the present Government has never interfered in the exchange market, and brings forward detailed figures proving that importers are benefited by the improved situation of the country. The report insists on the necessity of continuing the redemption of the paper currency and of curtailing the public expenditure.

The above is taken from a summary cabled by the Rio correspondent of the *Times*, and is no doubt a fair representation of the Minister's statement. As we have remarked, all turns upon the continuance of the present system for a period long enough to permit of the establishment of Brazilian financed on a permanently substantial basis. There are many points of similitude between the financial policy of the Brazilian Ministry and that of the Government of India. Both have adopted certain measures under circumstances that amount to compulsion. We can but express the hope that both will be able to restore public credit and stability by the artificial means resorted to. As, however, the Brazilian Minister specially refers to *importers* as having "benefited by an improved situation of the country," we can but assume that it is not alleged that exporters have also benefited. The natural inference is that they have suffered.

THE UNITED PLANTERS' ASSOCIATION, F. M. S.

The Planters' Association of Ceylon has established what may be termed cordial relations with the local Government, and has secured a position of great influence. Whatever the views of the present Chief Commissioner of Assam may be, the Indian Tea Association has won the ear of the Governments of India and Bengal. In Madras the more youthful U. P. A. S. I. has the sympathy and, we believe, the respect of the local Government, and its influence is steadily growing. We are glad to believe that perhaps the youngest Association of the same kind in the East, the United Planters' Association of the Federated Malay States stands in much the same position as regards the Government there, and that it, also, is acquiring increasing influence with increasing age. Either it or its Chairman is consulted with respect to legislation, etc., regarding agricultural matters, and its, or his, opinions are well considered before action is taken. This is as it should be. One result of the representations of the U. P. A. F. M. S. is an increase of accommodation on the part of Negapatam for Indian labourers about to emigrate to the Straits Settlements and particularly the Malay States. A Madras firm has lately offered to import *Mahratta* coolies for the Government of the Straits Settlement and others, but we are pleased to learn that this is not regarded, at present, as a question that affects the Association. Preparations are being made by Government, in consultation with the Association, for establishing what may be termed an investigation farm, under the charge of Mr. Stanley Arden, a scientist. There is some little doubt as to whether Mr. Arden has selected the best site ; there is also a doubt whether he, "a new arrival, who is not acclimatising at all well" should be permitted to assume personal charge. The Association has therefore resolved, "that, seeing the importance of the best selection being made for the purpose of an Experimental Garden, the Resident-General be asked that such selection be finally approved by a Committee of five Selangor planters with a quorum of three. Such Committee to consist of Messrs. W. W. Bailey, C. Meikle, E. V. Carey, H. M. Darby, and E. B. Prior." We have no doubt that the Government will agree to this. Meanwhile there are hopeful prospects for rubber and *Ficus elastica* in those parts, to judge from the yields so far obtained, and the Chairman of the Association, Mr. E. V. Carey, lately stated that it was encouraging that practically no coffee land had been abandoned, and that planters were still able to keep things going. No report has yet been received on a shipment of 100 cwt. of coffee to London, but as to 5 pikuls sent from Aden (or *to* Aden—the report before us leaves us in doubt on this point) it unfortunately appears that for some unknown reason it arrived in a very bad state. Mr. T. H. Hill stated that he had seen it, and that it was about as bad as it could be, he further added that he believed that unless the coffee exported was cured in some central place, he did not think that any satisfactory results would be attained.

NOTES.

Russia's Demand for Indian Teas. This season Russia is a much larger buyer of Indian teas.

Tea at Baghdad. In 1899 Baghdad took 3,750 packages of Indian tea; in 1900 the quantity imported was 3,825.

Coffee at Baghdad. During 1900 Baghdad imported *from Europe* 607 bags of coffee, valued at £1,821; while the coffee she imported from India was valued at £4,056.

The Indian Tea Crop. The actual shortage of Indian tea to the 30th September is estimated by Messrs Cresswell & Co. to amount to 15 to 16 million lbs. This, it is believed, will ensure an advance in price in all grades.

The Private Sales Extinct. The London correspondent of the *Times of Ceylon* cabled on 10th instant:—There are no catalogues for the private sales for Indian tea, and Messrs. Buchanan & Co. are printing for the public sales.

The Java Coffee Crop, 1901. The *Straits Times* of September 30th says:—According to a telegram sent to Europe by the Governor-General of Netherlands India, the Government coffee crop in Java is estimated for the year at 95,000 piculs.

Foochow Tea Crop Short. Business in tea, reports the *Foochow Echo* of the 14th September, continues on a very small scale in spite of the short supplies. The arrivals of Congou to date are only 282,000 half-chests, against 447,000 half-chests at the same date last year.

Preferential Treatment of British-Grown Tea. In view of the proposed rebate in the excise on sugar grown by white labour in Australia, it is suggested that the Indian Tea Association should approach the Commonwealth of Australia to get a rebate on British-grown tea, as against China and Japan.

Tea in Java. It is stated on the authority of Mr. R. C. Wright, that, no matter how much the cultivation of tea extends in Java, the production is not likely to exceed the local demand, so greatly is the drinking of tea extending among the Javanese, Malays, etc., We hope soon to see it extending among Indians also

Amsterdam Bark Market. A supplementary catalogue issued for the Amsterdam auctions of October 8th increases the offerings by 1,280 packages, containing 108 261 kilogrammes of Cinchona bark. The shipments at Java for the first half of the month were 601,300 Amsterdam lbs., against 610,000 Amsterdam lbs. last year, and 740,000 Amsterdam lbs. in 1899.

The Tea Industry. An urgent circular was issued last Saturday by the Indian Tea Association, Calcutta, intimating that certain Calcutta Tea Agency Houses had supplied the Association with figures showing the quantity of tea manufactured up to 30 September compared with the quantity at the same date in 1900. Returns were not supplied by Messrs. Andrew Yule & Co., Messrs Devenport & Co., and Messrs. Mackinnon, Mackenzie & Co and did not include the figures of the native gardens in Dohr Dun or Kangra. The total quantity, as now returned, wa 110,837,762, against 125,134,481 lbs. in 1900.

The West Coast of Sumatra. The principal produce of the We Coast of Sumatra is coffee, the cult vation of which is chiefly in th hands of the Government, but there are also large priva plantations on the borders of the volcanoes. Much of th coffee is exported to America. Amongst other products ma be mentioned copra, nutmegs, mace, rattans, hides, variou gums (*gum damar* which is softer than gum copal produce in Celebes, *gum berjamin* used as incense, and india-rubber also a kind of cinnamon and a little pepper. The cooli employed at Padang all come from the island of Nias, qui a special race amongst whom are many Christians.

A National Monopoly. Another bill for a National Mono poly of Coffee has been presented Congress by a deputy for the State of Rio, Sr. Barros Franc Junior. The stipulations of the project are not dissimilar those of a year or two ago, comprehending exclusive rig to ship coffee; obligation to purchase all coffees offered at minimum price to be fixed annually between the Company Association that undertook the business and Government and obligation to export all the coffee so purchased at a pric not exceeding 20% of the purchase price. So far, the *Bra zilian Review* understands, the project has no official approv and is not likely to get further than the initial stage.

Red Rust. The Indian Tea Association did good piece of work for themselve says *Capital*, when they secured Mr. Harold H. Mann, B. Sc as their scientific officer The planters up in the Nowgon District of Assam were troubled with red rust in their garden and so they sent for their doctor. Mr. Mann went up i June, and made a thorough examination and diagnosis of th disease. He has given the results in a concise little pampl let, beautifully illustrated—the largest picture being i colours—which has just been published by the Associatio and planters, after studying that pamphlet and obeying th instructions therein given, will have themselves to blame they cannot keep the blight of red rust henceforth we in hand.

Bangkok Pepper. Bangkok does not seem to ha been able to take much advantage the advanced price of pepper. Exports in 1900 fell off b 437 tons as compared with 1899, and the crop in 1901 w practically a failure. Shipments in 1900 were as follows:- U. K. 279 tons, Hong Kong 190, Europe (outside U. K 111, India 77, Singapore 42. That item "India" ought n to appear seeing that India produces more than sufficie pepper for her own requirements. The greatest export fro Bangkok during the last 10 years was 1,541 tons, th average about 990 tons, last year's only 699 tons. Practicall all is sold as white pepper. The crop for 1901 is promisin well and is expected to be 25 per cent. above the average quantity.

Cacao Stealing in Ceylon. In the Administration Report of th Central Province Ceylon, it is stated —"*Cacao Stealing.*—This crime,

egret to say, is still prevalent in the Matale district; but in ne Panwila district there has been a marked decrease. In ict there were very few cases reported to Court, and some of ne leading planters connected with the Panwila district have tated to me that there have been very few thefts during the ast cacao season. The largest number of cases that were nstituted in the Matale Court were those from Marukon state. It is difficult to put down cacao stealing as long as lanters employ dishonest watchers. In several cases that ave come before me I found that the watchers connived at he thefts."

The London Tea Market. Weekly special telegram dated 10th instant from Messrs. Gow, Wilson & Stanton to Colombo reports that heavy supplies of Indian tea are depressing the market, and that good liquoring Pekoes are easier; while the market for Common Pekoes and Broken Pekoes shows a slight decline. The price of fair liquoring Ceylon Pekoe Souchong is 5½d (¼d down), and the average price of Ceylon tea sold on garden account this week was 7¾d (¼d down). The average of the corresponding week last year was 7½d. Reuter reports that medium Ceylon teas are irregular, but others steady. Fair Pekoe Souchongs are quoted at 5d (the same as last week) and the average for the week is 7¾d (¼d down), 21,000 packages of Ceylon tea were offered for sale and 19,000 were disposed of; while of the 58,000 packages of Indian tea offered, 42,000 found purchasers, at an average of 8⅛d per lb. (⅜d less than last week).

Coffee in London. The firm tone prevailing, says the *Produce Markets' Review* of September 21, 1901, during the last few weeks is fully maintained, and the moderate quantity offered in auction on Tuesday met with strong competition, and realised full to again somewhat higher prices for Central American kinds. About 2,000 bags washed Santos (Dumont) were also offered, and realised previous values, with the exception of a small proportion of fine London-cleaned, which commanded relatively high rates, 55s 6d for No. 1, and 45s for No. 2 size. On Wednesday and Thursday there were no auctions. The scarcity of fine qualities of Central American is now very marked, and it seems likely that still higher prices will have to be paid to fill requirements of these sorts. It should be noted, however, that, notwithstanding the recent substantial advance in values, good and fine Coffees are still cheap in comparison with the prices which were considered reasonable a few years ago, say before the period of excessive Santos production. The receipts in Brazil continue on an enormous scale, the total from July 1 to date being 4,650,000 bags. Notwithstanding this, markets are firm and slightly dearer, terms being about 6d higher for the week. Exchange is 11 5/32d against 9¾d currency price, 4,500 reis against 7,100 reis, and sterling price 28s 9d (September) against 37s 9d the same time last year.

Java Government Cinchona. From the report on the Government cinchona-plantations in Java for the three months ending March 31, 1901, the *Chemist & Druggist* learns that the climatic conditions were somewhat unfavourable; the rainfall was much below the average, whilst heavy gales, about the middle of February, did a very considerable amount of damage to the plantations. These gales were mostly local, and of a cyclonic character, and the extent of the damage is shown by the fact that nearly 4,000 trees were blown down, from which over 200 tons of wet bark (equal to about 70 tons of dry bark) were collected. Numerous buildings were also more or less severely damaged. During the height of the stormy season the bulk of the native labourers, some 500 men, left the plantations, which caused great difficulty and much delay in gathering the bark of the uprooted trees. With the exception of some damage done by a caterpillar (*Euproctis flexuosa*), the depredations by insect-pests were inconsiderable. Further experiments made with a view of ascertaining whether the content of alkaloid varies with the climatic conditions, and whether it is greater in one particular month than in any other, have led to no definite results. The plants in the nurseries numbered 1,560,000, of which 1,428,000 were *Ledgeriana* and 132,000 *Succirubra*. In the open ground the total amounted to 2,641,500—*viz.*, 1,800,000 *Ledgeriana*, 433,500 hybrids, 362,000 *Succirubra*, and 46,000 *Officinalis*.

Calcutta Tea Sales. The last sale before the Poojahs was held on Friday the 11th instant when 24,000 packages were offered, against 22,000 packages, at the corresponding sale of last year. This is the largest auction yet held this season, and it is a pity the quantity was not restricted, as such a heavy supply to deal with on the verge of a holiday must have discounted to buyers' minds the actual shortage in the crop, which in our issue of last Thursday we estimated at 12 million lbs., but which we note Messrs. J. Thomas & Co. in their last fortnightly Market Report quoted from actual figures already in their possession as upwards of 13 million lbs. The result of the large offering yesterday was that prices were scarcely up to those of last week, and for good medium teas show up poorly against the values ruling at this time last year. This is also very noticeable in the case of tippy Broken Pekoe kinds, which are in many cases selling 30 per cent. under 1900 rates. The present seems to us a grand opportunity for sellers to retrieve, in great measure, their lost position if they will only use proper discretion in the handling of their crop. To offer 24,000 packages on the Calcutta market just when buyers, sellers, and brokers alike are naturally thinking of their holiday, seems to us to have been a great mistake—it will be an equally sad blunder if the teas that accumulate during that holiday are all forced on the market in one sale. We commend this to the attention of those who have the handling of tea agencies. With a short crop, such as is estimated, some balance sheets will cut a very sorry figure, unless proportionately higher values are secured, and it will be but poor consolation, after the produce is sold, to hear that it is showing large profits on resales in London.

Indian Teas in London. A firmer tendency generally has prevailed, says the *Produce Markets' Review* of 21st ultimo, some descriptions having advanced in price, the market closing with an improved tone. The demand is more active, and a larger volume of business has been transacted; and, as the trade hold but moderate stocks, the prospect of a further increased inquiry is favourable. The most active bidding continues to be for the medium and fine descriptions, and is principally centred on the Assam growths and the finer sorts of Darjeeling, which are far above the average quality. The former, taking them all round, have seldom offered better value, and although there will be, judging from reports, a good selection of Tea from the Assam

gardens, it is doubtful if the later arrivals will possess the fine quality of the earlier imports ; in fact, many of those offered recently are distinctly inferior. Darjeelings, on the whole, are little if any better than last season, and consequently they are selling at irregular prices, the less desirable sorts meeting with but a moderate demand, while those possessing the characteristics looked for in these Teas are readily bought at full rates. The Dooars, Sylhet and Cachar Teas up to the present are about on a par with those of last season, being mostly poor in cup and this is reported to be mainly owing to climatic causes. Later advices, however, speak of more favourable weather conditions, which, if continued for the remainder of the season, should produce more useful grades later on. Although from all accounts there will be less common Tea produced than last year, prices remain comparatively low, either due to the excess of stock on this side or the consumption running on the better kinds. The latter is probably the main reason, and this from all points is satisfactory, and it is, therefore, to the interests of the retailer to follow this up by getting the tastes of the consumer thoroughly established for the better class Teas. For the 41,412 packages brought forward at the sales there was good competition, prices being generally firm, and only 6,193 were withdrawn.

GENERAL ARTICLES.

PEPPER.

The *London Commercial Record* of 27th ultimo remarks :—

It is a peculiarity of all those markets the principal basis of which is formed by speculation, that they lend themselves most readily to the inventor of imaginary and romantic reports, cast abroad with a view to influence the mind of operators, and affect thereby the tendency of prices. We have all of us heard the most astounding communications regarding the development of young crops belonging to the species of speculative articles, reports which spoke of rains, floods, snow and blizzards, and which, when the truth leaked out, amounted to insignificant showers and anticipated snow storms. But they answered their purpose ; the bears became frightened, probably alarmed, and left the field to the inventive bull, whose conscience was probably as big as his pocket. Coffee, sugar, cotton, jute, hemp, cloves and shellac are, we think, the principal martyrs to the imaginary mind of some operators, and sad are the tales they can relate, but lately pepper has been added to the list of victims, and particularly Tellicherry seems to be a chosen subject for the imagination regarding this pepper. An endless number of crop reports and estimates have made their appearance in our market during the last fortnight, one more alarming than the other, until Holland seems to have beaten the lot by a communication according to which no more than about one quarter of last year's shipments will be available for export to Europe in the ensuing season. A very grave and alarming estimate which, we fear, must emanate from a bull holding dear pepper, but it is consoling to know that the effect upon the market has been no other than producing an incredulous smile. Other informers speak of a deficiency varying from 25 to 50 per cent., hinting that these figures have to be accepted as a minimum, there being every reason to suppose that the damage done both by rain and drought will exceed the figures stated In the face of these alarming reports, we have been approached by our readers for some explanation or authentic communication, and we are to-day in a position to state that as a result of our inquiries all these reports are greatly exaggerated. There is a grain of truth in them, but not more. At the beginning of the new season, the south-west monsoon was of an exceptionally beneficial character to the growing crop, and there was every ground for the hope of a bumper yield. Later on, we are informed, the monsoon changed into boisterous weather, accompanied by heavy downpours, which delayed the development of the fruit, and were, to some extent, responsible for a certain quantity of light pepper. Since then showers have ceased, and a somewhat protracted spell of weather has set in, amounting almost to a drought. Out of apparently capital has been made, and has led the imagina mind of some bulls to wander a little. We are told a great will depend on the strength of the north-west monsoon, before this has passed away it is very difficult to forecast probable size of the crop. To judge by the state of affairs so the crop will no doubt be late, and may fall short of last ye yield by about 25% maximum, but neither this nor any other mate must be accepted as final. The position of pepper, fro bull's point of view, is an excellent one, and it would be a pit an artificial range of prices were established through exagger crop reports. It hardly requires "puffs" of that description make pepper go.

FIRST RUSSIAN TEA.

THE TEA PLANTATIONS OF CONSTANTINE POPOFF IN THE CAUCASU

Having been closely connected with the tea trade from a early age, the project of introducing the plant into Europe had interested me deeply. I clearly saw, however, that before su scheme could be carried out with any prospect of success, the ditions under which the plant flourishes in its natural habitat, various properties of soil most favourable to the growth of the shrub, and the processes attending the manufacture of tea in Ch would have to be closely studied. It was not until 1889 that I in a position to carry out my long cherished scheme. For purpose I visited Hankow in 1899 ; thanks to the influence exe in my behalf by some Chinese friends, I was enabled, in spit the disturbances then agitating the country, to make a thoro study of the cultivation of the plant, and of the manner of pluck and drying the leaves, as practised in the province of Yu low-toong. I there worked side by side with the Chinese workm Twice subsequently—*viz.*, in 1891 and in 1893—I visited China. the first of these two visits to China I turned my whole atten to the flower teas, as well as to the black, yellow and green tea Foochow, studying later on the methods of tea cultivation Moning and Ningchow. On my third visit to China, in 189 visit which I consider as the most satisfactory of all, by its resu I succeeded in studying the culture of tea, not only in the provi I have already named, but in those of Mankong, Sanho, Ta-ping, Yung-low-see, and Nipcar-see, observing the progress of plant, from the first buds to the plucking of the leaf, noting conditions of soil and temperature, the atmospheric phenom as well as the methods employed in the culture and preparatio the leaf. Ceylon, Java, the Himalaya district, Japan, the Sandw Islands, and Assam were all afterwards visited, in turn more t once. The result of these voyages, and several subsequent o is that I possess: (*a*) A collection of specimens of the various ki of soil in which the tea plant flourishes best; (*b*) An herbariu the branches of the tea shrub; (*c*) A collection of the vari parasites that infest the tea plant; (*d*) A collection of tools u for cultivating the tea shrub; (*e*) Specimens of the tea-leaf every phase of its manipulation; and (*f*) Various kinds of ma factured teas.

I have imported on to my estates in the Caucasus :

(*a*) 10,000 tea shrubs from three Chinese provinces—*viz.*, M kong, Ningchow, and Yung-low-toong; (*b*) 5,000 tea shrubs f Japan ; (*c*) 500 tea shrubs from Ceylon ; (*d*) 200 tea shrubs f the Himalaya district; (*e*) 200 tea shrubs from Assam ; and (*f* tea shrubs from Java.

Unfortunately, several of the shrubs perished before they reac their destination. I have still, however, 1,257 bushes impor from China, 67 bushes from Japan, 40 from Ceylon, 7 from Ja 16 tea shrubs from the Himalaya district, and 22 from Assam.

The 1,500 bushes which had arrived intact out of the 10, imported from China had cost me, by the time they were lan in Batoum, and I had paid the Customs duties on them, close u £5,000 sterling.

Moreover, as I was particularly anxious that these plants sho be given every chance, I had engaged fourteen Chinese labou to accompany them to Russia, plant them in my estates, supe tend their growth, sow pure Chinese tea seeds, gather the c and manufacture the tea. Messrs. Butterfield and Swire, owners of the steamer on which the plants were carried as fa

Port Said, had agreed to demolish the partitions separating the second class cabins, thus forming a second deck, and obviating the necessity of their being placed in the hold of the vessel. By this means a sufficient quantity of air and light could be assured.

Whoever attentively examines my tea plantations in the Caucasus may make a very clear comparison between the tea plants imported from the various localities, and anyone versed in tea will find no difficulty in forming an accurate idea of the respective merits of each class of tea.

In 1892 I purchased three tracts of land in the district of Batoum —*viz.*, Salibaouri, Kapreshoum and Chakva, comprising, altogether, about 900 acres, and at once commenced preparing the ground for tea-planting. The three estates differ totally from one another, both as regards the nature of the soil and the climatic conditions, a circumstance which enables me to judge what elevation is the most favourable for tea culture in the Caucasus.

Before I purchased them in 1892, the three tracts of land were entirely covered with virgin forests of rhododendrons, wild laurel trees with stems thicker than a man's arm, with beech trees and alder trees, twelve feet in thickness and very tall. Thickly intertwined with furze and thistle, the trees effectually shut off every ray of sunshine, while rendering the forests absolutely impenetrable. Such was the tangled and swampy ground it now became necessary to clear and cultivate.

Not satisfied with having imported plants from China and the other localities before mentioned, I procured large quantities of Chinese seeds, as well as smaller lots from the other places, in order to be able to draw a comparison between them. I am obliged to admit that the seeds from China have been comparative failures, notwithstanding all the measures resorted to in order to induce germination. This unsatisfactory result, always the same after many trials, induced me to try and plant *shoots* from the imported Chinese plants, and this experiment has proved quite satisfactory

My tea plantations are in my three estates, in the district of Batoum; they are: Privolnoe (Salibaouri), Zavetnoe (Kapreshoum), and Otradnoe (Chakva). They are at the following distances from Batoum:—Privolnoe 3 versts' distance from Batoum; Zavetnoe 6, Otradnoe 12. The space occupied by each estate is about: Privolnoe 120 dessatins (equal to $2\frac{7}{10}$ of an acre); Zavetnoe 50 dessatins; Otradnoe 100 dessatins.

The three estates differ greatly both in altitude (from zero to 1,150 feet), in their proximity to the sea, in their accessibility to the influence of the sun and of the wind, and in the properties of the soil. My chief aim in purchasing these three estates was to see clearly, by practical experience, the climatic conditions, etc., which are best suited for the culture of the tea shrub in the Caucasus.

The following tracts of land have now been divided into tea plantations, and planted with tea shrubs of various ages:—In Privolnoe there are about 70 dessatins, planted; in Zavetnoe, 30; in Otradnoe 40, making 140 dessatins in all. I purpose shortly to portion out the rest of available land into new plantations, *i.e.*, about 130 dessatins more.

It is only the seedlings that have been raised from *imported* seeds that are cultivated on my estates; the tea shrubs that have been grown on the estates are not even allowed to flower, much less to turn to seed. Only a few seedlings have been raised from our own seeds, in Otradnoe, by way of experiment *viz*: In 1898, there were 345; in 1898, there were 388. All the rest of the seedlings have been raised from imported seeds. In reference to the latter, I may add that, in 1893, besides the chief quantum of China seeds, I imported seeds from other lands as an experiment; but none of the seeds, except those imported from China, yielded sprouts, or, at least, if they did, the sprouts all perished.

In 1895 I once more imported seeds from Ceylon, Assam, the Himalaya district, but it was a last and futile attempt, and from that time I have only imported China seeds.

From 1892 up to the present year I have continued importing seed from China every spring. It has even sometimes happened that I have received a cargo of seeds in the autumn in addition to those brought over in the spring.

In the year 1899 the seeds imported from China yielded about 10 millions of sprouts, and in 1900 about three millions, in the nursery gardens.

At the present time my plantations contain the following number of tea shrubs raised from seeds:—(*a*) In Zavetnoe.—Planted in 1893 from China seeds, 7,228; planted in 1897 from China seeds, 8,319; planted in 1897 from Assam seeds, 2,464; planted in 1898 from China seeds, 56,600; planted in 1898 from Himalaya seeds, 78; planted in 1898 from Ceylon seeds, 4,102; planted in 1899 from China seeds, 59,052. (*b*) In Otradnoe.—Planted in 1893 from China seeds, 19,302; planted in 1897 from China seeds, 35,144; planted in 1898 from our own seeds 345 and 388; planted in 1898 from China seeds, 34,018; planted in 1900 from China seeds, 284. (*c*) In Privolnoe.—Planted in 1893 from China seeds, 11,181; planted in 1896 from China seeds, 5,023; planted in 1897 from China seeds, 18,655; planted in 1898 from China seeds, 20,313; planted in 1899 from China seeds, 210,455.

The original tea shrubs have been planted in small experimental patches in my three estates.

At present there are the following original tea shrubs on my three estates:—(1) from China, Mankong, 401; from China Ningchow, 447; from China, Yung-low-toong, 409.—Total 1,257; (2) from Japan, 67; (3) from Ceylon, 40; (4) from Java, 7; (5) from the Himalaya district, 16; (6) from Assam, 22.—Total, 1409.

All the rest have perished.

The bushes mentioned above are distributed over my three estates thus:—(1) In Zavetnoe, Assam shrubs, 22; (2) in Privolnoe, China and Japan shrubs, 662; (3) in Otradnoe, China, Ceylon, Java, and Himalaya shrubs, 725.—Total, 1,409.

In 1894 I tried the experiment of raising new tea bushes from grafts taken exclusively from China bushes. Of these I have now (1) in Privolnoe, 2,509; (2) in Zavetnoe, 1350; (3) in Otradnoe, 2,120.

Personally, I am inclined to look upon no tea as really genuine but such as comes from China, and, indeed, only from two or three provinces in China, while, as regards the preparation of the tea, hand labour, such as it is practise in China, seems to me infinitely preferable to mechanical labour.

Notwithstanding this preference, however, a preference which has led me to bring Chinese cultivators to the Caucasus at an exorbitant cost, I found myself forced, after several failures, to procure from England the necessary machinery for the preparation of tea, as well as the framework for a new factory.

Messrs. Davidson & Co., of Belfast, furnished me with the apparatus for drying, rolling, fermenting, and sorting the leaves, apparatus for cutting and pressing the green twisted leaves, and also a hydraulic press to form the tea into tablets, and another to make tea in the form of a "pill."

The tea "pills," for the preparation of which I had to order a new machine, present, I think, a rather interesting and novel feature. They weigh each half a zolotnik (about 14 to the ounce), and should prove very useful for the army, as well as for sportsmen and travellers. A single "pill," steeped in boiling water, is sufficient to give a cup of good strong tea, and I believe that, before long, these "pills" will be known and appreciated at their true value.

The first tea I prepared and placed on the market was in 1895; the quantity in the year being, however, only 20 lbs. Since then the progression has been rapid. Thus I sold: Tea in packets—In 1895, 20 lbs.; in 1896, 37 lbs.; in 1897, 1,200 lbs.; in 1898, 2,900 lbs.; and in 1899, 3,610 lbs.

In addition I sold, in 1898, 10,000 lbs. of compressed tea (tablets).

The tea in "pills" has been already shown at several exhibitions, commencing with that held at Nijni Novgorod in 1896, then at Stockholm in 1897, St. Petersburg, 1899, and Paris, 1900. They were sold at the Exhibition in Batoum, 1900, too.

As regards the demand for Russian tea and the rapidity with which it is bought up, the only thing I can complain of is the small production, which is far inferior to the demand, owing to the newness of the enterprise and the fact that most of the shrubs are very young as yet.

The entire production of the three qualities I have placed on the market—*viz.*, at 2 roubles, 1 rouble 50 cop., and 1 rouble a pound, has been disposed of in Moscow, St Petersburg and Warsaw, as soon as offered. Almost everyone who has tried it prefers it to all other tea, many customers buying 10 lbs. at a time, in case they may have finished there supply before a fresh one is procurable.

It would be idle to deny that I am somewhat proud of such results. The examination of my teas from the point of view of flavour, as well as the chemical analysis which has been made of it, have proved that if this tea, grown on Russian territory, be not actually superior to the best Chinese kinds, its quality is in no way inferior. There is, therefore, every ground for hoping that, ere long, Europe will accord in full rights of citizenship.

Moscow, 15*th May*, 1901. Constantine Popoff.

BUYING, HANDLING AND SELLING COFFEES.

The *Canadian Grocer* publishes the three papers that won the cash prizes in the recent contest inaugurated by it. Our contemporary says: The object in view was the creation of greater interest in coffees among the trade. Already this has to some extent been accomplished, and, judging from the commendation which comes from the judges, the papers which we herewith publish will prove helpful as well as interesting to our readers. The five essays which were selected by the judges as entitling the writers to copies of the *Canadian Grocer* for one year will appear in subsequent issues.

Mr. C. L. Marshall, the winner of the first prize of $15, is the manager of Warren Bros. & Co's sample-room. He is a native of Bristol, England. Medicine was the career originally intended for him, and for two years he was a student of the healing art. It is over twenty years since he came to Canada, and during the first five years of his residence here he was engaged as an accountant in the lumber business. His first experience in the grocery trade was with Mr. John Garvey, then a retailer in Peterboro', but who has since left that town. Mr. Marshall's connection with Warren Bros. & Co. began about eleven years ago. During that time he has gone through nearly every department of that firm's business, and his present position, as manager of the sample-room, he has been filling for the last three or four years.

Mr. William Rhodes, the winner of the second prize of $10, was born at Elk Rapids, Mich., in 1870. In 1883, his father having died about ten years before, he went to live with his uncle, Mr. John Rhodes, a Brockville, Ont., grocer, whose store, three years later, he entered as a clerk. In 1892 he became a partner, the style of the firm becoming J. Rhodes & Co., and now, in the declining years of the senior partner, the responsibility of the business largely rests upon the gentleman who carried off the second prize in the recent essay contest.

Mr. R. H. Hudson, the winner of the third prize of $5, began his mercantile career in 1893 with the late W. Beatty, general merchant, Parry Sound, Ont. Mr. Hudson's duties were largely confined to the grocery department of the store, and he soon learned to take a lively interest in the goods carried in stock, as well as in the customers upon whom he waited. The result was that in three years he had become the firm's principal buyer, except for the dry goods and clothing department. The ill-health of Mrs Hudson necessitated the removal of Mr. Hudson and his family to Ashville, N.C. There he began business as dealer in teas and coffees. Large quantities of the latter being drunk in the south as well as in other parts of the United States, Mr. Hudson paid particular attention to them. He gave names to his blends of teas as well as of coffees, and his business gradually increased. The health of his wife having improved, Mr. Hudson finally returned to Canada again and took charge of the tea and coffee department of MacWilkie Bros., Yonge and Richmond streets, Toronto. In 1898 he went with Brown Bros., Queen street West, Toronto, where he still is, and where teas and coffees are still his hobby. Brown Bros., it might be noted, are famous for the exceedingly well appointed tea-room which they have in connection with their store. Mr. Hudson was last year President of the Grocery Clerks' Association and this year he is treasurer of that organization.

We give the first essay below :—

THE FIRST PRIZE ESSAY.

By C. L. Marshall (O. G. Java), Toronto

It is now generally conceded that coffee is the most intricate branch of the grocery business. A thorough knowledge of its details can only be obtained after a lifetime's experience, and even then, with new growths and types being marketed month after month, no one has ever reached the point where it can be said truthfully that there is nothing new to learn. Many a grocer has stood aghast as he has faced the immensity of the subject, and although, perhaps, a thorough master of everything else pertaining to his business, has neglected the study of coffee, and been content to let the spice or wholesale man secure all the knowledge, and incidentally nearly all the profit there is to be obtained from what should be one of the most profitable lines he handles.

That coffee can be made a profitable and extensive business is demonstrated in nearly every city and large town in Canada (as in other countries), where some particular grocer has built his reputation on selling good coffee—just a little better, perhaps, than his competitors sold.

Essentially a luxury, good coffee is, by the consumer, much more difficult to purchase than good tea. A more intimate knowledge of the latter has made it an important factor in every grocery store, whereas the former not being in as general use, has been neglected by the majority of our merchants. Convinced that by supplying a better article at a moderate price any grocer can foster the trade for and encourage the consumption of an article which in many countries far exceeds in volume the sale of tea, I will endeavour to give a few hints which may be useful to the retail grocer in buying, handling and selling of coffees.

BUYING.

The modern grocer rarely attempts to buy his coffee in the gr condition. There are good reasons for this. Grown in Ara Java, Ceylon, India, the West Indies, Mexico and in nearly all South-American Republics, with countless types and growt many of the lower grades washed, dyed, scented and soaked imitate the higher grades—numerous pitfalls await the buyer greens, and experience has taught many an ambitious mercha that it is safer and easier to buy it washed. Aside from expense incurred in the purchase of a roasting and cooli plant, the roasting itself is a high art and should not be attempted by any but a thoroughly experienced man. support of this, the experience of a large departmental store is good example. The company in question had always purchased coffee roasted from a local roaster, and thinking that a grea profit could be made by buying it green, despatched the manag of the grocery department to New York to buy what he consider in quality and quantity would meet the requirements of the sto Now, the buyer, an ex-proprietor of a grocery store and a thorough experienced man in many other respects, probably knew as mu about "green" coffee as he knew about astronomy (and that w very little), and the result was his purchase included a large p portion of soaked Santos, made to look exactly like Mocha, a other faked-up growths in imitation of Javas and Ceylons— which, besides paying to the New York dealer an extortiona profit, not being imported direct from the country of growth, a du of 10 per cent *ad valorem* had also to be paid.

That goods well bought are half sold applies very strongly to coff To buy it well you must rely on your own judgment as to wh will suit the tastes of your customers. Disabuse your mind of t idea that there are only two high-grade coffees of any merit. Ja and Mocha, for, whilst it is true that a good Mocha or a good Ja is hard to beat, it is also a fact that many Central and Sout American growths equal them in drinking quality.

Buy your coffees on sample, just as you buy your tea; grind and draw it and test it, as you would tea—above all buy it for drinking quality, not for style or appearance. Be satisfied with fair profit; do not expect to buy coffee to retail at 40c for less th 30 to 32c; those to retail at 25 and 35c. per pound at 18 or 26 27c. respectively.

Always buy coffee :

(*a*) Whole roasted (not ground)

(*b*) In air-tight cans.

(*c*) In small quantities (not over two weeks' supply if possible).

(*d*) From a reputable spice house or wholesale grocer.

Where there is any German, Dutch or foreign trade, there is demand for Rio coffees, in preference to mild growths, the consum nearly always buying them green. In making your selection these choose a green, flinty, regular bean, free from blacks a quakers. The latter can generally be detected by immersing small quantity of the coffee in cold water, when the quakers w float on the surface. Reject any that are spongy or soft or whi have the appearance of having been dyed or washed. Rio coffe in Canada are rarely consumed by English-speaking people—and f this reason, if you sell it roasted for your German trade, be caref not to mix or blend it with coffees sold to the former.

HANDLING.

Coffee may be carefully and skilfully bought at close price but not realizing how perishable it is, a serious loss is oft made by careless handling. One point in the handling of coff should always be borne in mind by those who wish to make success of the business—*viz.*, from the minute it is roasted until passes into the hands of the consumer, the less it is exposed to t air, the better. There are two reasons for this :

Firstly.—It is very absorbent and easily becomes tainted proximity to butter, cheese, coal oil, spices, etc.

Secondly.—It loses aroma and strength to a great extent evaporation.

Both reasons apply more to ground coffee than they do to t unground berry.

Bearing this in mind it is not advisable to dress windows make counter displays with loose, roasted coffee. Such a cour can only lead to rapid deterioration, and a week or two's exposu will render any coffee almost worthless.

Window displays can be made with green coffee, and ma

merchants who do not sell the raw article purchase a small quantity for this purpose, or if exposed in air-tight, light, white flint bottles and changed frequently very little loss will be incurred by using roasted goods.

Still bearing in mind the rapidity with which deterioration sets in from evaporation, the importance of not stocking too heavily in roasted coffee will be apparent. For the same reason purchase and keep your supply in air-tight cans, and refuse to accept any purchase you have made which is shipped to you in barrels, boxes, or paper parcels. Jealously guard your stock from the air, grind it only as you sell it, and to insure its reaching your customer in good condition parcel it in parchment or tinfoil bags. These cost a little more than the ordinary paper packages, but the outlay will amply be repaid by increased sales. The same diligent care should be taken in handling the cheapest as the highest grades sold. The ideal cup is made from freshly roasted and recently ground coffee. Impress this on your customers and induce them, if possible, to grind their own coffee, just as they want it for each meal. Small mills of good and lasting quality can be retailed at one dollar or less; keep a dozen or so in stock, and press the sale of them. In countries where the sale of coffee is greatest per capita, it is almost invariably ground by the consumer.

To sum up, a few of the more important things to be remembered are:—

(*a*) Expose to the air as little as possible.
(*b*) Induce your customers to do the same.
(*c*) Keep your stock fresh.
(*d*) If you sell it ground—sell it freshly ground.
(*e*) Never allow it to come in contact with other goods.
(*f*) Never grind anything but coffee in your coffee mill.

SELLING.

Your coffee well bought and skilfully handled will, to a great extent, make the selling of it an easy matter. It is however necessary to have a definite place of campaign in placing it before your customers,

Advertising.—If you have space in a newspaper, let the public know you make a leader of coffee, roasted daily, ground while they wait, etc. Emphasize the fact that you excel in this particular line and back it up with good values. Good coffee carries within itself its own best advertisement, *viz.*: aroma. Place your mill in a conspicuous position in the store; do your grinding within sight of the customer, and leave the appetizing odour arising from the process to tell its own tale—a tale more eloquent than any mere words can express.

Much good coffee is ruined by bad treatment in the making—and much has been condemned as "poor stuff" simply for this reason. To overcome defective preparation a good plan is to have one or two thousand neatly printed copies of the following formula, either on a special parchment coffee bag—or on a card which can be enclosed therein.

How to make a Cup of Coffee.

One table spoonful of coffee to each cup and one for the coffee pot. Boil ten minutes and allow time to settle. Fill the cup with three parts coffee and balance with cream or scalded milk.

There are those who will take exception to the instructions in this recipe for "boiling," but I have found that, with coffee drinkers generally, boiling is popular, for the reason that it extracts everything contained in the coffee, and although it is true that the flavour can be extracted by a mere infusion, the body of weight of liquor is not obtainable without boiling.

As a further aid to selling periodical demonstrations, preferably in cold weather, should be useful. The expense of such is not great and a small cup, perfectly made, of your best line served with cream will act as an inducement for many a new customer to buy.

THE USE OF CHICORY

In the history of the grocery business chicory has always been associated with coffee, and the judicious use of it is, without doubt, advantageous.

Many coffee consumers are much prejudiced against chicory or rather against the name, due largely to over-adulteration by grocers in the past when coffee was much higher-priced than it is at present. With low-grade coffee costing 22 to 23 cents per pound it was a great temptation, for the sake of profit, to add a too liberal proportion of chicory, so much so, that blends containing 50 or 75 per cent. were common articles of commerce. With the same low-grade coffees obtainable at 14 cents per pound and less the addition of chicory, from a profit point of view, is quite unnecessary. Chicory is now recognized as a most wholesome and harmless adulteration in coffee, and is appreciated, although unconsciously so, in blends containing 10 or 25 per cent. by a large section of the public who would consider there was something radically wrong with their beverage if the chicory were absent. At all events it is the custom of a great many grocers to add from two to four ounces to the pound, the consumer thus acquires a taste for the mixture and except in rare instances prefers the adulterated to the pure article.

Personally, I do not advocate the mixing of chicory with coffee, high grades in particular. It is true it adds body to the liquor, but it appreciably destroys the natural delicacy of flavour in a really good coffee—and in a properly balanced blend the addition of body should be unnecessary.

The chicory question has been threshed out over and over again in trade journals—much being written *pro.* and *con.*, but the wisest plan to adopt is to leave it to the individual tastes of the customers. If they prefer an admixture by all means supply it. When the sale of coffee is made endeavour, if possible, to sell two, three or four ounces of chicory in a separate parcel, to be mixed at home as required; in this way the purchaser can ascertain if he likes the addition, and if he does the proportion needed to suit his taste. Some coffee drinkers will have already decided the question and will ask for a stated quantity to be added, in which case the desired amount of chicory "nibs" can be added to the berry before grinding.

The grocer in buying should select a good, heavy-weight chicory, uniform in colour and grain, and now, that as good an article is grown in Canada as can be produced anywhere in the world, it is not necessary to purchase the more expensive English and German growths. Before making your selection carefully draw a teaspoonful in a cup of boiling water. The liquor should be sweet and faintly pungent with no disagreeable flavour, and have all the necessary body.

In conclusion, no branch of the business is more worthy of the attention of the grocer than the buying, handling, and selling of coffees. A careful study of the tastes of his customers is of the utmost importance, for be it remembered that "tastes differ" and the delicate flavour of the high-grade Java, is so delicate as not to be appreciated by the every-day coffee drinker, a coarser, harsher flavour often being preferred.

Success awaits the man who will make a leader of coffee—and in doing so supply the public with a good and fresh article at a reasonable price. Try the experiment.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange, *August 31st*, 1901—Ninety days' Bank rate on London opened on Monday, 26th ultimo at $10\frac{3}{8}$d. rose to $10\frac{9}{16}$d. on Wednesday and closed this evening at $10\frac{13}{32}$d.

The rising tendency of Exchange has received a set back probably due to the liquidations for the end of the month. Indeed it is somewhat surprising that the reaction was not more severe as there were known to be a good number of contracts for the 31st still running at relatively high rates.

Coffee shipments (*embarques*) during the week just closed were large, their value being £617,400 as against £595,000 for the corresponding week last year.

From the 1st July to 30th August the value of the coffee sailed was £3,457,745 and in spite of the terribly low sterling prices positively £104,736 more than for the corresponding period last year.

Extremes during the week ending August 30th were $10\frac{1}{4}$d.—$10\frac{9}{16}$d. for 90 d/s Bank paper and $10\frac{5}{16}$d.—$10\frac{11}{16}$d. for private.

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

Coffee.—Entries at Rio and Santos for the week ended 30th August showed a renewed revival, being 54,246 bags over those of the previous week's and 323,736 more than for the corresponding week last year, which is accounted for by the strike on the Sorocabana Railway which stopped entries at Santos during 5 days at this period last year. The entries for the month of August amounted to 1,933,929 as against 1,319,583 last year and for the current crop to 3,308,192 as against 2,108,502 for the previous crop. Advices from the interior or to the effect that the weather has cleared and that, though a little damage has been done, it is unimportant and will not prevent the crop from being in all probability the largest on record. As regards the coming crop 1902-1903 there is little to say; in some districts a premature flowering has suffered from the rain and cold weather, but not on a scale to affect general results, as these premature flowerings are never of much importance.

Shipments (*embarques*) were also very large, being 82,776 bags over the previous week's and 128,862 more than the corresponding week's last year.

Declared sales, however, were slightly smaller than the previous week's, 195,000 as against 222,000, and 178,500 for the corresponding week last year.

Stocks grow steadily if slowly, and on the 30th August showed an increase at Rio and Santos of 29,991 bags compared with the previous week and of 398,769 compared with the same date last year.

Cost of Coffee. On the subject of the cost of production of coffee. Sr. Raul de Carvalho, a Santos *commissario*, who publishes a weekly circular called "O Café," to which we have several times referred, writes as follows:—

"No doubt on great estates like the Schmidt's and Prado's, coffee can be produced at very low figure. At São Manoel do Paraiso, the cost of production is undoubtedly lower than anywhere else, but neither one nor the other can be taken as guide of the general cost of production in this State. According to the statistics published a short time ago of the results of working from different plantations belonging to Sr. Domiciano Fagundes, with a total production of 54,874 *arrobas* in 1900 on one of the plantations, the cost worked out at 2$389, whilst the year before in was 5$212 per *arroba*, and the average in 1899 for the four plantations was 6$404."

COFFEE SEED FOR CENTRAL AFRICA.

In various places it is the fashion to urge that the importation of seeds must be prohibited, or else rendered practically impossible, because forsooth, seeds and plants—like men are subject to disease. The following remarks from the *Central African Times* go to show that the necessity for importation of coffee seed in that part of the world is deemed greater than the necessity for the exclusion of plant disease.

SEED IMPORTATION.

It has long been apparent to planters and others interested in the country agriculturally that new seed is absolutely necessary if the coffee industry is to be saved from the disastrous effects of the labour scarcity of the last two years. Moreover, the shade question has not yet been solved although various trees have been tried at the suggestion of the home authorities. Still further the need of importing seeds of new products in order to try and establish new industries has been prominently before the minds of the community during the past year and efforts have been made, with very doubtful success, to import seeds from countries not prohibited by the "Prevention of Coffee Leaf Disease Regulations." The necessity of a relaxation of the abovementioned Regulations is now admitted on all hands and we understand that the subject is engaging the attention of the Chamber Committee.

It will be remembered that the Regulations were made in the interests of the coffee planters. They have been loyally supported by the planters up till now although various modifications have been proposed and submitted to the home authorities from time to time. These proposals and modifications the Kew authorities have consistently rejected, and their advice was acquiesced in by the Chamber of Agriculture and Commerce here. We think it may truly be said that the Administration framed these Regulations with the best intentions and that they have carried them out consistently and wisely. We think it may also be said that the planters have supported the Administration throughout and that the present untoward result is due to the extreme stringency posed upon both the Administration and the planters by the authorities with, we may remark, the very best intentions. Regulations so far have been completely successful and as yet have been able to keep the leaf disease at bay. In barring importation of seed from all countries where leaf disease is kn to be, or has been, we have, however, handicapped ourselves tremendous extent as, unfortunately for a young country like o we have been unable to import seed from all those countries wh are our immediate neighbours. We have, in fact, had to face problem of importing our seed from the uttermost ends of the ea and seed is a commodity which cannot stand long carriage. example, it is practically impossible to establish cocoa here beca in ninety-nine cases out of a hundred the germinative powe the cocoa seed is lost by the time the seeds arrive in this coun from the East Indies, the Leaf Disease Regulations absolu prohibiting the importation from our nearest neighbours such Natal, Mauritius, India, or Ceylon. Most of the importations coffee seed have failed for a like reason and the shade prob might have been solved long ago if we could have adopted Indian shade trees instead of having to experiment with such tr as the Albizzia Moluccana and Grevillea which have turned practically failures. It is evident, moreover, that in barrin large country like India *in toto* a mistake has been made on side of stringency. India is not a small country and seed could imported from districts hundreds of miles away from the centre Coffee growing. We bar Natal, a small state, but we allow the importation of seed from Cape Colony, its immediate neighbo Why therefore when we bar Mysore and Coorg should we not all importation of seed from Assam or Calcutta (say) which are m further from the coffee growing states than Cape Colony is fr Natal. The result of these various considerations is that plant have the choice of two evils, either to take the risk of leaf disea or, to carry on an unequal fight under such hampering restricti as must spell failure to most. There is no quarrel with the p We have tried the policy of absolute prohibition and it has fai because we are a young country and dependent on other countr for the wherewithal to establish new industries. The conclus which has been come to therefore is that we must face the risks introducing coffee leaf disease and, for a time at least, allow importaion of economic seeds in order not only to revive coffee industry and solve the shade problem but also to enable to introduce new products with some prospect of success. must be noted however that the proposal is not to allow discriminate importation but only under special circumstan and after disinfection under specially appointed agents. this means it is hoped that the risk of leaf disease being i ported will be reduced to a minimum and after a period Regulations could again be enforced as at present. It is, howev apparent to all that this risk must be taken and we have no dou but that H. M. Commissioner, recognising the urgency of the ca will at once accede to the Chamber Committee's proposals It m be objected by some that coffee seed is now being imported Government and that we should therefore wait. The answer that after a year's delay this importation by Government has by any means been a success as only a few pounds of seed have yet been received, and further that such importations from o country do not meet the urgent circumstances of the case. Still mo they do not touch the shade problem nor do they help us to es blish new industries For ourselves we maintain that this count is as much a coffee country as India and if only we introduce n seed and also suitable shade trees, in a few years from now o export will be higher than it has ever been. At present the coff market is at its lowest. By the time the new crops are ready shipment it is safe to prophesy that prices will be rapidly on t rise and B.C.A. with its cheap labour will soon regain its lost grou

In conclusion, it may be observed that in order to justify t grave step which it is proposed we should take, the Commission will undoubtedly expect the community to be absolutely unanimo in supporting the Chamber Committee's proposals. We tru therefore that the country will heartily and loyally support t Chamber Committee in their action so that H. M. Commissioner m see that he has the support of the whole community in any acti which he may be asked to take. Never before was the need f united action so apparent as at the present time, seeing t whole future of the Protectorate depends upon the action taken this critical juncture.

THE AUGUST COFFEE MOVEMENT IN THE U. S.

Deliveries in August were again heavy, both in the United States and Europe, says the *American Grocer*. The combined movement in both countries leads last year by 298,873 bags. The total deliveries for the first two months of the present trade year lead 1900 by 216,387 bags. This shows that low prices are leading to increased consumption. The visible supply gained heavily, the amount held September 1 being 1,120,012 bags in excess of the total held August 1, and 2,065,353 bags larger than on September 1, 1900. These figures emphasize the enormous bulk of supply, especially when taken in connection with the record-breaking receipts at Rio and Santos, which in two months foot up 3,309,000 bags—a quantity about equal to the total crop in 1880. Such a fact shows the remarkable advance in the productive capacity of Brazil, which is far from reaching its possibilities.

The following statement shows the August movement and general position of the article:

	Bags.	Bags.
Stocks, August 1, 1901—		
United States	1,191,798	
Europe	4,063,991 —	5,255,789
Receipts during August—		
United States	757,957	
Europe	665,536 —	1,423,493
Total supply, September 1 ...		6,679,282
Less Stocks, September 1, 1901 —		
United States	1,471,686	
Europe	3,991,115 —	5,462,801
Deliveries, August—		
United States	478,069	
Europe	738,412 —	1,216,481
Deliveries, August, 1900 —		
United States	289,060	
Europe	628,548 —	917,608
Increase as compared with August, 1900 ...		298,873

The August deliveries in the United States consisted of 372,995 bags of Brazil; 105,074 bags of all other sorts.

The visible supply of the world, September 1,1901, was 8,654,801 bags, against 7,534,789 bags on August 1, an increase of 1,120,012 bags; visible supply on September 1, 1900, was 6,589,448 bags, or 3,065,353 bags increase in one year.

Receipts at Rio and Santos during the first two months of the crop year were 3,309,000 bags, exceeding the previous season's receipts for same time by 1,221,000 bags, and 1899 by 674,000 bags.

If the Brazil crop amounts to 14,000,000 bags—a low estimate—and the mild coffee crop to 5,000,000 bags, there will be with the visible supply July 1,1901, a total supply of nearly 26,000,000 bags of coffee to meet requirements of 15,000,000 to 16,000,000 bags, allowing for an increase in consumption. Present prices may be low but the situation is not such as to permit of manipulation for a rise, or to warrant much higher prices.

THE TEA TRADE.

The British Army requires 1,000,000 pounds of tea annually. Brig.-Gen. John P. Hawkins (retired), late Commissary-General United States Army, stated that, during the Civil War, the troops in his division travelled farther, and sustained the fatigues of the march better, when tea was served instead of other beverages.

W. A. King & Co., Detroit, Mich.:

"Tea-drinkers are rapidly dying off. America is destined to become a great coffee-drinking nation."

Mau, Sadler & Co., San Francisco:

"We decidedly think the depression in tea is due to the present duty. The imposition of the duty has been a detriment, decreasing the consumption among the poorer and medium classes. The duty has caused the importation of very much lower grades. Less fine tea is used at present than formerly. The removal of the duty would be a benefit to the cousumer, and better grades would be imported."

C. W. Antrim & Sons, Richmond, Va.:

"We consider the depressson in the tea trade due to two causes:

"*First.*—On account of the Government allowing low-class, trashy teas to be brought into this country before the duty was put on.

"*Second.*—When the duty was put on, it made the medium class of teas, that are great sellers, too high.

"Now, we think if the duty is taken off and low-class teas are prohibited, you will see quite a difference in the tea trade."

The above opinions are among many of similar import, given in reply to inquiries made by the New York *Commercial*. The facts are that the *per capita* consumption in 1901 is practically the same as in 1900, not varying over one one-hundredth of a pound. The use of tea, judged by the *per capita* record, has been lower since the imposition of the duty of 10 cents per pound. Americans are not lovers of tea as a beverage, and so because the average quality of imports has always been low—very low. Very fine tea forms a small part of the total imports. If consumers were educated to an appreciation of fine flavour, and would acquire the habit of using the beverage as a means of gratifying the palate, the tea trade would be in a more satisfactory condition. But how can we expect the inexperienced housekeeper to appreciate niceties of flavour, and pay for the same, when tea experts differ as much as 20 cents per pound in their estimate of value on a sample of fancy Formosa Oolong?

Russia has the equivalent of 185½ acres planted with tea bushes. Three million seedlings are in nursery. The plants now out are located in three estates. Mr. Popoff, who is making the experiments at Batoum, says:

"My especial duty is the manufacture of tea. There is a good factory—all iron, withering loft above with jute hessian tats it was built by Messrs. 'Sirocco' Davidson, who also supplied all the machinery *viz.*, 12 H. P. steam engine, roller, dry tea sifter and equalizer, ditto cutter and equalizer, oxidizer, downdraft sirocco, packer, machine for compressing pillules and hydraulic press for tablets, and electric machine. Also, Chinese hand sieves, pans, chulas, and winnowers. It is lighted by electricity; there is a telephone from the factory to the office, and thence to my house.

"The crop will be only some 12,000 pounds of tea this season, as I have advised husbanding a great part of the estate."

The export of brick tea from the port of Kiukiang in 1899 rose to 43,352 piculs, as against 33,831 piculs in 1898, and this might be considerably augmented if tea dust were procurable in larger quantities. It is curious to notice Ceylon tea dust figuring among the imports; this occurs for the first time this year, a small consignment having been brought in by the Ressian firms at Kiukiang by way of experiment. It is stronger and more highly flavoured than the China dust, and is to be used in the manufacture of brick tea.—*American Grocer.*

CACAO PLANTING IN COSTA RICA.

"E. A. C." writes to the *Ceylon Observer*:—

In reply to your foot-note appended to my article "Coffee in Costa Rica," I give you the benefit of what knowledge I have been able to acquire about cacao in this country. What is most surprising about it is that with such facilities as exist for its production, it should not be able to supply even the local market, which is a very small one, a few hundred quintals sufficing to supply consumption throughout the republic: one may go to several stores in the cities and villages and enquire for cacao in quite a few before he will find it, and then most likely have to pay about one colon per pound of native best, lower grades from Colombia and Ecuador selling for 60 centimos upwards. It is generally supposed that there are some millions of acres specially adapted for the cultivation of cacao in the following districts of the republic, Golfo Dula, El General, Talamanca, San Carlos, and Matina, the last-named being the only one with railroad advantages. This, however, should not be considered much of a drawback to the others on taking into account the high prices realised in the capital. The principal hindrance to the development of cacao culture on lands known to be of the best, is that unwise legislation has allowed anybody with or without intentions of cultivation to grab up enormous tracts of land wherever they chose by merely "denouncing" them according to a prescribed law: 99 out of 100 who did so, are doing nothing with the land, and are only waiting for somebody to turn up some day, and pay them a big price for it, meanwhile they are stubbornly fighting any small road-tax that is levied once or twice a year: the only lands of account that a poor man can work on are small lots of 50 hectares apiece, along the sea-coast or banks of navigable rivers known as the maritime mile, which can be taken

up and held according to what is known as squatter's right, which is indisputable to all-comers as long as it is not abandoned for over one year.

The Government is just beginning to offer some inducement to the culture of cacao by giving premiums of 30 centimes per tree on what is in production, Mrs. Arnold of Limon thereby coming in for a bonanza of some 1,000 colones on her farm in Matina: Messrs. Codleman and Heinsen, who have been planting for the past seven years in San Carlos, also received a considerable benefit from the same source. This coming season should give them splendid returns, and they are well prepared for it, having put in a great deal of drying apparatus this year, as well as a tramway to different parts of their estate.

It is to be regretted that cacao will not flourish in the most populated part of the country, the central plateau, and it is difficult to foretell when conditions will change for the better as regards the present tenure of lands. Many are looking hopefully for the opening of the Nicaragua canal, which they believe will be the means of foreign capital developing the enormous plains of San Carlos, and give a river and ocean outlet for all products. In the hands of the present owners the land can never improve.

I am indebted to Mr. Hugo Karlsen of San Carlos for the following details of a farm of 80 acres, that has been run for several years by Mr. W. Armstrong of Bluefields, Nicaragua, and hope that the same may be of interest to your readers. To abbreviate as much as possible I will summarize small items by stating that they call for:—gathering, planting, and taking care of seed; planting, cleaning, pruning, marketing of produce; tools, houses, foreman's salary, mules and equipments, boats, drying houses, stationery, etc.; values are given in American gold.

First year.—Cutting down forest, planting and cleaning once of 12,000 banana suckers, gathering and planting 10,000 rubber seeds, gathering and planting of 13,000 cacao seeds, erection of houses, etc.

		$
		2,957
Second year.—Transplanting and cleaning rubber and cacao, marketing of 15,000 bunches of bananas	... ...	1,832
Third year.—Cleaning, replanting, and marketing of bananas		1,845
4th year, cleaning, replanting, and marketing of bananas	...	1,920
5th year do do 10,000 lbs. of cacao	...	2,405
6th year do do 18,000 „ do	...	2,575
7th year do do 30,000 „ do	...	2,805
8th year do do 48,000 „ do	...	3,425
9th year do do { 60,000 „ do ; 15,000 „ rubber ; 19,200 „ do }	...	4,365
10th year do do 60,000 „ cacao	...	4,475
Total of expenses for ten years	...	$28,604

Proceeds.

			$
2nd year, by sale of	15,000	bunches of bananas at 16c. ...	2,400
3rd year do	20,000	do do ...	3,200
4th year do	20,000	do do ...	3,200
5th year do	20,000	do do ..	3,200
do	10,000	lbs. cacao at 18c. ...	1,800
6th year do	20,000	bunches of bananas at 16c. ...	3,200
do	18,000	lbs. cacao at 18c. ...	3,240
7th year do	12,000	bunches of bananas at 16c. ...	1,920
do	30,000	lbs. cacao at 18c. ...	5,400
8th year do	6,000	bunches of bananas at 16c. ..	960
do	4,800	lbs. cacao at 18c. ..	8,640
9th year do	15,000	lbs. rubber at 60c. .	9,000
do	60,000	lbs. cacao at 18c.	10,800
10th year do	19,200	lbs. rubber at 60c. ...	11,520
do	60,000	lbs. cacao at 18c. ...	10,800
Total of proceeds		...	$79,280
Total of expenses		...	$28,604
Profits		...	$50,676

I would remark that these are favourable returns all of which cannot be obtained in some parts as represented here; in the case of bananas nothing could be sold to advantage where the distance from the port or railroad is great. The Bluefields climate must always be a drawback to foreign settlement, whatever advantages it may have in the question of cheap labour; otherwise I see no reasons why similar results should not be obtained in favourable districts in this republic.

THE COST OF PRODUCTION OF COFFEE.

Apropos of the figures published in a late number of *Brazilian Review* on the cost of production at the Faze União, a correspondent from Pernambuco writes under designation of "Gold *versus* Exchange" as follows:—

	1896	1897	1898	1899	19
Arrobas per 1,000 trees ...	170	87	121	57	2
Average exchange ...	9 1/32	7 11/16	7 5/32	7 27/64	
Price per 15 kilos. ...	11s.8d	8s.	6s.	5s.4d.	6

A *reductio ad absurdum* to begin with! The table can be rea show that a low exchange causes the trees to bear less whils higher exchange causes them to bring forth more abundant This deduction is no more wide of the mark than is the asser that exchange can affect the gold price—as great a fallacy as it is the "tail that wags the dog."

The sterling price—assuming that this is based solely on sup and demand and that Stocks and Visible Supply are the pr through which the relative effect is foreseen, then we can arr at an evident reason why coffee was worth 11s. 8d. in 1896 and in 1897. In 1896 the reading of the prism was too optimistic an this year we got more for our coffee than the actual circumstar warranted. In 1897 the reading of the prism was still too optir tic at 8s., for next year still shows a decline, notwithstandin smaller crop. In 1898 the prism is still too optimistic, for n year shows a drop from 6s. to 5s. 4d. In 1899 the prism was low, for next year shows a rise from 5s. 4d. to 6s., and so we go on *ad infinitum*.

The above seems to disclose of two fallacies, *viz.*—that excha can be a factor in the fixing of the gold price—it, at most, can be a factor for accepting or rejecting the fixed gold price duri say, a month or two; the other fallacy is that of Dr. Assis Bra and of many others, *viz*, that importers and retail dealers combine to sell at fantastic rates. The import price, as we h seen, depends on the sanguine or doleful view of the prob effect of supply or demand, and the coffee market is not yet no it likely to be collared by any one Trust, so supply and dem hold the field. As for the fantastic difference between the p of coffee here and its retail price, this is naturally accounted by the actual cost of retail distribution. A corollary can easil deduced from all this, *viz.*, that speculation can have much les do with the price of coffee than is often supposed to be the case

DISTRICT ASSOCIATIONS.

SHEVAROY.

Proceedings of the Monthly Committee Meeting of Shevaroy Planters' Association, held in the Victoria Roo on Monday, 7th October, 1901, at 1 p.m. PRESENT:—H J. M. Kempff, Messrs. J. C. Large, W. I. Lechler, C. Lechler, and R. Gompertz, *Honorary Secretary*.

1. Notice calling the meeting taken as read.
2. Read a letter from Mr. Large complaining that the Tahsi had gone away on leave on days when notice had been given that treasury would be open, and that he had thereby been prever from cashing his supply Bills.—Read also the Honorary Secreta letter to the Collector, dated the 20th ultimo, reporting the ma and requesting that better arrangements might be made.

Resolved that the Collector's reply be awaited.

3. Read letter from Mr. Newton, of Willcocks & Co., offering send up 7 lbs. of Ufertas, and 20 lbs. dried blood manure experiment.

Resolved that Mr. Newton be asked to send the manure, but t he be informed that so small a quantity is insufficient for exp ments, and not likely to give very satisfactory results.

4. Read letter from Director of Land Records and Agricult N.-W. P. and Oudh, inquiring whether we would like his bulle

Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant appointment of "Purveyors to Her Majesty The Queen and Emp of India" from the year 1837 until the time of her death, have had the honour of being appointed by Royal Warrant "Purveyor The King."

sent us, adding that anything of general interest is sent to the Imperial Agricultural Ledger.

Resolved that he be thanked for his kind offer, but informed that as we see the Imperial Agricultural Ledger, we do not think we need trouble him to send the bulletin contributed to it from the N.-W. P. and Oudh.

5. Read circular letter from Secretary, U. P. A. S. I., forwarding letter from Traffic Manager, S. I. Railway, drawing attention that coffee is carried much more cheaply at owner's than at Railway risk.

Resolved that the Traffic Manager be informed that planters are well aware that they can get their coffee carried more cheaply by absolving the Railway from the necessity of taking ordinary precautions to prevent theft or damage, but that this is not what they want. They desire that the rate for the carriage of coffee at the Railway Company's risk be reduced.

6. Resolved that a vote cob enksof thanveyed to Messrs. Binny & Co., for their courtesy in permitting Mr. Elder's report on the Leeming system to be published.

7. Read circular letter No. 77/01 forwarding letter from the Hon'ble Mr. Acworth proposing that each District Association should pass a vote of sympathy with the Assam planters, to be forwarded to that body through the I. T. A.

Resolved that this Association entirely agree with Mr. Acworth, and record a vote of cordial sympathy with the Assam Tea Planters, and hope that their representations to the Supreme Government may procure their speedy relief.

8. Read circular letter No. 80/01 from Secretary U. P. A. S. I., forwarding Mr. Barber's suggestion for a quasi-compulsory cess of Re.1 per ton on coffee.

Resolved that this matter stand over for consideration at the next meeting.

9. Read letter from Mr. C. G. Lechler *re* repair of part of the road to Killiur.

Resolved that the Collector's sanction be asked.

10. Read letter from Mr. Travers-Drapes asking the Association to engage a pleader to defend his maistry and coolies in a case which he says has been trumped up against them by the police.

Resolved that Mr. Drapes be informed that in the opinion of this meeting the estate concerned should give the accused such assistance as may be necessary.

The following letters were read and recorded :—

A letter from Mr. R. Buchanan, recommending a cheap manure—"Bone Char."

Circulars received from the Secretary U. P. A. S. I. during the month :—

No. 74/01. Forwarding copy of Mr. Elder's report on the Leeming system.

No. 75/01. Forwarding copy of letter from Mr. de Niceville, saying he will be glad to visit Tea and Coffee districts in South India, if Planters will assist him.

No. 76/01. Forwarding confidential letter which the I. T. A. propose submitting to Government.

No. 78/01. Forwarding letter from Mr. Hodgson to Chairman *re* Labour Bill.

No. 79/01. Forwarding letter from Planters' Association, Ceylon, saying that they have secured the right to sell Ceylon tea in the cup at the St. Petersburg Exhibition.

G. O. No. 1200, dated 7th August, 1901.

A letter from the Collector, Salem, forwarding terms on which Government will assist planters to undertake mule breeding.

The following books and papers received during the month were laid on the table :—

Planting Opinion, August 31st, September 7th, 14th, 21st and 28th, October 5th.

Brazilian Review, July 23rd and 30th, August 6th and 20th.

Proceedings of the Nilgiri Planters' Association, dated September 23rd, 1901.

of the Wynaad Planters' Association, dated September 4th, 1901.

of the I. T. A., dated August 27th, September 10th, and 24th, 1901.

Circulars from the I. T. A., No. 61, dated September 9th, 1901, No. 62, dated September 10th, 1901. No. 63, dated September 12th, 1901. No. 66, dated September 24th, 1901. No. 68, dated September 26th, 1901, and No. 1, dated September 23rd, 1901.

Agricultural Ledgers :—

No. 3. Cultivation of Pepper in the Bombay Presidency.

No. 4. Nature, value, and utilisation of Alkali Lands.

No. 5. Diseases of Sugar Cane in Bengal.

No. 6. Properties of Indian Geranium Roots.

No. 7. On the seeds of some species of Brassica and Sinapis.

Vol. II. Bulletin No. 45, Department of Land Records and Agriculture, Madras—A tea eel-worm disease in S. India.

ROBT. GOMPERTZ,
Honorary Secretary, S. P. A.

MARKET REPORT.

[*Per Mail advices of 27th September* 1901.]

COFFEE.

The London Commercial Record says:—The market continues to be somewhat sparingly supplied, and, as there has been a steady demand from the trade, prices have again been in favour of sellers, and privately business in second hands has been transacted at improved rates A large consignment of washed Santos sold with competition at rather higher prices. The general tendency for "futures" has been stronger, and though the latest prices are not quiet up to the recent highest point, they still show an advance for the week, a rise in Exchange counteracting the very heavy receipts; yesterday's business was done in December Santos at 29s 7½d to 30s, March at 30s 1½d to 30s 7½d and May at 30s 9d to 31s 1½d, closing at the lower figures.

To-day's auctions comprised—21 bags Ceylon Liberian, 797 bags East India, 280 bags Nyassaland, 3 barrels Jamaica, 256 bags Guatemala, 399 bags Colombian, 73 bags Costa Rica, 103 bags Nicaragua, 16 bags Salvador, and 57 bags Vera Paz. The auctions to-day offered only unimportant supplies and passed off slowly at steady prices.

London ...	... Santos ...	Dec. delivery	... 29s 7½d.
New York	... No. 7 Rio...	,,	... 5·20 cents.
Hamburg...	... Santos ...	,,	... 30½ pf.
Havre ...	... Santos ...	,,	... 37 francs.

Imports, Deliveries and Stock of Coffee in London are as follows :—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	16,432	17,436	39,311	30,626
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	14,956	12,248	22,444	15,624

The preceding figures exhibit—

	Tons.
In the Imports an increase this year of ..	8,685
Home Consumption an increase of	2,708
Export an increase of	6,820
Stock a decrease of	1,004

Auctions this week have passed off as under :—

East India.—1,111 bags 9 cases sold as follows—*Coorg*, smalls 37s to 43s 6d, low middling 45s to 48s, middling 58s, bold 55s to 66s 6d, good blue bold 80s 6d to 81s, peaberry 64s to 77s 6d; *Mysore*, low middling 48s; *Neilgherry*, middling to good middling 48s to 58s 6d; *Wynaad*, low middling 43s.

Mocha.—223 packages bought in.

Jamaica.—2 barrels 5 bags sold—ordinary palish 30s to 31s.

Costa Rica.—382 bags partly sold—ordinary to good ordinary 36s to 40s 6d, low middling dull coloury 49s, peaberry 40s to 64s 6d.

Guatemala.—1,088 bags mostly sold—smalls 27s to 42s, low middling 45s to 47s, middling 50s to 52s, good middling 58s 6d to 61s, bold 57s to 66s, fine blue bold 76s, peaberry 36s to 68s.

Salvador.—Of 321 bags catalogued 110 bags sold—Ordinary brownish 35s 6d to 37s, peaberry 40s.

Nicaragua.—262 bags about half sold—smalls 36s, low middling 45s, bold 54s 6d, fine bold 82s, peaberry 44s to 80s.

Mexican.—358 bags mostly sold—ordinary to good ordinary 37s 6d to 42s 6d, middling brownish 54s 6d, bold 65s, peaberry 35s 6d to 38s.

Colombian.—683 bags sold—damaged, smalls 30s to 37s 6d, good ordinary 39s to 39s 6d, low middling 42s to 45s, middling 46s 6d to 47s 6d, bold 48s to 54s 6d, peaberry 43s to 44s 6d.

Brazil.—3,288 bags washed Dumont Santos sold—smalls 28s to 29s, medium 32s to 35s 6d, bold 38s to 45s, peaberry 34s to 45s.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99. Bags.
Rio ...	1,769,000	853,000	1,205,000	1,013,000
Santos ...	3,419,000	2,543,000	2,751,000	2,116,000
Total ...	5,188,000	3,396,000	3,956,000	3,129,000
Crop ...	—	10,900,000	8,971,000	8,772,000

Rio Exchange $11\frac{7}{16}$d, previous day $11\frac{11}{32}$d.

HAVRE, *September* 26.—Good average Santos September opened quiet at 37f. and closed lower at $36\frac{3}{4}$f., December opened at $37\frac{1}{4}$f. and closed at 37f., March opened at $37\frac{3}{4}$f. and closed at $37\frac{1}{2}$f., May opened at 38f. and closed at 38f., July opened at $38\frac{1}{4}$f. and closed at $38\frac{1}{4}$f.

HAMBURG, *September* 26.—Good average Santos September opened steady at 30pf. and closed dull at 30pf., December opened at $30\frac{1}{2}$pf. and closed at $30\frac{1}{2}$pf., March opened at $31\frac{1}{4}$pf. and closed at 31pf., May opened at $31\frac{3}{4}$pf. and closed at $31\frac{1}{2}$pf., July opened at 32pf. and closed at 32pf.

NEW YORK, *September* 26.—Closing prices of No. 7 Rio were as follow:—

	Sept.	Oct.	Nov.	Dec.	Jan.
September 26...	5·00	5·00	5·10	5·20	5·30
September 25...	5·10	5·10	5·20	5·30	5·40

Prices realized at Auctions of the Principal Marks of East India Coffee for the Week ending 25th Spetember, 1901.

COORG.

		1 Bags		2 Bags		P Bags	
Mathesons Coorg Kanambaddy ...		90-0	52-0	40-0	43-6	—	—
Do. Woshully ...		20-0 76-0	63-0 62-6	—	—	—	—
Grant & Abbs Coorg Cowrie Betta		165-0	not sold	180-0	43-0	25-0	60-0
		A		**B**		**PB**	
IM Santicoopa		15-0	51-0	20-0	not sold	6-0	51-0
IM Netley		13-0	56-6	21-0	45-0	6-0	not sold
		1		**2**		**P**	
Mathesons Coorg Cotta Betta ...		20-0 65-0	66-0 66-6	79-0	47-6	32-0	66-0
Do. Balamannay ...		20-0 40-0	66-6 66-0	62-0	47-6	34-0	66-0
Rookma Coorg		10-0	75-6	25-0	56-0	5-0	69-0
		1		**2**		**P**	
Mathesons Coorg Polli Betta ...		70-0 20-0	65-6 66-0	20·0 95-0	47-0 46·6	20-0 10-0	67-0 66-6
Mac Innes WNG		11-0	not sold	10-0	43-0	6-0	not sold
Bajee Collie Coorg		14-0	not sold	16-0	40-0	4-0	not sold
Grant & Abbs Coorg Cowrie Betta		46-0	63-6	79-0	46-6	10-0	65-0
		1		**2**		**PB**	
Matheson's Coorg Woshully ...		123-0 40-0	66-6 67-0	121-0	48-0	63-0	68-0
Do. Polli Betta ...		20-0 180-0	34-0 34-6	— (cherry)	—	18-0	45-6
		A		**B**		**PB**	
IM Bala Kadoo		20-0 36-0	67-6 67-0	20-0 79-0	49-0 48-6	21-0	70-0
		1		**2**		**PB**	
Matheson's Coorg Chickenhully Blue Mountain.		3-0	75-0	4-0	60-0	5-0	75-0
Grant & Abbs Coorg Cowrie Betta		34-0	59-0	51-0	45·0	6-0	62-6
Matheson's Coorg Dolli Betta ...		69-0	68-0	98-0	43-0	25-0	69-0
PJB Rookma		4-0	73-0	11-0	54-0	3-0	62-0
F Kowrie Kadoo Coorg ...		5-0	55-0	10-0	45-0	2-0	47-0
HFD Coorg Haradur ...		14-0	64-0	16-0	46-6	4-0	55-6
Grant & Abbs Coorg Cowrie Betta Cherry		—	—	—	—	—	—
Matheson's Coorg Kanambaddy...		40-0 93-0	66·6 66-0	116-0	48-0	68-0	64-0
Do. Balamannay ...		150-0	66-0	147-0	47-6	43-0	70-0

NEILGHERRY.

		A		B		PB	
Clovelly		3-0	41-0	12-0	39-6	3-0	43-6
Adderley...		5-0	42-0	17-0	39-6	19-0	42-0
Thiashola Nilgiris		12-0	not sold	21-0	not sold	4-0	not sold
		1 Bags		**2** Bags		**PB** Bags	
Marylands THS ◇		17-0	62-0	27-0	46-0	7-0	6
		A		**B**		**PB**	
Waverley		9-0	74-6	23-0	not sold	4-0	6
JM Droog Estate Neilgherry ...		16-0	86-6	20-0 16-0	66-0 65-6	7-0	
Mullanoor		14-0	57-0	21-0	45-0	4-0	
		1		**2**		**PB**	
Riverdale THS ◇		45-0	71-0	62-0	50-6	20-0	6
		A		**B**		**PB**	
JM Droog Estate Neilgherry ...		4-0	70-0	35-0	57-0	7-0	
Do. do. ...		11-0	88-6	20-0 14-0	69-6 69-0	6-0	7
Oolieut Nilgiris		12-0	52-6	18-0	42-0	4-0	4
Terramiah		6-0	65-0	15-0	50-0	2-0	6
Tuttapollium W ◇		7 0	53-0	14-0	42-0	—	

MYSORE.

		0		A		PB	
Rungaiks Mysore		8-0	65 0	30-0	53-0	8-0	6
		1		**2**		**PB**	
KCE Mysore		11-0	93-6	14-0	70-0	5-0	7
PM & Co. Mysore		5-0	not sold	16-0	38-0	11-0	4

NELLIAMPATHY.

		1		2		PB	
OCC Victoria		40-0	not sold	82-0	not sold	20-0	5
		A		**B**		**P**	
Nelliampathy Moonkwood ...		7-0	55-6	18-0	45-6	4-0	4
Do. do. Cherry.		3-0	33-0	15-0	33-0	4-0	3

PULNEYS.

		1		2		PB	
A & Co. Peryoor		6-0	48-0	24-0	41-6	3-0	6

WYNAAD.

		1		2		PB	
Avondale Nella Cotta ...		17-0	not sold	25-0	43-0	5-0	5
Eddakul		11-0	52-0	7-0	41-6	3-0	

TEA.

INDIAN.—Catalogues embraced a smaller quantity, *viz.*, 33,9 packages, contrasted with 41,300 packages during the foregoi week and 36,700 packages at this period a twelve-months since.

The above moderate amount was well within the requirements the trade, and a strong and progressive demand was appare The general quality was more useful, though really fine invoic were less frequently met with. There is not much change to no in values, but any movement has been against buyers, full ri liquoring kinds as before, continuing to be in most request. A low priced Teas above the commonest were again the turn dear and present indications for this class are favourable.

For 29,000 packages on estate account $8\frac{3}{4}$d per lb. was obtain *versus* $8\frac{7}{8}$d per lb. for 30,000 packages and $8\frac{3}{4}$d per lb. for 34,5 packages in the two former seasons.

Including what is advertised for next Monday the total submitt on importers' account in September is:—

1901.	1900.	1899.
173,000 packages	147,800 packages	175,300 package

making the total of this year's crop offered 281,000 packag compared with 294,000 packages and 341,700 packages to 3 instant in 1900 and 1899 respectively.

Telegrams from Calcutta state that 5a 2p per lb. was realis there for 20,000 packages on the 20th instant, a steady tone bei noticeable. For to-day, Friday, 20,000 packages are declared.

CEYLON.—Rather over 19,000 packages passed the hamm opposed to 20,600 packages in the previous week, and 19,3 packages a year ago

The desirable and somewhat limited selection combined further strengthen the market, and competition was spirited all grades. Ordinary descriptions were again fractionally dear while fair to good medium for the most part brought $\frac{1}{4}$d $\frac{1}{2}$d per lb. advance. Higher quotations were also often register for standout and choice lines, improvement in cup being w recognised in the bidding.

The average is 7⅞d per lb. On the 19th instant it stood at 7½d per lb., and 7d per lb. in 1900.

Totals printed for the month are :—

1901.	1900.	1899.
86,500 pkgs.	98,200 pkgs.	114,300 pkgs.
(Avge. 7⅞d per lb.)	(Avge. 6⅞d per lb.)	(Avge. 7⅞d per lb.)

Java.—About 2,600 packages of direct import were brought forward. There was an active enquiry and results were on the whole to the advantage of sellers.

September Public Sales aggregated :—

1901.	1900.	1899.
5,400 pkgs.	2,700 pkgs.	3,700 pkgs.
(Avge. 6½d per lb.)	(Avge. 6½d per lb.)	(Avge. 7d per lb.)

Deliveries.—Clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.* :—

From 1st to 24th September, 1901 ...	...	13,323,904 lbs.
Do. do. 1900 ...	...	12,773,736 ,,

During the week the following have been printed for sale by public auction :—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offered. Pkgs.
India	30,307	3,553	33,860
Ceylon	17,777	1,285	19,062
Java	2,553	80	2,633
Total ...	50,637	4,918	55,555

Also 424 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated September 27th, 1901, says :—

Quantity brought to Auction in London from 1st June to date.

	Indian. Pkgs.	Ceylon. Pkgs.	Java. Pkgs.
1901-1902	319,731	418,868	24,088
1900-1901	315,980	452,779	15,773

34,585 *pkgs.* Indian
19,551 ,, Ceylon
2,671 ,, Java
} Total 56,807 packages were offered in public auction this week.

The Indian Tea Association has published figures which show that the quantity of Indian Tea manufactured to mid-August was below that made to the same date last season, and estimating the total crop at about three million pounds under last season's outturn.

Mr. J. E. O'Conor, C.I.E., in his "Review of the Trade of India," commenting upon the over-production and consequent low prices during last season, remarks :—

"While reduced prices were the consequence of over-production, they also became the cause of the continuance of over-production, for, to compensate for the fall in prices, as much leaf as possible was taken from the plant, and the quantity was increased at the cost of the quality. This operation again, by lowering the quality, had the effect of maintaining and accentuating the fall in prices." "When prices fell because tea was produced in excess, the fall induced directors to endeavour, by further increasing production, to continue dividends to shareholders, and this endeavour to increase quantity was inevitably attended by a reduction in quality *the combination of the two bringing about a further fall in prices.*"

The above remarks are very pertinent, and well merit the serious attention of producers.

Indian.—With rather smaller auctions and a revival of trade in the provinces, the market was again strong, the better demand noticed last week being more pronounced, resulting in a very steady market for all descriptions. Common whole leaf Teas were, if anything, slightly dearer. Averages :—Amal. T Co.'s gardens "Dooteriah" and "Lattakoojan," 1/2¼; "Teesta Valley T Co.," 1/2¼; "Balijan T Co.," 1/1½; "Ass. Co.," 1/1¼.

Week's average of New Season's Tea sold on Garden Account, 1901, 28,951 pkgs., av. 8·62d. 1900, 30,347 pkgs., av. 8·75d.

New Season's Tea sold on Garden Account 1st June to date, 1901, 217,353 pkgs., av. 8·45d. 1900, 250,287 pkgs., av. 8·20d.

Ceylon.—With a comparatively light auction and a continuance of the improved quality competition was strong, and prices showed an advance varying from ¼d. to ½d. per lb., in which all descriptions participated. Averages:—"Drayton Ests. Co.," 1/-; "Nuwara Eliya Co. Concordia," 11¼d.; and "Talawakelle T Co., 11d.

Average for week 7·83d., against 6·97d. same week, 1900.

Ceylon Tea sold on Garden Account 1st Jan. to date, 890,366 pkgs., av. 6·65d. 1900, 953,369 pkgs., av. 7·17d.

Java.—The firm tone noticed above was equally pronounced in Java Teas, all grades showing a hardening tendency with improved prices. 120 packages "Tanawattee" averaged 9¾d. per lb., and 108 "Golapara" 9¾d.

COCOA.

An extremely slow tone prevailed at the auctions on Tuesday, when 2,225 bags were offered. Prices, however, did not alter materially, although only 575 bags sold. Of 359 bags Trinidad catalogued, 165 bags sold—very fine red 73s 6d, good to fine 70s to 71s, and fair 69s, or about the values ruling at the previous auctions. 12 bags Jamaica partly sold at 62s for good, while 5 bags Honduras realised 65s 6d. Of 850 bags Guayaquil offered only 40 bags sold—greyish red Caraquez 66s. 17 bags Seychelles partly found buyers at 61s. 118 bags common African sold at 58s to 59s 6d. Of 478 bags Ceylon 235 bags were disposed of at steady rates—60s to 65s 6d for brownish to fair red, and 40s 6d to 43 6d for small. 19 bags St. Lucia, 360 bags Haiti, and 3 bags Maracaibo passed the hammer unsold. Privately not much business done, the sales reported including 200 bags Trinidad at 66s to 70s, 300 bags Haiti at 53s to 53s 6d. 200 bags Ceylon and 1,000 bags Guayaquil, Caraquez at 66s, Arriba at 71s 6d to 78s.

PEPPER.

Black.—The market is firm, and with more demand fully 150 tons have changed hands, including fair Singapore on the spot at 6d to 6 1/16d, August-October shipment at 6⅛d, September-November, at 6⅛d to 6 3/16d, and November-January at 6¼d.

At auction on Wednesday 13 bags Singapore, 24 bags Penang, 200 bags Trang, and 200 bags Wynaad were all bought in.

White is firm. Singapore October-December shipment has been sold at 9¼d to 9 5/16d, and Penang December February at 8⅞d. About 120 tons sold.

At public sale on the 26th instant 109 bags Singapore were bought in at 9½d to 9¾d per lb.

Pepper firm to-day. Of White 20 tons Singapore October-December shipment sold at 9 11/32d.

GINGER.

Cochin.—The market continues very firm, but transactions are limited. Of 207 cases 92 bags offered only 3 cases bold and medium dullish cut and scraped sold at 85s per cwt. Privately medium and small washed rough has been sold at 39s 6d to 40s, being a little dearer.

No *Jamaica* catalogued.

CINCHONA.

At auction on Tuesday, the small supply of 1,828 packages was offered, of which the bulk sold, with good competition, at an average unit of 1⅜d, against 1½d at the last London sale, or a slight advance on the Amsterdam unit. A large supply of Bolivian cultivated Calisaya cinchona was offered, and met a good demand.

The following table shows the amount of bark offered and sold :—

	Packages offered.	Packages sold.
Bolivian cultivated Calisaya ...	979	979
East Indian	343	268
Java	236	191
Ceylon	226	200
West Coast African	44	44
	1,828	1,628

The following were the approximate quantities of bark purchased by the principal buyers :—

	Lbs.
Brunswick factory	59,143
The American and Italian factories	52,934
The Mannheim and Amsterdam factories	40,265
The Paris factory	15,412
The Frankfort and Stuttgart factories	11,024
Messrs. Howards & Sons	3,900
The Imperial factory...	1,500
Druggists, etc.	13,214
Total quantity sold ...	196,392
Bought in or withdrawn ...	27,194
Total quantity offered ...	223,586

The following prices were paid:—

West Coast African.—Broken quill, 5⅞d to 6d per lb.

South American.—Bolivian cultivated Calisaya, flat, 1s 3d to 1s 3½d per lb.; quill, part broken, 5d to 7¾d; rich, 8¼d. Cartagena small soft, 1⅝d per lb.

Ceylon.—Officinalis, chips and shavings, 2½d to 3½d per lb. Red stem, renewed, 3⅝y to 4⅝a; chips and shavings, 2⅛d to 4d; broken quill and chips, 2⅞d to 4¼d; and root, 4d to 5d per lb.

East Indian.—Ledgeriana, renewed, 4½d to 7½d; root, 5¾d; and quill, 7⅛d. Brown, renewed, 4½d to 6⅛d; chips and shavings, 2¼d to 5⅞d; branch, ¾d to 3¼d. Red, renewed, 4⅛d; chips and shavings, 2¼d to 3⅞d; and root 1½d to 2⅛d per lb.

Java.—Ledgeriana branch, 4¾d to 6¾d; stem-chips, 7d to 10¾d. Succirubra root, 3½d to 5d per lb.

To the Amsterdam auctions, to be held on October 3, 1,912 bales (170,807 kilos.) have been added, so that the total amount to be offered amounts to 6,155 bales and 307 cases, totalling 577,375 kilos The stock in first hands at Amsterdam on September 18 consisted of 2,348 packages Government and 8,528 packages private bark, including the quantity to be offered at the above auctions. In the drug-auction, 3 bales of thin flat Calisaya bark, partly damaged, sold readily at 1s 2½d per lb.

QUININE.

The market has not changed much this week, and although firm at [illegible], it closes rather quiet with buyers of B and S and or Brunswick at 1s 1⅛d, and sellers at 1s 1¼d for December delivery and October delivery quoted.

Vanilloes.—The large supplies offered at last week's auct took the whole of Friday and part of Saturday to be disposed and, with a fair competition, the greater part of the quan brought under the hammer was sold at an average decline of 4 5s, the cause of this having been that further shipments are pected shortly, and that the quality of the *Seychelles* vanilla mostly in bad keeping condition. Of 1,533 tins offered, ab 1,450 sold, as to quality, as follows: *Seychelles*, 7½ to 8 inches at 6d to 24s, 6½ to 7 inches at 12s 6d to 17s, 5½ to 7 inches at 8s 3 10s 6d, 5 to 6 inches at 8s 6d to 13s 6d, 5 to 5½ inches at 6s 9d t 3d, 4 to 5 inches at 7s 6d to 12s 6d, 3½ to 5 inches at 5s 3d to 8s 2½ to 4 inches at 7s 6d to 11s 6d, common and mouldy 2½ to 7 2½ to 6 inches at 2s to 6s 6d. *Madagascar* common at 8s to 9s, *Bourbon* fair 7½ to 8 inches at 18s 6d, and common, 3½ to 6½ inc at 9s. *Mauritius*, 7 to 7½ inches at 11s 6d, and 4 to 6½ inches a to 9s 6d.

CARDAMOMS.

Offered, 222 packages. Sold, 170. The quantity offered about half what it was a fortnight ago, and the lots sold to- fetched steady prices at a fair competition. *Mysore*, bold p fetched 4s 4d, good fair bold 3s 1d to 3s 2d, medium bold pa 2s 7d to 2s 9d, medium pale 2s 1d to 2s 4d, medium palish 10d to 2s, small medium pale 1s 7d to 1s 9d, small 1s 5d to 1s splits 1s 4d to 1s 5d, and seeds 2s 3d to 2s 4d. Good *Mala* bought in at 2s.

(Average for all India 8·86d., September 27th.)

Garden.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Du and Various.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Pric
Neilgherry ...	**265**	**8·26**												
New Hope ...	98 p	6	22	7½	33	5¾	14½c	7½	23	5	...	...	6½c	4½
Nonsuch ...	167½c	10¼	121½c	9¾ 11¾	46½c	9½	...	...	...	...	...	...	...	...
Travancore ...	**711**	**6·36**												
Ellangy ..	102 p	5¼	...	...	20	5¼	27	6¼	23	4½	...	...	32½c	4½
Glenmary ..	109	7¼	31	7	...	...	33	8½	25	5¾	...	...	20	7
Mount ..	40	6½	...	..	10	6	18	7¼	...	...	...	...	12	6
Poonmudi T Co B	60 p	6½	...	..	16	6	15	7¾	11	5	7½c	5¼	11 p	3¼
,, Braemore	68 p	6¼	15	7¾	24	6	8	8¼	14	5¼	4	4½	3½c	3½
,, Poonmudi	127 p	6¼	21	7½	48	6¼	28½c	7½	26	5¼	...	...	4¼c	3½
S I T Co Kud Kar	112	5¾	15	5¾	...	...	43	6¾	31	5	...	...	23	5¼
Trav T Est Co BA	93	7	20	10	31	5¾	24	6¾	...	...	18	6	...	...
Wynaad ...														
Wynaad T Co Per...	198 p	5¾	37	6	...	...	52½c	7	104	5½	...	...	5½c	4¾

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DOMESTIC OCCURRENCE.—The fee for inserting a domestic occurrence will be *One Rupee* for each insertion, payable in advance.

N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 1st proximo. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad. *October 22nd.*—*Weather*—Wind from N.-E. and heavy showers alternating with bright sun. Temperature in shade ranges 60° to 80°. The heavy showers of the North-East cause a good deal of wash. *Crop*—ripening up rapidly. *Coffee*—very healthy, little or no leaf disease. *Health*—Good. *Labour*—Abundant. *Interesting item*—A small gymkhana is to be held at Saklaspur this week.

Coorg. Polli Betta, *23rd October.*—*Weather*—Occasional heavy North-Easters. Coffee looking very fine. In the western parts heavy pickings are being taken in, some estates taking in over 100 bushels per day. On the eastern side crop has not well begun yet. *Labour*—Plentiful. *General Health*—Fair.

MARKETS FOR INDIAN COFFEE.

Indian coffee-planters are fully alive to the desirability of lightening the quantity of coffee they place on the London market with a view to increasing prices. Needless to say, the course referred to can only have the anticipated result if the high standard of quality is maintained. *Apropos* of this subject, we would refer to the recent prize-essays quoted from a Canadian paper. Many of our readers may have wondered why we have devoted so much space to these. Well, in the first place, we think that the producer can derive nothing but advantage from acquaintance with the methods of the retailer; more especially, just at the time when the former is studying how to stimulate consumption. Moreover, there is one peculiar feature about these essays that can scarcely have escaped the notice of observant readers. Among the various descriptions of coffee specially recommended the essay-

ists, generally speaking, do not include *Indian*. They do include the Ceylon berry, which is almost out of the market. In other words, the reputation of Ceylon plantation coffee has survived its ancient glory—we might almost say, has survived the coffee itself—in such a distant market as Canada. Indian coffee has still to win a reputation there. If this fact does not put Indian planters upon their mettle, we know not what will. Canada is but one important market, among a goodly number, to which the above remark applies.

Our present aim is, however, to deal more particularly with the potentialities of the Indian market, rather than to discuss the chances for Indian coffee in foreign consuming centres. We cannot but think that the first duty of the planter is to cultivate to the uttermost the market that is at his door. He is striving now to do this ; but for years he neglected it, and one result has been that while Indian coffee has been fetching unsatisfactory prices in Europe, Brazilian and other coffees have been selling in India. On another page we give figures showing the extent to which this trade has been carried on. For these figures we are indebted to the Director-General of Statistics, who kindly furnished them at the request of the Secretary of the U. P. A. S. I. Roughly, they may be said to show that against every 10 tons of coffee that India has exported during the last 20 years she has imported 1 ton of foreign coffee. In other words, she may be said to have only supplied 90 per cent. of the demand for coffee within India itself. Yet the chief importing centre has been Bombay, which lies conveniently near some of the chief coffee planting districts of India. Burma, which grows a little coffee, has imported a fair quantity. Even Madras has at times drawn freely from foreign sources, and Bengal has been a steady, if small, importer for many years. During the last twenty years India has imported no less than 18,822 tons of foreign coffee. Every iota of the demand that this represents ought to have been met by Indian coffee. True, during the same period she has *exported* 630 tons of foreign coffee, but we need scarcely remark that this demand also should have been met from Indian estates. If it pays to export foreign coffee to East Africa, Arabia, Persia, and Mauritius (the chief centres to which the above coffee was sent) surely it should be possible for India to cut in against foreign rivals and secure a virtual monopoly of these markets.

Now, let us see whence comes this competition that India has had to face. Mainly from the Straits Settlements. Does this mean that Borneo, Sumatra, and Java coffees have been extensively placed on the Indian market? It looks like it. Large supplies have also come in from Austria-Hungary. This may be Brazilian. Some has come from Aden, some from Ceylon. The figures we give admit of only haphazard inferences, but we judge that a certain small quantity of fine coffees is imported into India to meet a special inquiry for such descriptions as Mocha, and that a larger quantity of very inferior stuff comes in—perhaps at low figures—which is probably passed off as Indian even in Indian bazaars and shops. To what extent raw coffee is imported, and how much of the importations are tinned, we cannot say ; but it is justifiable to assume that both the raw berry and the tinned powder are included. Planters must, therefore, prepare themselves to supply tinned coffee as well as the raw berry. They must show themselves capable of supplying all the coffee that is wanted, in whatever form it is required. They have the very finest quality available, they have also plenty of poor stuff to spare. Why, then, should they not succeed in meeting the whole Indian demand? We do not wish disparage the efforts that have been and are being mad attain this object ; but we invite those who are speci interested in these efforts to study the statistics we give, note how little impression they have yet made upon competition referred to. The fact that there is still su wide field before them should prove an incentive to f effort, to further outlay of capital, to redoubled enterpr and the information we place at their disposal should indi whence the chief rivalry comes, and to which markets—s Indian—special attention should be given with a vie replacing foreign coffee by Indian.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S

The Proposed Coffee Cess.

The following circular, dated Yercaud, 18th October, 19 from the Chairman has been forwarded to the various Co cillors of the U. P. A. S. I., who include the Honorary Se taries of all District Associations interested in coffee :—

GENTLEMEN,—At the late Conference, I proposed that we sh ask Government to impose a compulsory cess on coffee, and proceeds handed over to the U. P. A. S. I., to enable us to ad tise, and to push its sale. Though the meeting, for various reas objected to this proposal, the delegates were absolutely unanim in thinking that *something* should be done at once; aud w generally, in favour of inviting voluntary subscriptions for purpose. The question then arose how these subscriptions sh be utilized. As the funds already at the disposal of the U. P. A. were sufficient to subsidize the Paris shop, it was resolved tha the United Coffee Growers' Co. would consent to print, on t labels, the amount of chicory in their mixtures, the money shoul invested in shares of that Company, to enable it to extend its op tions. It has already been fairly successful; and it would undo edly do much better, if it had a little more capital at its comm

2. Since then a scheme has been formulated by Mr. Barber raising a quasi-compulsory subscription from planters, to be coll ed (and doubled) by the curers. His scheme appears to me excellent one (if accepted by a sufficient majority), to which two objections occur to me. The first is that some of the cu might refuse to join, which would enable the inevitable mino to avoid the tax ; and the second is that the small native own who would benefit as much, in proportion, as larger propriet but who do not cure their coffee, would altogether escape. B perfect scheme is impossible ; and I think that these trifling dr backs may well be disregarded.

3. I see no reason why the two ideas should not be worked gether. That is to say, why Mr. Barber's scheme should no adopted, and the money collected under it invested in shares of United Coffee Growers' Co. These shares are, I believe, Rs each. The curers therefore would have to take the shares (in th own names?), and to keep an account of the proportion belong to each of their constituents. For instance, if a man sent then tons to cure, he would receive a letter, or certificate, from the cu that he owned $\frac{7}{10}$ of a share, and would get his dividends in portion. I believe the shares are not yet fully paid up, which mi make it a little complicated ; but that is a detail which could ea be arranged, and which need not trouble us at present.

4. Several men, willing to subscribe voluntarily, have hithe refrained, because they have no definite information as to w will be done with their money. They say that, if their subsc tions are handed over to the U. P A. S. I., there is no organizat suitable for employing them to the best advantage, and that that they would eventually be lost sight of, and absorbe the general Funds of the Association, which is not what t desire. Others have told me that they consider the probabilit a direct return for their money too shadowy and undefined other words, they want a good investment.

5 The above scheme meets both of these objections. The United Coffee Growers' Co. has an organization already—capable of indefinite extension; and, as it is a Company which supplies a very decided and growing demand, it is likely to be a good investment, and to yield good dividends in future, besides the indirect advantages to planters from its advertising, and pushing the sale of, Indian grown-coffee, for which purpose it was originally started. At present, on account of the smallness of its capital, its operations, I believe, are confined to India; but, as more shares are taken up, they will doubtless be extended to the principal markets of the world.

6. The United Coffee Growers' Co. say that they would be delighted if a law were passed compelling all dealers to print on their labels the proportion of chicory they mix with their coffee; but that, until *all* are obliged to, it would be handicapping them too severely to insist on their *doing* it. They say that they already state, on their labels, that their mixtures do contain some chicory, which is more than other dealers do, and that the proportion they use is less than others use. Moreover the Secretary assures me that many of their customers are giving up the mixtures in favour of pure coffee They are doing good work, and there is certainly some sense and truth in these arguments; and though I—personally—still think that, at any temporary sacrifice, the percentage of chicory ought to be stated, I am convinced that unanimity is of the first importance, and am prepared to waive my own opinion for the general good.

7. As long as human nature is what it is, there must be many planters who think that if they were only placed in irresponsible charge of the United Coffee Growers' Co., they could do infinitely better than the present staff. May be they could; but that is obviously impossible, and it is scarcely the point at issue. The question is, has any scheme been put before us which would command so large a measure of support as the adaptation of Messrs. Hodgson and Barber's ideas, suggested in para 3—and I unhesitatingly answer No. Is it then better to adopt this—*faute de mieux*—or to sit still and do nothing? And, if the working of the United Coffee Growers' Co. could be improved, the remedy is obvious. Let those who think so take so many shares that they and their friends may make their voices heard, and to *compel* the Company to amend its ways. There really is no other method. Mere talking will never do it.

8. Without unanimity we can do nothing. If a number of men are hauling on a rope, it is clear that they must not only pull in the same direction, but that they must pull *together*, or their efforts will be vain. And that they may be able to pull together, some one must give the word. As you have made me your Chairman for the year, I take upon myself to give it. So now gentlemen, all together, for Mr. Barber's scheme and the United Coffee Growers' Co. !

9. I request that all Honorary Secretaries, will be kind enough to call a special General Meeting of their Associations, with the least possible delay and to put the subjoined motion to the vote, immediately reporting the result to the Secretary, U. P A. S. I.; also that, in reporting it, you will be so good as to state how many voted for, and how many against it. As the meetings will be held in so many different places, it is clear that amendments would be out of place, and would make it more difficult to ascertain the wishes of the majority; and that, therefore, the motion must be accepted—or rejected—as it stands. But if any are generally—in favor of the scheme, but would prefer it slightly modified, I earnestly hope they will vote for it *now*:—as immediate action is supremely necessary lest this season's subscriptions should be lost. I would beg them to leave the proposed modifications to be made hereafter, or discussed at the next Conference in August, 1902.

I am, Gentlemen,
Yours faithfully,
(Signed) Robt. Gompertz,
Chairman, U. P. A. S. I. (*Incd.*).

Proposed Motion.

That the scheme suggested in para. 3 of the Chairman's letter of the 18th October be adopted; and that, if carried by a majority of at least ⅔ of all the coffee-planters who vote on it, in all the District Associations, the Chairman be authorized to take immediate steps to carry it out as far as may be possible, with reference to the present season's crop, desiring curers to exempt those who inform him that they have already subscribed, since the last Conference, to the extent of their voluntary subscriptions.

(Signed) Robt Gompertz,
Chairman, U. P. A. S. I.

P.S.—Since writing the above, Secretary's Circular 86/01 of the 18th instant has come in. I always thought that to ask the curers to pay as much towards the Fund as the planters, would lead to the refusal of some of them to join—though that is not the only reason adduced by Mr. Stanes—but have hitherto refrained from saying so. I now propose that we should ask them to contribute only four annas per ton, for the following reasons:—(1) Though the curers would benefit, to a certain extent, by advertising Indian coffee, and by pushing its sale, it cannot be contended that they would benefit as much as producers would. (2) Even at present prices, most planters make a larger profit *per ton*, than the curers do; and if the price goes up as high as it was some 5 years ago, the difference would be very much greater. (3) They would have a good deal of trouble, and some little expenses, in keeping the accounts which would be necessary under the scheme (4) Last, not least, it is absolutely essential that a large majority of the curers should willingly join us; and it would therefore be very unwise to disgust them by asking for too much. For these reasons I think Mr. Barber's excellent scheme would stand a better chance of being carried out, if we asked the curers for only four annas a ton, at least in the first instance. In laying my proposal before your Associations, therefore, and asking them to vote for, or against it, I beg you will do me the favour to explain that the scheme suggested in para. 3 of my letter, should be understood to be modified, in the motion, and to the extent of asking the curers to subscribe four annas per ton, instead of one rupee.

(Signed) Robt. Gompertz,
Chairman, U. P. A. S. I.

* * *

The General Committee of the Indian Tea Association, Calcutta, have issued the following figures in their Monthly Ruturn, dated 16th October, 1901, of Sailings and Daily Customs Entries of Tea from Calcutta and Chittagong.

Exports of Indian Tea from Calcutta and Chittagong.

	1901. Lbs.	1900. Lbs.	1899. Lbs.
Sailings to Great Britain from Calcutta in September ...	20,625,791	18,122,728	26,714,347
Sailings to Great Britain from Chittagong in September ...	2,135,700	—	—
Sailings to Great Britain from 1st April to 30th September (including Chittagong) ...	68,308,669	70,357,103	72,732,636
Sailings to Australia and New Zealand in September	1,130,996	1,364,635	314,785
Sailings to Australia and New Zealand from 1st April to 30th September	3,504,447	4,821,615	3,674,486
Sailings to America in September.	227,359	516,627	1,144,551
Sailings to America from 1st April to 30th September ...	475,101	1,968,958	2,088,593
Sailings to other places in September	1,618,732	1,218,457	1,482,679
Sailings to other places from 1st April to 30th September ..	5,653,403	3,670,848	4,253,172
Total Sailings from 1st April to 30th September	77,941,620	80,818,524	82,748,887

		Lbs.	
Daily Customs Entries for Export from Calcutta to Great Britain from 1st April to 30th September 1901		67,867,224	
Do.	Do. from Chittagong ...	5,157,030	
			73,024,254
Do.	do. from Calcutta, 1900 ...	...	79,049,988

Exports of Tea from Ceylon.

Total Exports from 1st January to 30th September,			1901 ...	106,533,166
Do.	do.	do.	1900	109,662,605
Do.	do.	do.	1899 ...	96,500,118
Do.	do.	do.	1898 ...	92,201,421

Statement showing the Exports of Tea to Sundry Ports during the month of September, 1901.

FOREIGN PORTS.

	Lbs.	
Trieste	1,396	
Copenhagen	500	
Marseilles	732	
Bremerhaven	19,015	
Hamburg	37,775	
Odessa	239,664	
Stockholm	500	
Constantinople	16,988	
Zanzibar	420	
Mauritius	200	
Cape Town	2,500	
Suez	18,870	
Aden	850	
Hong-Kong	183.379	*
Shanghai	30,083	
Bushire	34,349	
Batoum	8,305	
Singapore	8,700	
Bagdad	21,911	
Beyrouth	6,785	
Bussora	12,575	
Jaffa	1,065	
Trebizonde	302,751	
Smyrna	5,600	
		954,913 lbs.
Bombay	642,373	
Kurrachee	*nil*	
Other Indian Ports	21,446	
		663.819 ,,
Total		1,618,732 ,,

THE COFFEE MARKET.

Java Coffee has been commanding good prices of Amsterdam of late, and is described as "a fancy article, owing to scarcity and strong liquor." During last month the Amsterdam market was generally in favour of sellers, and Santos varieties commanded a small advance on August figures. Messrs. G. Duuring and Zoon report that present low values in face of higher exchange are now meeting with more interest, and that sentiment is decidedly in favour of the article, looking more towards the probability of a coming reduced crop their to present excessive receipts. Thus far receipts from Brazil, have been 1,857,000 bags more than last year; but there are reports of drought and damage. There are also joyous advices, however, from Rio de Janeiro and Minas Geraes of the flowering of the coffee, and though these States are less important than Sao Paulo, it is well not to be too sanguine. At the end of September European stocks were 4,700 tons less but the visible supply shows another increase of 52,500 tons. In spite of this London advices confirm Dutch reports. The price of coffee is steadily advancing, for terminal as well as actual. The *London Commercial Record* reports that spot lots are enjoying exceptionally good support, and particularly fine colour East Indians are in strong request, the value of which have risen no less than about 15s. per cwt. during the last few weeks and as for terminal coffees, figures and position appear to count for nothing, for bulls have gradually succeeded in driving prices up about 3s. per cwt. within a very short space of time. Circumstances, of course, have favoured them. A rise in the exchange was a very opportune event; an improved demand in America also helped to harden prices; and last, but not least, the reported outbreak of plague in Brazil afforded to the bull operators an exceptional handle to raise the market. "In the opinion most people," says our contemporary, "the rumour of appearance of plague has been greatly exaggerated, and so people even go so far as to assert that the report was a m invention. Whatever the merits of the rumour may be, we must agree that bulls have made the most of it, and bea have allowed themselves to be frightened." This is not t first time the game has been tried.

Reverting to Java coffee for a moment, we may say th according to the Colonial budget there will be sold for Go ernment account during 1902.

95,000 bags Java	in Holland	estimate	30 cents
100, 00 ,,	,, at Batavia	,,	£32 per cw
42,000 ,,	,, Padang at Patang	,,	£55 per cw
900 ,,	,, broken ,,	,,	£18 per cw

The statistical position of coffee is referred to in some figu published on another page.

* It is understood that the bulk of this tea consists of transhipments for the United States and Canada.

NOTES.

Ceylon Tea Company. The Ceylon Tea Plantations C Ld., pay an interim dividend of 7 the Balmoral (Ceylon) Estates Co. an interim dividend of 5

Regulation of Tea Sales. A special cablegram dated 16 instant to the *Times of Ceylon* sta that Indian tea merchants have resumed regulating t weekly offering, of tea in London

Mosquito Blight. The Terai Planters' Associati having reported a severe outbreak mosquito blight in their gardens, Mr. Mann, the Scienti officer of the Tea Association, has been sent to advise regar ing mitigating measures.

Labour Recruiting Difficulties in Assam. Difficulties are arising this seas in recruiting coolies for Assam und the new regulations. No wond when the Chief Commissioner spreads far and wide su sentiments as those to which he has lately given expressio

Exhibitions of Coffee. It is proposed to start permane exhibitions of Brazilian coffee at t different Brazilian Consulates in Europe and elsewhere. T hint should be taken by India; but it is to be hoped so usef a propaganda will not stop there, but that visitors will supplied with a cup of coffee ground and made whilst th wait, and for the first time in their lives, perhaps, discov what real coffee is like.

Indian Tea in Canada. Toronto advices dated 19th ulti in the *Canadian Grocer* state :—T feature of the tea market is a firmer tone in Indian a Ceylon descriptions. Mail advices from London, under da of September 6, state that the previous Wednesday's auctio of Indian teas passed at fairly steady rates, and that t market was strong, with prices hardening, especially f the better-liquoring kinds in Ceylon teas.

The Indian Tea Crop. The General Committee of t Indian Tea Association intimate th the following telegrams have been received from the Kang Valley Planters' Association and the Dehra Dun Tea Planter Association :—"Comparative returns 30th September twel largest gardens give reliable information, last year bla

1,690 lbs.; green 157,452 lbs. This year black 581,387 .; green 167,272 lbs." "Dehra Dun tea crop to the 30th ptember, 1901, 1,560,000 lbs. Same date last year 390,000 lbs."

ylon Green Teas.

A correspondent of the *Ceylon Observer* asserts that 30 cents a lb. erage will be necessary to induce offerings of Ceylon teas, ese to include 15 per cent. of dust and fannings. He remarks: It costs a good deal more to manufacture green teas than acks, and outturn per 100 lbs. leaf is 22 or 23 per cent.; erefore *unlike blacks and very much so.* I have given up een tea manufacture and will have none of it with 10 cents for dust and fannings, against 28 cents for dust and inings black. Any man would be either drunk or insane manufacture green teas under these circumstances.

dian Green Teas.

The Indian Tea Association, Calcutta, has received the following egrams from the Kangra Valley Planters' Association and e Dehra Dun Tea Planters' Association.

From the Kangra Valley Planters' Association.

"Comparative returns 30th September twelve largest gardens give reliable information, last year black 601,690 lbs.; green 157,452 lbs. This year black 581,387 lbs.; green 167,272 lbs."

From the Dehra Dun Tea Planters' Association.

"Dehra Dun tea crop to 30th September, 1901, 1,560,000 lbs. Same date last year 1,390,000 lbs."

va Cinchona.

The N. V. Nederl. Veem. reports that the shipments from Java to urope during September have been as follows (in Amsterm lbs.):—

1901	1,200,000	1896	1,389,000
1900	1,366,000	1895	816,000
1899	1,232,000	1894	1,071,000
1898	790,000	1893	500,000
1897	1,051,000		

tal shipments January-September—

1901	8,724,000	1896	7,418,000
1900	7,090,000	1895	5,829,700
1899	8,462,800	1894	6,625,000
1898	7,926,000	1893	5,876,000
1897	5,982,000		

cline of 73 per cent. in Indian Tea Exports to Canada.

Tea exports from India to Canada direct, so far this season, were only 300,428 lbs., as against 1,145,752 lbs. last year. This means a decrease of per cent. The chief cause is undoubtedly the determition on the part of the shippers to curtail the quantity of tea nsigned to the Canadian market. As everyone in the trade nows, says the *Canadian Grocer*, shippers have been congning to this market quantities of low-grade tea which ere out of all proportion to its consumptive requirements. his led to teas not only being sold at a sacrifice, but being metimes sold to people who were unable to pay for them. ne result of the losses which have been sustained through lling to irresponsible people is the fact that the banks in dia now demand on drafts on Canadian account 25 per cent. their value before they will issue them.

e Amsterdam Cinchona Auctions.

Cabling on 3rd instant, the correspondent of the *Chemist & Druggist* said:—At the auctions of cinchona bark held here to-day 6,462 packages were offered, containing 577.375 kilos. of cinchona. This entire quantity was disposed of at an average unit of 8·25c. per half kilo., against 7·60 cents per half kilo. paid at the auction on August 29. The following were the approximate quantities of quinine purchased by the principal buyers:—English and American factories, who purchased the equivalent of 10,738 kilos.; the Brunswick factory, 3,233 kilos.; the Mannheim and Amsterdam factories, 5,306 kilos.; the Frankfort-on-Main and Stuttgart factories, 3,775 kilos.; and various buyers, 5,919 kilos. The prices paid for the manufacturing bark ranged from 6½c. to 9 3/4c. per half kilo., and druggist's bark from 13c. to 76½c.

Charges on Coffee at New York.

According to the Brazilian Consul at New York, the charges for delivery and discharge of coffee at that port are as follows:—

Despatch and Entry dues at the Customs, invoices of 100 to 10,000 bags	$1 50
Freight from Rio or Santos per bag	25 to 05 cents.
Fire insurance	⅜ ,,
Cleaning	15 ,,
Sampling	1 ,,
Storage per month	4 ,,
Weighing per 100 lbs.	2½ ,,
Shovelling per bag	5 ,,
Brokerage 1½% per bag, or	10 ,,
Commission	1 to ½%
Sale for Cash	2%

The Consul does not recommended planters to consign their coffee, as, owing to speculation and the large stocks, prices are often positively lower in New York than at Rio de Janeiro.

Coffee in London.

At this season rumours as to the next Brazil crop are generally about, says the *Produce Markets' Review* of 28th ultimo, but are often of a most conflicting nature and quite unreliable. To some extent, however, they influence prices, particularly in the terminal market, and being further helped by a rise in the exchange, quotations advanced about 6d in face of receipts in Santos, which have reached the enormous total of over 70,000 bags in one day. Following the two largest crops on record, it is quite likely that the next will show a decided reduction, but even then will very possibly total 9,000,000 bags, a quantity which is generally considered as now requisite to meet the increased consumption. The demand for mild coffees has continued good, and with little selection offering prices are well maintained and in some instances dearer. A good trade has been done privately in East India, and as reports of the new crop all state that it will be the smallest on record, holders have been able to obtain a considerable advance over the prices of last month.

Indian Tea in London.

The market is stronger, says the *Produce Markets' Review* of 28th ultimo, and prices for all grades have advanced, closing with a good inquiry at the improvement. The common teas show the most important change in values, having risen from ¼d to ½d, the reason given for this being the reported shortage of the season's available supply. Some gardens have no doubt produced an increased percentage of the finer teas this season, but the districts where the larger proportion of the

lower qualities is usually grown have so far not restricted the output in favour of finer plucking. To initiate, therefore, an important advance in prices at this early period does not appear sound policy. notwithstanding that the estimate of the crop is put down at from 5,000,000 lbs. to 6,000,000 lbs. less than last year. At the public sales 34,035 packages were catalogued and the small proportion of 3,702 withdrawn. The demand was generally active with an upward movement in prices, particularly for the lower and medium kinds, which are at the moment not too liberally offered. For the finer descriptions there was active bidding, but, as the quantity brought forward was equal to the larger inquiry, prices were steady but firm.

Java Tea Tabloids.

The *Straits Times* remarks :—Tea-planters in Java complain bitterly of low prices, like their fellows in India and Ceylon. Yet so it is urged they have only to bestow a little extra care in preparing leaf for the market to realise higher prices. The Sukamaju estate in the Preanger provinces has just proved this. At Amsterdam the other day flowery Pekoe leaf from that estate fetched at auction 403 guilder cents per half-kilogramme—a price never before given for any kind of Java tea. The brokers had nothing but praise for the leaf in question and forecast that news of the success thus achieved by the estate will make more widely known the name of Java as a tea-producing land. Attention has been drawn there to the advantages of selling tea in tabloid or compressed form of a size just enough for the brewing of one cup. This, it is pointed out, will be of great advantage to travellers and wayfarers. They could carry about with them a refreshing drink, within a small compass and weighing but a trifle. On the Sinagar tea estate, such tabloids or packets of compressed tea have been prepared for the market. What is required for one cup of tea can be stowed away so to speak in a thimble. This new way of packing tea is expected to be highly advantageous to the army commissariat department.

Vanilla Planting in Seychelles.

The *Board of Trade Journal* for the week ending October 3rd reports that in the recently-issued report of the Administrator of the Seychelles group it is stated that although in 1900 the amount of vanilla exported was 17,569 kilogs., it is possible that the actual crop of that year did not exceed 12,000 kilogs., some of the vanilla of 1899 being included in the shipments of 1900. The vanilla crop for the current year promised at the end of last year to be an exceptionally fine one, and, notwithstanding losses owing to continued rain, the output for 1901 will probably be the largest on record. The preparation of vanilla has much improved of late years. Nearly all vanilla is cured in well constructed drying rooms, heated with hot air, instead of being left to dry in the sun. Large preparers of vanilla are now building houses of two storeys in which the whole process of preparation, from steaming the green pods to packing the prepared vanilla, is carried out. In 1900 prepared vanilla, sold at Rs.12 to Rs.20 per lb. In the Blue Book report for 1899 hints were given as to vanilla cultivation, and anyone who may think of embarking on vanilla planting in Seychelles may be referred to those remarks, and also to an excellent treatise on the subject by Mr. S. J. Galbraith, who was for some years one of the most experienced and successful planters in Seychelles. This treatise has been publi by the Department of Agriculture (Division of Botan the United States of America.

An Entomologist wanted.

Indian Gardening and Pla remarks :—"The planting intere the country are growing every year, and the planting munity is increasing correspondingly. That they recognise the value of entomological help may be gath from the fact that the planters of the Wynaad, Sout India, have invited the Entomologist to the Indian Mus Calcutta, to visit their district next January, they u taking to make all the necessary arrangements for his The Assam, Cachar, Sylhet, Dooars, and Darjeeling planters would also like to have Mr. de Niceville among for purposes of consultation and advice, so would the planters of the Kangra Valley, Kumaun, and Dehra likewise the fruit growers of Kulu and the indigo plante Behar and the North-Western Provinces; but as Mr Niceville is not ubiquitous, he cannot like Sir Boyle Ro bird, be in more than one place at a time; and being si handed, he cannot be expected to do the work of half-a-d men. It strikes us as curious that the Madras Governm cannot arrange to have a State Entomologist. The mone meet his salary could easily be found by a small reductio its stationery expenditure. The tons of paper wasted nually in printing its Resolutions and Orders on the trivial subjects might with advantage be saved and applie meet the salary of a competent Entomologist." But, a the request has been made, and declined, long ago. It t thousands of judges, magistrates and police officers and to look after criminal "unfeathered bipeds" in India; yet t is but one Entomologist to cope with all its *poochees*, n of which have truly criminal propensities.

GENERAL ARTICLES.

THE USE OF LIME ON SOUR LAND.

Lime is applied to the soil either slacked or unslacked certain portions of the middle Atlantic states its use to sw the soil and act upon latent plant food is quite general, and m farmers have their own kilns, where they burn limestone qua on the place or near by Lime can here be procured cheaply, even in remote sections by buying in carload lots a cheap gra agricultural lime it can be obtained at a much lower cost than commonly used for building purposes. The rate of applic varies from 500 to 2,000 lbs. per acre. Some successful farmers a heavy application which lasts for a number of years; others less quantity and apply more frequently.

The best results are obtained from applying the lime in a ca state. When air-slacked it loses much of its caustic properties the effect upon the soil is greatly lessened. A common mode o plication is to plow and prepare the land for wheat or rye, mark it off in sections 1 rd square. In the centre of each o these squares place in a pile 1-160th part of the amount to be ap to each acre and cover with earth. It will then slack gradually break up into a fine powder without losing much of its ca properties.

After the mass is thoroughly slacked it should be spread ev on the square rod of ground. If the grain is put in with a g drill the ground should be harrowed well before sowing the seed if sown broadcast by hand the harrowing to cover the seed w probably be sufficient. Timothy and redtop seed are usually at the same time and clover the following spring.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange, *September 7th,* 1901. Ninety days' Bank rate on London opened on Monday at 10 7/16d. rose to 10 19/32d. on Wednesday and closed on Friday evening at 10 17/32d. Saturday being a holiday the Banks were closed.

Extremes during the week ending September 6 were 10 5/16d.—10 5/8d for 90 d/s Bank paper and 10 3/8d.—10 3/32d. for private.

Coffee.—During the past week the value of coffee shipments was £497,000 as against £617,000 the previous week and £457,000 for the corresponding week last year.

Declared sales were slightly smaller, 177,000 bags as against 195,000 at Rio and Santos during the previous week and 198,000 last year. From Pará we are still unfortunately without advices.

Entries at Rio and Santos during the week ended 6th instant showed renewed activity, principally at Santos, being 1 ,076 bags greater than the preceding week and 221,761, double those of the corresponding week last year.

Since the 1st July the aggregate entries are 3,854,616 bags up to 6th instant as against 2,403,195 last year.

The total quantity of coffee cleared from these two ports from 1st July to 6th September amounted to 2,867,263 of the value of £3,814,190 as against 1,773,125 bags valued at £4,079,491 last year.

In his circular of 1st September Sr. Raul de Carvelho states that "from all directions come reports of the weakened state of the trees consequent on two monster consecutive crops. As regards the weight of the current crop there is now no doubt whatever that it is greatly inferior to last crop's, which was particularly heavy.

RUBBER.

From notes by Mr. H. C. Hill, *Conservator of Forests, N.-W. P., India,* we take the following :—

Mr. Carey : I should like to ask you, Mr. Hill, what reason you have for saying that Pará rubber will yield more quickly than gutta rambong, and if you will give us a few figures in support?

Mr. Bailey : I should like to ask Mr. Hill's opinion about topping Pará rubber so as to compare it with the way we have been recommended to top it by many experts in this country? And I should like him to tell us, for the benefit of the planting community, some of the little things from his great experience in forestry. I have no doubt he will be able to give us many things which he has not dealt with to-night; and, if he were to do so, I am sure everybody would be very grateful to him for it?

Mr. Fryer (Ag. R.E.R., Selangor): I should like to know why the "jarrah" sleeper should be disparaged in favour of chengal and merbau.

Mr. Marks (Ag. S.R.G.): I should be much obliged if Mr. Hill would tell us why this country is so suited, to Pará rubber, not on account of its soil but on account of its climate, which I heard him say a few evenings ago.

Mr. Hill: With regard to Mr. Carey's question, the point was discussed in settling on a plantation in Burma the other day, as to whether they should plant Pará or Ficus elastica. In Assam we have large plantations of the latter, and speaking from memory, they aggregate some 5,000 acres. Some parts are 30 years old, at which age the tree can be remuneratively tapped. These plantations have been tended and watched in Assam where Ficus elastica is equally as indigenous as here, and Mr. Ribbentrop puts the commencement of yield at a considerably longer period than the eight years estimated for Pará. That is what we found planting it in Assam. But I may mention one particular point. We first began to try the plant as nature does – in forks of trees—and the slowness of its growth led us to calculate that it would be fifty years before the roots got to the ground. Then we planted it under cover in the same way as Mr. Stephens (Forest Officer) has planted it in Perak. I am not sure that it is necessary to plant it under cover; but, so far as our information goes, it has to go to thirty years before giving a return, whereas Pará gives a return in eight years.

Mr. Carey: I would like to ask whether, from your personal experience, you consider the soil and climatic conditions of Assam analagous with the Malay Peninsula. It seems to me that a comparison may make a great difference. The only case in which we have any data in connection with a F. elastica plantation is that of Java, on an old abandoned coffee estate, and the yield was extremely poor. We were discouraged on those grounds. You have told us we have a rainfall of 200 inches?

Mr. Hill: I think all the circumstances are in favour of the Peninsula; and, as far as this particular tree is concerned, it grows in Perak, at Batu Kuran, naturally, just as it grows in Assam; and the yield will I think, certainly be greater than in Assam where there is a period of dry weather and rest.

Mr. Hill: With regard to Mr. Bailey's question, I proposed to say, only I inadvertently turned over two pages of my notes:

To those gentlemen who are here to-night with an interest in planting up large estates, or who have large estates, under coffee, I may perhaps express the opinion that no better investment offers than the plantation of Pará rubber (Hevea Braziliensis). It has been shown that it grows freely and that in 12 or 13 years it will yield a large return: moreover, that it can be tapped at the earlier age of 7 or 8 years.

As a shade tree over coffee it should be most remunerative, and then I venture to think it is better to let the leading shoot soar up to the highest possible point before it throws out branches; so that the cover may be high and as little detrimental as possible to the coffee.

Where only Pará is planted, I think 12 feet apart is far enough. Under these conditions it will form a complete canopy in 7 or 8 years when the time comes for tapping it, and all weeds will be kept down by the canopy.

The French have a very good definition of cover as opposed to shade. They say that it is the horizontal projection of the tree on the ground; cover is detrimental and shade is an advantage. But it is impossible to have one without the other.

I know perfectly well your argument for topping Pará trees—*viz.*, you find that the tall pliant stems are much acted upon by the wind and that the attacks of white ants are possibly due to a certain amount of breakage of the collar which gives the ants something to start on. Where you want to grow coffee underneath I have no hesitation in saying: let Pará grow up to its full height. Where you have not coffee I would plant it much closer together, at the outside 12 feet apart and not decapitate.

Mr. Bailey's suggestion for information about any little things about planting trees or rubber is too large a demand for me to meet. If he could give some specific questions, I would be glad to answer them.

Mr. Bailey: Something about your general opinion of Pará rubber you have seen in the Peninsula: whether you think it will be successful or not?

Mr. Hill: I distinctly think that at the age of from 8 to 12 years they will yield, and will go on yielding annually, that there is no reason why you should not have fifty isolated trees to the acre and they will give a product of 8 lbs. each, or 400 lbs. which worth 2s. 6d. a pound amounts to £50 sterling per acre. I think if it falls to half the price—*i.e.*, fifteen pence a pound—you would still have a splendid investment.

Mr. Hill (in reply to Mr. Marks) : In discussing the plantation of Para I said that I think a mistake has been made in experiments with individual trees. So far everybody, who has tapped it, has operated on isolated trees exposed on all sides to direct sunlight. The return has been 10 lbs. and 11 lbs. (Voice : and 16 lbs.), and even up to 16 lbs. per tree. As I pointed out to Mr. Ridley in Singapore these experiments are not to the point: you don't want to know what an individual tree will yield but rather what an acre will yield. It is only then that you can judge of the desirability or otherwise of planting the trees at wide distances from each other. You have been experimenting with no definite results. In Setiawan, I think it is, there is a very dnese canopy wich shows that Para leaves are absorbing the whole of the sunlight; and experiments there would show what return you would get per acre under those conditions. What you want is a tapping over a certain area and results would be, when the time comes to tap, simply proportionate to the complete leaf-surface you have got on the area Of course, where you have got coffee you may not want your cover, you may want merely shade with intervening spaces: and you must be content with an incomplete crop of rubber. What I want to explain to you is that the production of rubber must be proportionate to the leaf-surface on

which light is acting. Therefore, the sooner you get your crop of rubber complete the better it is. Once having got your crop of rubber complete you take nothing from the soil: whatever you take in the shape of rubber is taken practically from the air. Your plantation will not get played out; you go on improving the soil by the additions of decaying leaves and fruits.

Mr. Parry (Hon. Secretary, U. P. A.): I was told by Mr. Ridley to plant Para in wet soil, but I planted it on high land We have been informed that the humidity of the air supplies the necessary food for the plant. Now, in Brazil, it is necessary to plant it where at times it is completely swamped.

Mr. Hill: If you plant Para on a soil where it is well swamped and the flood remains for a certain time – twenty-four or forty-eight hours, I cannot tell you the exact time—the trees are killed. It demands a well-drained surface soil and can only stand flooding for short periods, though it flourishes where the water level is at no great distance from the surface. If planted so low that the floods remain and keep the trees long under water they are killed. You may see this at Kuala Kangsar, where all the trees on a part of the plantation have been killed by floods.

HE SOLD THE COFFEE.

A salesman for a coffee house which does a large business in Brooklyn, N. Y., has hit, according to a contemporary, upon a scheme to get orders which has the merit of cleverness. How he works it is best told in the words of a charming young housewife, who lives at what some Manhattanites call "the foolish end of the bridge."

"I saw his wagon stop at the door before the bell rang," said she, "and I knew it was one of those persistent coffee men. I had tried twice before to use their coffee, but it wasn't as good as the coffee my grocer sells. I went to the door myself, prepared to be awfully cross. The man stood with his hat in his hand. He gave me one look and started back a step with his hand on his heart. I thought the poor fellow was going to faint. He recovered himself in a moment, and looked very much embarrassed.

"'Pardon me,' he said, 'but I was so startled. I have recently lost a sister, and you looked so much like her that I thought, as you opened the door, she had come back to life.'

"The man was apparently much affected, and I felt so sorry for him. When he began talking coffee I tried to steel myself against him; but he looked at me so wistfully that I hadn't the heart to be disagreeable. He was evidently so well bred, too, that I couldn't shut the door in his face. Well, before I realized it I had bought a pound of his coffee.

"I didn't feel so badly about having broken my resolve until next day, when a woman in the apartment across the hall dropped in to tell me how sorry she felt for a poor coffee salesman who nearly fainted when she opened the door, because, as he said, she was the living image of his dead sister."—*Canadian Grocer.*

REGARDING TEA AND COFFEE.

"M. G." writes: Is tea and coffee healthy?

Certainly they are. Properly made, they are most refreshi and healthful, all the faddists and cranks to the contrary, who you every time you drink tea or coffee you shorten your life. we followed the dictates of these people where would we en Some of them preaching against meat; others on all manner fads pertaining to both eating and drinking. Be sensible, te perate in all things, even in eating and drinking. The pub generally place the proper value on these things. Thus, you fi the consumption of tea and coffee increasing, and the health of t public becoming better, the length of life also being prolong Those who sell the new health drinks now in the market seem think it needful to abuse tea and coffee in order to sell their p parations. Most people see the game and are not misled there Tea and coffee do not need our defence. The public know a go thing, and from present indications they intend to continue drink the "cup that cheers."—*Canadian Grocer.*

TEA-DRINKING IN INDIA.

"S. A. A" writes to the *Pioneer*:—

I have read with interest the correspondence recently publish in the *Pioneer* on the above subject, and considered the vario schemes suggested for the expansion of tea-markets in India. O writer says that the high caste native looks upon the dry tea polluted, because it has been touched by people of inferior caste whilst another suggests that the bunniah is the proper person be employed in the expansion of the sale of the article. As o intimately acquainted with native ideas and habits, I beg to subm that what these writers suggest and remark is quite beside t mark, and does not touch the real points at issue. No native, n even the twice-born Brahmin, thinks that any *dry* article, such tea, coffee, etc., can be polluted by the mere touch; but there is notion prevalent abroad that the *l ose* tea sold by the bunniah not the genuine article imported from respectable tea-merchan but, as is not unfrequently the case, old and stale tea which h lost its aroma and flavour by being exposed to the air; or, as erroneously but popularly supposed, *boiled* tea which he gets second-hand, *i.e.*, the tea which has once been used for the *Sahi logue* and then sold by the *khansama* to the bunniah after bei coloured by a certain process. It is ideas like these that requi to be set right, while the benefits of tea-drinking have to impressed upon the public mind. I would, therefore, suggest t following methods to be adopted by those who are interested in t promotion of tea-drinking amongst the natives of this country: (1) Publication and distribution broadcast of pamphlets and leafl in the vernaculars, explaining and enumerating the benefits tea-drinking. (2) Employment of one or two respectable nati travelling agents to visit large cities and towns with samples tea, and describe the benefits of tea drinking in the higher circl of native society, so as to create amongst them a taste for "the c

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that cheers but not inebriates." (3) Introduction of one and two-anna packets of tea for retail sale. I am sanguine that the adoption of these and similar methods will conduce to the creation of a widespread taste for tea-drinking among the natives of India; and "once a fashion is created," as remarked by the *St. James's Gazette*, "the immense population of India would ensure an enormous return," and, at no distant date, will Assam and Cachar have to *double* their tea-gardens. I shall be glad to supply further details and suggestions regarding the preparation and circulation of the requisite pamphlets, etc., with a view to the promotion of tea-drinking. if Messrs. Andrew Yule & Company, Commissioners for the Expansion of Indian Tea Markets, the Indian Tea Association, or other public bodies interested in the tea trade communicate with me through you.

COFFEE STATISTICS.

The official statistics given below are referred to in our leading columns.

Imports of **Coffee** *by Sea from Foreign Countries into each Province of British India from 1881-82 to 1900-01.*

Years	Bengal.	Bombay.	Sind.	Madras.	Burma.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1881-82 ...	107,968	3,199,728	...	212,688	269,024	3,789,408
1882-83 ...	40,544	2,731,008	...	311,920	264,880	3 348 352
1883-84 ...	6,944	2,151,184	...	21,728	310,016	2,489,872
1884-85 ...	39,424	3 780,448	...	112 112	305,536	4 237,520
1885-86 ...	62 160	1,297 184	112	127 232	297,136	1,783,824
1886-87 ...	91,056	1,985,536	112	5.712	284 704	2,367,120
1887-88 ...	90,944	1,577,744	448	44,688	257,152	1,970,976
1888-89 ...	72,688	2,512,496	1,232	84,896	165 872	2,837,184
1889-90 ...	47,712	2,284,912	1,568	72,800	278,320	2,685,312
1890 91 ..	21,280	811,664	896	205,632	314,384	1.353,856
1891-92 ...	72,912	2,569,504	1,792	61,376	235,312	2,940.896
1892-93 ...	35 504	1,011,696	672	4,592	217,168	1,269,632
1893-94 ...	41,328	1,094,912	1,008	1,120	168,448	1,306.816
1894-95 .	35 168	2,039,744	1,904	4,592	149.520	2,230.923
1895-96 .	19,376	900,368	2,464	5,040	157 808	1,085,056
1896-97 ...	42,336	733,936	...	12,992	140,336	929,600
1897-98 ...	102,592	944,272	2,128	18.368	185,360	1.252,720
1898-99 ...	107,968	1,879,584	56,560	5,376	274,288	2,323,776
1899-1900..	31,136	822.864	4,256	15 344	244,832	1,118,432
1900-01	24,976	512,736	224	3,360	299,040	840,336

Exports of **Coffee** *(Foreign) by Sea to Foreign Countries from each Province of British India from 1881-82 to 1900-01.*

Years.	Bengal.	Bombay.	Sind.	Madras.	Burma.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1881-82 ...	17,248	611,856	...	...	...	629,104
1882-83 ...	14,336	1 182 160	...	...	112	1,196.608
1883-84 ...	8,848	1 322,272	...	...	...	1,331,120
1884-85 ...	35,728	1,573 152	...	...	...	1,608,880
1885-86 ...	37,744	596,624	...	1,232	...	635,600
1886 87 ...	26.768	476,224	...	...	224	503,216
1887-88 ...	14,784	183,680	...	784	3,248	202.496
1888-89 ...	...	242,480	...	...	1,792	244,272
1889 90 ..		205.632	...	...	6,384	212,016
1890-91 ...	560	174,496	...	224	...	175,280
1891 92 ...	6,832	47 ,464	...	...	...	485,296
1892-93 ...	6,832	295,456	...	112	...	302,400
1893-94 ...	1,120	455,952	...	112	...	457,184
1894-95 ...	672	1,504,832	...	560	...	1,506,064
1895-96 .	25,200	818 384	112		...	843,696
1896-97 ...	1,904	578 928	336		...	581.168
1897-98 ...	23,408	881,664	...	672	1,456	907,200
1898-99 ..	336	1,287,664	...	...	...	1,288 000
1899-1900 ..	...	812,336	...	...	...	812,336
1900-01 ...	4,592	187,264	...	...	...	191,856

Imports of **Coffee** *into British India from other countries.*

Countries.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-01.
			(1) BY SEA.		
	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom ...	8,848	34,048	12,656	16 240	34,496
Austria-Hungary ..	112	6,496	536,480	301,280	353,024
France ...	...	...	11,312	15,568	..
Germany	...	2,576	5,600	4,256	...
Italy	...	...	...	5,376	..
Russia	...	...	...	112	...
Turkey in Europe ...	...	...	..	112	...
Egypt	...	...	15,232	6,608	12,656
Africa, East (British) ...	...	1,120	12,096	2,800	224
,, ,, (Portuguese)...	...	2,800	...	1,568	...
,, ,, (other Ports)...	...	...	112	...	...
Madagascar	...	...	112	..	...
Mauritius	.	...	...	4,816	...
Natal	112	...	...	...	..
South-America ...	...	8,288	...	...	..
Aden	19,376	43,344	34,384	12,096	19,712
Arabia	784	...	...	16.6-8	224
Ceylon	21,056	11,312	11.200	17,36.	15,120
China—Hongkong .	2,128	...	...	...	...
Japan		3,024	...	448	...
Java	...	...	...	...	112
Philippines	...	...	...	...	112
Persia	...	...	.	448	...
Straits Settlements ...	877,184	1,139,712	1,684,592	712,656	399,280
Turkey in Asia ...	...	...	...	...	5,152
Australia	...	...	.	...	224
Total ..	929,600	1,252,720	2,323,776	1,118,432	840,336

(2) BY LAND.

Nil.

Exports of **Coffee** *(Foreign) from British India to other countries.*

Countries.	1896 97.	1897-98.	1898-99.	1899-1900.	1900-01.
			(1) BY SEA.		
	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom ...	448	17,584	24,528	3,472	...
Austria-Hungary .		...	...	...	4,480
France	...	.	...	...	44,016
Africa, East (British)	224	672	4,368	16,688	112
,, ,, (Portuguese)	448		..	2,464	33,712
,, ,, (other Ports).	...	1,680	...	...	...
Cape Colony ...	112	...	...	...	...
Mauritius	122,752	83,888	2,576	20,128	14,112
Natal	112	...	...	...	...
Aden	112	...	112	...	...
Arabia	266,112	353,472	623,504	474,208	67,872
Ceylon ...	55,104	336	6,272	...	...
Persia	127,792	404,208	568,064	282,576	27,216
Straits Settlements ..		1,792	58,240	...	...
Turkey in Asia ...	7,952	43,568	336	2,800	336
Total ...	581,168	907,200	1,288,000	812,336	191,856

(2) BY LAND.

Nil.

CEYLON TEA ON THE CONTINENT OF EUROPE.

Mr. J. H. Renton reports with reference to Ceylon tea in Sweden, Norway, and Denmark:

I have been for the last 12 days in Sweden, Norway, and Denmark, and give you herewith impressions of my visit.

SWEDEN.

Ceylon tea has been well introduced into this country, owing to the fact that two or three planters are connected with Sweden, and have introduced the tea and pushed it through their agents and

friends. Some 10 years ago the Messrs. Seton, of the Agras, began the work, and others have followed, *viz.*, Mr. Dickson, who is himself a Swede, the Lethenty Co., and Mr. Luck. With the exception of the agents and friends of the Ceylon planters, I found only one other firm importing tea in Stockholm, and this firm has tea only as one of its departments. It is a large firm importing all Colonial produce. I called on two other large firms whose names had been given to me as tea importers, and found they did not touch the article. I was somewhat puzzled, therefore, as to how the 216,270 kilos. of tea consumed in Sweden got into the country. But when I got to Gothenburg I found nearly as much tea is imported here as in Stockholm, and that tea is imported into Sweden through no less than 22 other ports. Detailed statistics are as under:—

From	1899. Kilos.	1900. Kilos.
Norway	1,106	1,242
Finnland	675	3,522
Russia	22	687
Germany	64,598	60,618
Denmark	55,117	52,018
Holland	5,659	7,820
Belgium	7,201	14,056
Great Britain	67,105	76,084
France	26	223
Total	201,509	216,270

These statistics give no information as to original country of production. Tea transhipped at Hamburg, Amsterdam, and Antwerp, for instance, is all entered as coming from Germany, Holland, and Belgium, and these countries figure, therefore, as the countries of export. The population of Sweden is just over 5 millions. The consumption of about 0·09 English lbs. per head is very poor, especially when it is considered that the duty is only 50 öre per kilo., say 3d. per English lb. The consumption, however, is increasing slowly. Ten years ago the quantity imported for home consumption was only 80,000 kilos. From careful enquiries, I think quite one-third of the above quantity of 475,794 English lbs. (I should say it was over a third but not a half), is of Ceylon tea. With the exception of the quantity imported by the Messrs. Seton and Dickson's agents *viâ* Antwerp and Hamburg, all the rest of the Ceylon tea imported into Sweden is bought in London. Even Messrs. Seton's friends are buying now more in London. The reasons of this are, mainly, the London market is cheaper, the dealer gets samples in advance of the auctions and buys exactly what he wants, and finance is easier. For teas shipped from Colombo the drafts come forward by the mail in 3 weeks' time, and have to be paid at once, whereas the teas themselves are always seven weeks on the road, sometimes longer. Credit is much abused both in Norway and Sweden. The dealers have to give their clients, the grocers, a nominal four but generally six months' credit, because private individuals pay their accounts sometimes once in six months, sometimes in a year's time. On teas bought in London the Swedish and Norwegian dealers obtain the usual London terms and are not called upon to pay for the teas till long after their arrival. I called on the following:—

IN STOCKHOLM.

Firm A. General importers of colonial goods with a tea department—has imported direct from Colombo and are quite satisfied with their work, but prefer to buy in London. Use, however, mostly China tea and keep Ceylon only for clients who ask for it, are not inclined to go out of the way to push it; think the taste is growing for Ceylon.

B. Tea importers only. Ten or twelve years ago took up Ceylon at the instance of the Messrs. Seton, of Preston estate; now purchase only Ceylon and push it entirely. This firm received a grant from the Committee in 1897, I believe, and one through me this year of £100. Last year they expended on general and special advertisements 8,550 kronen, say £475: their travellers' expenses were 14,000 kronen, say £777.

In 1901 to date they have expended in general advertisements, signs to grocers, canisters, etc. 5,550 kronen = £297
Travellers' expenses 10,000 „ = £555
They well deserve our support

Their imports in 1900 were 61,000 lbs To date 1901 only 25,500 lbs. but 22,200 are on the way from London, Ceylon, and Hamburg. They anticipate that they will import about 6,000 lbs. less in 1901 than in 1900 as they got a large quantity just at end of last ye but they are buying more in London this year and the quan from there will be 10,000 lbs. over last year and correspondin less from Ceylon direct.

C. A small limited Company called Ceylon Plantage le Depô commenced by a coffee broker who, unfortunately, has failed plunging in coffee. This firm has been in existence four year and seems to have spent a great deal on advertising in m ingenious ways. To instance one, they have a number of l little match boxes, which they give away. Up to date t say they have lost money. They are supplied exclusively the Lethenty Estates Company from London. I have promi them a grant for next year, and will, if I have funds, make th a contribution for this. As vouchers were not ready for me th accounts are to follow me.

D. Mr. Dickson's agent has Dickson's tea and placards in thre four shops, but he is working mainly through private persons, has only commenced his general propaganda.

E. Is a firm of first-class grocers with five shops in Stockho The head of the firm, a born Englishman, but now a naturali Swede, has a nephew a proprietor in Ceylon. This firm, some th year ago, imported packet teas direct from Colombo, but now t have their own Ceylon packets packeted in London. They also a pure Indian blend—and give the preference to the Indian. London firm which supplies them, having a branch in Calcu naturally tries to push Indian teas in preference to Ceylons. T Calcutta firm seems to be doing a good business in Norw Sweden, and Denmark.

As we have quite enough firms in Stockholm making Ceylon t their speciality, I did not try to get any of the Gothenburg fi to take it up specially and push it. A special return is iss yearly of Gothenburg trade which gives, amongst other thi the quantity imported by each firm. The return for 1900 is out yet, but in 1899, 73,000 kilos. were imported by 14 differ firms. Two of these only are purely tea firms; the others general Colonial produce importers—I called on the principals.

F. By far the biggest importer, has correspondents in Colom but buys now always in London; is favourably disposed towa Ceylon tea and buys about 20,000 lbs. per annum, which is ab one-third of his total import.

G. 2nd largest importer, total import though only 15,000 buys principally Ceylon and Indian, all in London.

H. Imports 12,000 lbs., principal retail mostly China fr Hamburg, uses Ceylon for mixing purposes.

I. Entirely tea, imports only 2,000 lbs.! all China—was at time the biggest tea business in Sweden.

J. General importers; by blends from a firm in *Putney*, Lond S.W.!!!

NORWAY.

The consumption in Norway is as follows:—

	1899. Kilos.	1900. Kilos.
From Sweden	1,656	4,799
„ Denmark	20,340	18,805
„ Germany	51,884	58,571
„ Holland	2,091	1,640
„ Belgium	7,262	907
„ Great Britain	34,030	38,960
„ East India, China, and Asia	673	807
„ Other Countries	51	47
„ Russia	108	339
Total	118,095	124,875

Last year the consumption was 274,725 English pounds. population is 2,000,000, so the consumption per head of 0·13 o English lb. is better than Sweden, and this notwithstanding fact that the duty on tea in Norway is 2 kronen per kilo about 1/2 per lb. The Norwegian importers have petitioned t Parliament on successive occasions to have the duty redu The justice of their demand has been acknowledged, but Government cannot do without the revenue. The dealers sa the duty were only reduced by half, the consumption would

Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant appointment of "Purveyors to Her Majesty The Queen and Emp of India" from the year 1837 until the time of her death, have had the honour of being appointed by Royal Warrant "Purveyor The King."

oubled. I have not been able to find out through whom most of he tea comes, and think Hamburg and Copenhagen dealers must upply the retail firms direct. I hear there is a firm in Bergen mporting a good deal of tea direct from London, but I could only earn of five firms in Christiania interesting themselves to any xtent in tea. Of these five three are general colonial produce ouses.

K. A big firm, tea is a minor article with them, and they confine heir purchases almost entirely to China. What little Ceylon they et, they buy in Bremen or Hamburg.

L. Also another large firm with whom tea is only a minor rticle, all of which they buy in London, and they sell principally heir Assam blend.

M. A smaller firm who took up Ceylon tea in 1897 and import t in packets direct from Colombo. They advertised and pushed t vigorously in 1898-99, and last year. It is gradually displacing heir China as this year they will import two-thirds Ceylon, one-hird China, but their total imports will not exceed 7,000 lbs. this ear. They got a grant last year, and I have promised one for next o include this year's expenditure.

N. A new firm started two years ago and entirely tea. They re to put up and run a pure Ceylon tea of three qualities, are get-ing special placards for it and circulars. Their first purchases of eylon have just been made, and we will see what they can do.

O. Is the Christiania branch of the Stockholm firm *B.* They pened in Christiania four years ago—and only sell Ceylon. Have orked up the importation to 8,000 lbs., but have lost money every ear. They have advertised very largely, but the expensive part of he business is their travellers, as it does not pay to travel only for ea. If I have funds available, I will give them something towards heir expenditure this year, and have promised them £50 for next! fancy that nearly one-third of the tea sold in Norway is Ceylon ea; if not sold pure, it is sold in blends. I have urged on the ealers the importance of getting grocers to reduce their prices. ea especially in Sweden is far too dear, and until it is much heaper the public will not take to it. The drink of these coun-ries is, of course, coffee. I fear nothing can be done at present n the way of tea rooms. The customs of these countries do ot lend themselves to afternoon coffee, and consequently not fternoon tea. The cafes are deserted between 4 and 6, as this is he dinner hour of the dwellers in towns. Coffee is drunk at reakfast and at supper. In a very few families tea is taken at o'clock occasionally, but when it is drunk it is at 9 or 10 o'clock t night. The peasant and fishermen will have no tea. Still the aste for tea is growing. and there is no reason why the ¾ million bs. of tea drunk now in these two countries should not be all eylon.

DENMARK.

In Denmark much more tea per head is drunk Quantity entered or home consumption in 1900 was 910,000 Danish lbs. The total mport was 1,490,000 Danish lbs., but as Copenhagen is a free port, good deal is transhipped there for Russia and Sweden and Norway. The steamers of the East Asiatic Company receive the ame privileges as steamers flying the Russian flag. The import or home consumption in 1899 was 900,000 Danish lbs, but in 1898 t was *990,000* Danish lbs. The population is a little over 2½ millions, of which nearly half a million is resident in Copenhagen nd suburbs. 910,000 Danish lbs. equal to say 990,000 English lbs. s equivalent to 0·35 per lb. per head of the population. I am onvinced that the Copenhagen dealers supply the retailers in outh of Sweden, so that Denmark offers a good field for Ceylon ea. In Copenhagen I saw no less than 5 large shops and 3 smaller nes selling only tea. In addition to these special tea businesses, tea s displayed in many grocers' windows. But in Denmark Ceylon has nade but a very small beginning, and where other than China are sed it is all Indian, that is used and preferred. The usual story s, it keeps better and is much better adapted for mixing.

IN COPENHAGEN

here are four large Colonial importers with tea departments. Four irms selling tea only wholesale, and five semi-wholesale with good warehouses and offices but with retail shops as well.

1. The oldest and most important in the first group do put eylon tea, but frankly told me they only kept it if it was asked or. They had sold China tea for 50 years and did not intend to ell any other, if they could help it.
2. Keep only China—and their tea is a very minor article.
3. A small house, principally coffee and exclusively China tea.

4. One of the partners in this firm has been in Colombo, and has correspondents there. Their business is principally other articles, but he takes a keen interest in Ceylon tea, and has tried to open up a trade in it though he finds it very difficult to do so.

The second group all keep Ceylon tea, and buy it in London or through Bremen firms. One of them gives all the preference to Indian. But another tells me he imports 100,000 lbs., of which one-third is Ceylon-Indian, mostly Ceylon bought in the London market. I have hopes that in time this man will take up and push Ceylon. The 3rd firm have agreed to make Ceylon a special feature in their trade, to run it in packets in 3 qualities under a special label, and will issue special circulars. I am to contribute the cost of placards and circulars, and this is a beginning, at any rate, of the 3rd group. I found one who said he sold practically no China. He keeps to the China designations, but his teas are all Indian blends. He maintains the public do not care for Ceylon. The other four firms all keep Ceylon, but use it mainly in their blends. The demand for pure Ceylon is, they say, very small. They buy all their Indian and Ceylon teas in London; one of them has the agency for the *Santhal Mission* teas from Bengal!!

You will see from the above that the work in the interests of Ceylon tea was begun in Sweden and Norway long ago, and that what has been done there has been through the initiative of the individual Ceylon planter. The increase in the consumption has been very slow, but continuous, and the work has been a very uphill work. We have made a beginning in Denmark; and I hope it will not be either so slow or such hard work as in Norway and Sweden.

The duty on tea in Denmark is 66 öre per kilo., say 3¾d. per English lbs.

CEYLON TEA IN N. AMERICA AND ITS PROSPECTS GENERALLY.

Mr. C. Shand writes under date London 27th ultimo to the *Ceylon Observer*:—

I enclose copy of another letter I have written to the Secretary of the Ceylon Association. Much of its contents will have appeared in the *Observer*, but there are a few points which are new.

I see amongst the many suggestions for getting rid of what is called rubbishy tea, is to buy it up and burn it! I think mine, to convert it into brick tea, is better. It appears that, after all the fuss about Japan tea in Canada, she only takes 5,424,000 lbs. per annum. How 10,000,000 lbs. is to be captured out of that by Ceylon Greens is a puzzle which Mr. Larkin will perhaps be able to solve when he comes back next week. I missed seeing him by a couple of minutes. If Ceylon planters continue their restrictive policy six months longer until the duty is reduced, they will set the industry on its legs again, because there will be an expansion in the home trade. I believe, however, even this is going on satisfactorily, but it will probably be checked by the rise in common tea.

I am not sure whether the statement in the Yokohama Prices Current includes shipments from Kobe, but I will find out. The Japan Blue Book is rather confusing; first they are given in kins, (100th part of a picul) and then the pan-fired and basket-fired are given separately. I shall no doubt find out all about it at the American Consulate and the Colonial Office; perhaps I may find it in the "Encyclopedia Ceylonica." 50 millions from China, 20 from Japan, and 17 from Ceylon and India—make up in all 87 millions.

THE SECRETARY OF THE CEYLON ASSOCIATION,
London.

52, Longridge Road, 25th September, 1901.

DEAR SIR,—In my letter of the 9th instant, I asserted that the importers of Japan tea into America held an impregnable position, from which they could not be ousted by the costly and unpractical methods adopted by the Ceylon Planters' Association.

As this opinion is contrary to that of many intelligent and experienced planters, it will certainly be disputed. I, therefore, think I may as well anticipate criticism, by stating my reasons for making so bold a statement, and, by thus raising the question, give my critics an opportunity of refuting my arguments, if they can do so.

That importers of Japanese tea in America have an advantage of thirty per cent. in the difference between 25 pence per yen, and 16 pence per rupee will not be denied. There are none better qualified to appreciate this advantage than Ceylon planters, for has not the action of the Indian Government in factitiously raising the sterling value of the rupee to the extent named, been, for the last four years, a standing grievance of India and Ceylon planters?

There is little doubt that Ceylon planters can, if they choose, make better Green Tea than the Japanese, but to do so, fine-plucked leaves must be used, and as the lower grades are not admitted into America, and cannot be sold elsewhere at prices that would cover the cost of packages and transport, they have to be eliminated, and this adds considerably to the cost of the exportable grades, which I think cannot be less than 36 cents per pound, laid down in Colombo.

That the leaves used in making superior Greens, would, if made into Black Tea, give more profitable results is proved by the fact, that very little Green Tea is now being made in Ceylon, and it looks probable, that there will be even less during the next few months.

Hitherto very little has been publicly written regarding the cost of tea in Japan, except vague statements that the prices of labour having advanced, there, the cost must be greater than in Ceylon. It is very difficult to obtain accurate information on this point, as there are very few merchants here who are interested directly in the trade between Japan and America. I have interviewed every one likely to be able to give me information on the subject, and Mr. Comes of Messrs. Comes & Co., was the only one I found practically acquainted with it. From him I learned that Japan tea was not sold packed ready for shipment, as in China, India, and Ceylon; but was sent to the shipping ports, in a half manufactured state, and there refired, sorted, and packed by exporters, and that the cost of doing this was about five yen per picul. By adding this sum to the market quotations, the price ready for shipment is obtained. This was confirmed by Mr. Walters, Manager of the Hongkong and Shanghai Banking Corporation, who has been in Japan.

I find by the Yokohama Prices Current of the 13th August, that common teas including re-firing, etc., cost 28 yen per picul; this at an exchange of 25d. is equal to 5·26d. per pound. Good medium tea at 25 yen equals 6·37d., and finest at 40 yen equal 7·52d.

Taking good medium to correspond with the quality usually shipped from Colombo, it would appear that there is not much difference between the cost of Japan, and Ceylon Greens.

It is authoritatively stated that, to capture the Japanese stronghold, it will be necessary to expend a very large sum in advertisements, and that Ceylon Green Tea must be made to resemble in every way Japanese, and moreover, for a considerable time, Ceylon planters will have to carry on the trade on philanthropic, and not on business, principles.

I will not dwell in this letter on the subject of the bonus paid by the "Thirty Committee" of the Planters' Association, because in a letter to the *Financial Times* in April last, copy of which you obtained, I fully explained its nature and object. I would simply ask what effect could the substitution of a couple of million pounds of Green for Black Tea have in counteracting the over-supply to Great Britain?

Those who are old enough to recall the time when China was the only source of supply, will remember that the consumption of Green went *pari passu* with Black.

Outside the producing countries, and North America, who now drinks Green Tea? I gather from the subjoined statement, taken from the Yokohoma Chamber of Commerce Prices Current, that, even in the United States and Canada, the taste for it is diminishing; whilst that for Black, as in all other Anglo-Saxon countries, is increasing.

Is it worth while Ceylon's spending large sums to try and revivify a declining trade?

I learn from Ferguson's "Encyclopedia Ceylonica" that the American campaign costs no less than £20,000 per annum. This amount, if diverted to practical purposes, would pay five per cent. dividend on £400,000 of capital.

Your Committee can imagine what that sum could be made to do in promotion the consumpting of Ceylon tea in Muhammedan countries.

It appears that the chief part of the annual cost of the campaign, is the secret services! One year's savings would cover the expense of erecting in Colombo a Brick Tea Factory, to use up those grades which every one, but the Chinese are anxious to get rid of. Those astute people are, I gather from the Ceylon newspapers, beginn to find out their value.

It would only cost £2,500 per annum to subsidise a Joint S Company with a capital of £50,000 to work the factory.

TOTAL EXPORTS OF JAPAN TEA FOR THE PAST SIX SEASONS.

Shipments.	1900-1901.	1899-1900.	1898-1899.
To U. S. America ..	19,859,749	19,846,372	15,947,030
To Canada ...	5,424,678	6,859,829	7,979,284
	1897-1898.	1896-1897.	1895-1896.
To U. S. America ...	21,890,958	19,641,751	23,436,023
To Canada ...	5,565,810	7,708,267	6,500,277

You know that of the 84 million pounds of tea imported America 50 millions is from China—the consumption of tea in U. S. appears to have made no progress during the last tw years.

(Signed) C. Shan

COFFEE STATISTICS.

From Messrs. G. Duuring and Zoon's report dated Rott dam, September 30th, 1901.

STOCKS.

	1901.		1900.		1899.
	Bags.	Chests.	Bags.	Chests.	Bags.
Trading Co.					
Java, ...	60,500	—	45,400	—	55,000
Padang	—	11	—	—	—
Macassar	—	—	—	—	—
Menado	2,900	—	3,700	—	500
Surinam	—	—	—	—	400
Trading Co., Total, East-India	63,400	11	49,100	—	55,900
Privately.					
Java first hand ...	51,500	—	70,300	—	110,900
Padang ,, ...	6,700	—	3,200	—	1,600
Macassar ,, ...	15,800	—	6,500	—	3,100
Menado ,, ...	800	—	1,500	—	200
African ,, ...	6,100	—	12,500	—	10,500
East-India ,, ..	100	—	—	—	—
Total, East-India ...	1,44,400	11	1,43,100	—	1,82,200
Privately.					
Santos	5,48,400	—	4,21,500	—	3,79,000
Venezuelan and Columbian	100	—	—	—	100
Central American ..	1,000	—	1,500	—	1,700
Surinam	—	—	—	—	—
Total, 1st hand .	6,93,900	11	5,66,100	—	5,63,000
Trading Co's Warrants, 2nd hand ...	57,500	390	59,500	32	55,100
Total **Stock**	7,51,400	401	6,25,600	32	6,18,100
Do. **do.** September 1st...	7,55,600	420	6,24,700	35	6,43,200
Quotation of *good ord. Java* ...	35 *cts.*		35 *cts.*		26 *cts.*
Do. do. do. *Santos*..	19 ,,		24½ ,,		17 ..

DELIVERIES.

	September.						From January 1st to 30th Sep				
	1901.		1900.		1899.		1901.		1900.		1899
	Bags.	Chests.	Bags.	Chests.	Bags.	Chests.	Bags.	Chests.	Bags.	Chests.	Bags.
Trading Co.	11457	30	11230	3	22382	48	97680	191	105192	57	146475
Private ..	154200	259	159400	166	150100	109	1009400	1468	1021500	891	847700
Total ..	165657	289	170630	169	172482	157	1107080	1659	1126692	948	994175

East India Figures.

Result of the Government Batavia Sale 5th September:

4,300 Piculs	Preanger	average *f* 27¾	per Picul
2,109 ,,	Malang	,, - 36⅜	,, ,,
2,391 ,,	Sundries Plantation ...	,, - 40 - 56½	,, ,,

Total 8,800 Piculs.

Export from Dutch East-Indies

	August. Piculs.	September. Piculs.
From Java to Holland for the Trading Company ...	3,000	2,000
Do. do. do. Private account ...	23,000	31,000
Do. Sumatra do.	1,000	1,000
Do. Celebes do.	—	—
Dutch East-Indies to U.S.A.	—	12,000
	27,000	46,000

Brazil Figures.

Exports from Rio de Janeiro from July 1st to August 31st.

	1901. Tons.	1900. Tons.	1899. Tons.
To North-Europe ...	8,752	4,107	4,011
,, Mediterranean ...	4,317	2,319	4,636
Europe	13,069	6,426	8,647
,, U. S. A.	39,189	14,829	23,188
,, Cape and La Plata	5,412	4,357	7,674
Total ..	57,670	24,612	39,509
Afloat from Rio to Europe ...	...	148,000 bags.	
	against	129,000 ,,	in 1900
,, Santos ,, ...	..	954,000 bags.	
	against	663,000 ,,	in 1900

	Rio.			*Santos.*		
From July 1st to Sept. 28th.	1901.	1900.	1899.	1901.	1900.	1899.
	Bags.	Bags.	Bags.	Bags.	Bags.	Bags.
Receipts ...	1,848,000	803,000	1,150,000	3,615,000	2.378,000	2,627,000
Exports to Europe	341,000	199,000	256,000	1,762,000	1 227,000	1,178,000
Do. U. S. A. .	1,005,000	424,000	580,000	949,000	331,000	525,000
Stock ...	585,000	221,000	336,000	1,222,000	951,000	1,124,000

PROSPECTS OF INDIAN TEA.

The *Indian Daily News* of the 18th instant observes :—

All interested in tea, and in this City of Palaces their name is legion, will learn with satisfaction that at last Mincing Lane appears to be attaching some importance to the threatened curtailment of the supply of Indian tea brought about this season by finer plucking and climatic causes. Telegrams received yesterday from London announce that lower grades of tea have advanced a farthing, and a strong demand is anticipated from now onwards. On the 10th instant we announced in these columns that, as far as we could ascertain, there was an actual shortage to end of September of 12 million lbs., and that latest advices from the districts indicated an early close to the season and to revised estimates not being reached. We then expressed the opinion that the present season would close with 15 to 17 million lbs. less tea than was made in 1900. Since we advanced that statement, the Indian Tea Association have announced an *ascertained* shortage to the 30th September of 14¼ million lbs., as compared with the same date last year, or 2¼ million lbs. *more* than we had estimated, and there seems every reason now therefore to expect a total shrinkage this season of 17 to 19 million lbs. This goes to confirm the opinion held in some quarters, to which we referred some short time back, that the shortage will be full 20 million lbs. Such a formidable deficit properly handled should soon make itself felt, and prices be brought once again to a paying level. It appears to us that sellers, if they like, can be more masters of the situation than has been possible for years, and by the use of ordinary discretion in the selling of the balance of their produce, recover some of the losses they have had to bear in the past. They must not force teas on the market in excess of the buying power, as was clearly the case at last Friday's sale, but restrict the auctions to moderate dimensions. They need be under no apprehension that buyers will not remain in Calcutta so long as there is tea to buy. Postponement of the dates of departure of some of the annually homeward bound will, we feel sure, be cheerfully conceded by buyers, if the trade of the Calcutta market, in which they are interested, can be improved by their remaining a little longer here. The tea market has been suffering for some time from the indigestion and lethargy that follows in the steps of gluttony. A little wholesome restriction of its diet will do wonders for it, and on shortened commons it will rapidly recover its tone and appetite. We would particularly commend these points of view to those who have teas arriving during the Poojahs. Far better to hold over an invoice or two to the following sale than to force 25 or 30 thousand packages on to the market at once and have a repetition of last week's languid tone.

PLANTING AND SCIENCE IN CEYLON.

In his address at the opening of the Legislative Council on the 18th instant, the Governor of Ceylon, the Right Hon'ble Sir John West Ridgeway, remarked :—

Mr. Willis, the very able and energetic Director, reports that the scientific sub-department has been fully organized. and a large amount of work has been carried out by it. The chief desideratum in organization is now the further division of the sub-department of gardens into the Botanic Gardens proper, and an Experimental Garden, where large experiments may be tried with staples, or with plants that may become staples, leaving experiments on the minor plants and the cultivation of ornamental plants to the Botanic Gardens. By the purchase of Gangaroowa estate, facing the Peradeniya Gardens, an unrivalled site for experimental work has been secured, and in future all work with tea, coffee, cocoanuts, camphor, cinchona, tobacco, fibres, fruit, etc., will be carried on upon this site on a scale sufficient for the practical commercial testing of the results and products for the information of all interested in agricultural enterprise in the Colony. With the Experimental Garden it is proposed to combine the training of a few students, and thus supply the place of the Agricultural School in Colombo now closed. The training will be of a strictly practical character, and almost entirely out of doors, the garden being worked like an estate.

The general condition of the crops of the Island in regard to diseases is distinctly better than usual. This is partly due to the work of the Mycologist and Entomologist, who have done much to spread a knowledge of the principles of sanitation and of treatment of disease in its early stages among planters and others. They have reported, mainly by letter, on over 750 cases of disease during the year, and have travelled over a large area giving advice and help. They have also carried out a large amount of scientific investigation into the life-histories of insects and fungi, especially those which are or may become harmful. Mr. Green has also devoted a good deal of attention to the question of mosquitoes and malaria, with a view to the discovery of preventive measures against this scourge.

With the of view obstructing as much as possible the introduction of disease into the Island, an Ordinance has been passed empowering the Government to prohibit the importation of plants from infected countries, or to require them to be fumigated on arrival, according to the necessities of the case. A small fumigating chamber is about to be built at Kochchikada for the treatment of imports.

Tea has passed through a critical period. The year 1900 was distinguished by an unusually favourable season for heavy flushing in most of the Ceylon tea districts, and there appeared also to be a prevalent belief that common teas were likely to find a good market. The result was a total of shipments far in excess of the estimate, no less than 149,264,602 lbs., or 19½ million pounds above the exports in 1899. This heavy increase, more especially in tea of poor quality, combined with large shipments from India, led to a rapid fall in the average price, until towards the end of the year and during the first half of the present year it approached a figure that could leave little or no margin of profit to a certain proportion of the producers. For a time production had overtaken consumption, checked as the latter undoubtdedly was to some extent in the

United Kingdom by the Imperial War Tax of two pence additional per pound on our staple; and with large stocks the prospect before Ceylon and Indian planters was at the opening of the present year by no means bright. But the planters of Ceylon, as in former crises, rose to the occasion, and by plucking finer leaf and preparing a better quality of tea have gradually circumscribed shipments and established a standard for which a much better and improving average price is now offered in the London market. The prospect then, at the present moment, is by no means unfavourable to the Ceylon tea planter. Let us hope that the lesson has not been lost, and that he has learned how shortsighted it is to rush the home market with large quantities of common tea, and how much wiser it is to endeavour, as far as possible, to make tea of good quality. Any extension of planting being for the present stopped, it is improbable that production will again be allowed to outstrip the combined requirements of home and foreign markets. Further, let us hope for an early termination to the troubles in South Africa and for the consequent removal of the war levy on tea, followed by a better progressive rate of consumption in the United kingdom. In regard to foreign markets, the progress made—more especially in Russia—continues to be satisfactory, and there is good reason to believe that the manufacture of pure green tea to suit the American market will benefit the local industry. The record for the six years so far as available may be given as follows:—

Total Exports of Ceylou Tea.

		Increase on previous Year.
	lbs.	lbs.
1896	108,141,412	10,000,000
1897	116,054,567	8,000,000
1898	119,769,071	3,700,000
1899	129,894,156	10,000,000
1900	149,264,602	19,500,000
1901 (Estimate)	146,000,000	Decrease.

The progress in shipments to countries other than the United Kingdom may be noted.

Exports of Tea from Ceylon to the following Countries.

	Australasia.	Russia.	All Countries outside United Kingdom.
	lbs.	lbs.	lbs.
1896	11,062,832	201,313	14,205,051
1897	13,258,456	439,349	17,124,508
1898	15,126,891	2,714,003	23,635,138
1899	15,606,833	3,949,740	25,946,032
1900	17,606,912	8,917,185	34,671,446
1901*	15,342,156	6,959,327	28,857,783

Colombo is clearly destined to become a great market and distributing port for tea. How far its trade and importance might be increased by the removal of certain restrictions, and the imposition of safeguards against the import and export of what is known as "rubbishy" tea, it is for those chiefly concerned to say. Meantime, confidently trusting in the judicious management of plantations, practical experience being aided by Science, I see no reason to doubt the continued well-being of the great planting industry of the Colony.

Cacao is doing well, and on most large estates the canker has been largely eradicated. Cocoanuts, cinnamon, cardamoms, and other smaller products have been in a prosperous condition during the year.

Of new products, rubber claims the first place. Exports of appreciable quantities have commenced, and the prices obtained have been most satisfactory. The latest market report contains the entry "Best Pará, 3s. 9d.; Ceylon, fine, Pará sort, 4s. 1¾d. per lb." This cultivation may now be considered established in the wet low-country districts.

Camphor has continued to attract attention, and bids fair to prove a paying minor product for many parts of the south west and the hills. Samples prepared from trees grown in the Botanic Gardens have lately been valued at 126s. per cwt. The yield of camphor from clippings of leaves and young twigs is about 1·2 per cent. and the preparation is cheap, so that in places where 16,000 lbs. of clippings can be obtained from an acre in a year, there is little doubt that it will pay well.

Of other minor or new products, tobacco continues to extend, also vanilla, pepper, cinchona, and tapioca: the roots of the last named are, however, only used as yams, and not for the preparation tapioca. Citronella oil is in a very depressed state, owing to ov production and to low prices, with new competition in unadult ated oil from Java. The adulteration of our oils is so wholes and so shameless that it is difficult to foresee any remedy for t depression, unless the cultivation be taken up by large ma facturers. A detailed investigation has been made, and a rep will soon be published.

Investigations are being made into the Ceylon gutta-perch ebonies, and other subjects. The laboratory here has been used numerous visitors, in addition to the staff of the Departme A scientific journal, the "Annals of the Royal Botanic Garde Peradeniya," has been established for the publication of t technical and scientific part of the work of the Department. T subordinate clerical and gardening staff has been re-organized wi an incremental system of pay, resulting in a slight saving. T Department has assisted the Department of Public Instruction the starting of the new system of School Gardens, providi numbers of useful plants of the best varieties.

* Up to 30th September.

BUYING, HANDLING AND SELLING COFFEES

THE SECOND PRIZE ESSAY.

By William Rhodes (Quality), Brockville, Ont.

Coffee is one line among the many which a grocer handles th is capable of being made a distinguishing feature in one's trad that is to say, a man may, by diligent pushing, assisted by a lit judicious advertising, establish a reputation for fine coffee whi will bring him trade outside of his regular customers.

This is something which should be aimed at for several reason First, it pays you a good profit; second, it is a good advertisemer and third, it helps to bring trade for other goods. Now in order accomplish this desirable result, the first step is the

BUYING.

We presume these essays are intended for the benefit of retaile generally, so first, we would say, do not attempt to import yo coffee green and do your own roasting unless doing an exceptional large business There are several good, reliable houses in Cana handling coffee and spices combined whose goods can be relied both for quality and price, and we would recommend placing yo account with one of them. They will do the roasting far bett than you can, for they will do it in so much larger quantities und the watchful eye of men who, after years of practice, have becon experts and know just when the proper color has been attaine Besides, there are several items in the cost of roasting which ha to be taken into account, such as interest on investment (cost oraster, etc.), fuel, shrinkage in weight, risk of burning a bat occasionally, and last, but not least, time consumed which could far more profitably employed in attending promptly to custome arranging stock attractively, or collecting accounts.

A merchant should know all he possibly can learn about t goods he is handling and so it is a good plan to

GET SAMPLES OCCASIONALLY

from other houses and draw them against the ones you are han ling in order to compare values. It is also well to familiarize you self with the flavors of the different coffees as well as noting t shape, style and general appearance of the berry. In these wa you may become something of an expert yourself in time.

Now, as to the different kinds of coffee. They consist of Ceylon from the island of that name; Javas, from the islands of Java a Sumatra; Mochas, from Arabia; Maracaibos, from Venezeula, South America; Santos and Rios, from Brazil; and Jamaicas, fro the island of Jamaica. There are a number of other kinds. fact, there is more or less coffee grown in nearly all tropical cou tries and islands, but the kinds we have mentioned are the on best known to commerce.

The Plantation Ceylon is considered one of the finest coffe grown, and has its largest sale in Europe. Its sale in this countr is limited; partly because it is not known, but principally account of the price which ranges from 35 to 36 cents per poun Having a rich, full flavor, it is often used for toning up oth coffees, or makes a very fine cup of coffee alone.

But the names of coffees most familar to the public are Java an Mocha, and there is a great deal of coffee sold under these nam which is a libel on them.

Java and Mocha are the coffees which should be pushed, as they ive the best satisfaction when your customers become educated o them.

There are lots of people who drink cheap, heavy, black coffee ith a thick sediment in the bottom of the cup and they like it ecause their taste has been educated in that direction. But if yoo ould get them to try a blend of Java and Mocha, and persist in its se for a short time, they would soon prefer it and they could not e induced to return to the cheaper grade. There are, of course, any grades of both Java and Mocha, the difference consisting artly in the draw and partly in the style of the bean, which is due o the care in cultivation and place of growth. Private Javas, hich are the finest grown, are those grown on private estates here they get the greatest possible care in cultivation, and com- and prices ranging from 35 to 45c. per pound, but they are sold lmost entirely to wealthy city trade.

Old Government or Mountain Java will be found satisfactory to ordinary trade, and when blended with Arabian Mocha in about the proportion of 4 parts Java to 1 of Mocha, will make an excellent coffee to retail at 40c. per pound. Mocha does not make a desirable coffee alone, because of its peculiar acrid flavor.

Next in order come the Maracaibos—a medium-priced coffee. Here, again, you find a number of different grades. The best grade is branded "C. C." from the district of Cucuta, in Venezuela, its place of growth. At its present wholesale price, 10c., it makes ex- cellent 30c. coffee alone, while by blending with Mocha and Java you have a choice 35c. grade. We do not recommend the use of chicory unless your customers demand it particularly.

The grades which retail at 25c. per pound or less are composed of cheaper Maracaibos, Rios, Santos, Jamaicas or a combination of several of them to suit the price and the customer.

You may buy small quantities of the different cheap lines and blend them yourself, or you can give your coffee house a price limit and have them put up the best blend possible at the price.

We think this the best plan as you do not require to bother with so many lines nor keep so large a stock. It is pleasing to note that Canadians as a people drink principally the best grades of coffee, the cheap package stuff, such as is sold largely in the United States, having little or no sale here. This condition of things is better for the seller, as the higher priced article affords a better profit, and they certainly give greater pleasure in the cup to the consumer.

HANDLING.

The first point under this heading is the quantity to buy. Our rule is, to buy only a month's supply at a time and have it shipped in air-tight tins, as when coffee is exposed to atmospheric changes it absorbs the dampness, making the bean tough and rubbery, thus losing its crispness and fresh flavor. Coffee is one article which must be fresh to be as good as possible, so we would say, never buy ground coffee, as the delicious aroma and flavor of a good coffee passes away before it is all sold no matter how tight the tin, and a poor coffee is certainly not improved by being kept ground. If you desire to draw people's attention to your coffee by means of price tickets, put it in a glass dish with a tight-fitting cover.

SELLING.

We now reach the last and most important point in connection with this subject, namely, the selling, for this touches your profit —your living.

The main point in selling is to get yourself and your goods pro- minently before the public. Use every legitimate means by which to get the people talking about your coffee, so that they will think you have the best coffee in your town or neighbourhood. One way to accomplish this is to

ADVERTISE IN YOUR LOCAL PAPER.

A large and expensive space is not necessary as a small one written up in plain, catchy style will often do just as well. Change it often and make quality your strong point. Keep hammering away on quality, quality.

Quote prices occasionally if you wish, but don't cut prices. A cutter generally cuts his own throat first. Have your profit and sell good goods, for that is what tells in the long run.

TO DEMONSTRATE COFFEE.

Another very good way of advertising your coffee is by demon- stration, when possible. Very often a back corner of a store or a small room in connection with a store could be fixed up cozily with little trouble or expense. A few small tables and chairs which can be rented cheaply; a good sized coffee-pot on a gas-burner or stove; clean linen, dainty china, and a plate of five-o'clock tea biscuit on each table, and you are ready for callers. Of course, a demon- stration, to be a success, must be well advertised for about a week beforehand.

Another point is to watch your custsmers' orders and see if they all buy their coffee from you. If you find that any do not, intro- duce the subject in a careful way, ascertain their particular taste as nearly as possible, give them a sample to try and tell them to be sure to let you know how they liked it. If they should forget to do that, ask them yourself and if that sample failed to please give them another blend, and so keep on until you strike something to suit their taste.

Do not keep much coffee ground up ahead. It is, however, a good plan to grind what you think will be needed on Saturday first thing in the morning, so that customers get the benefit of the aroma when they crowd in.

In conclusion, do not get discouraged if results do not follow as quickly as you think they should. Be patient and keep pounding away on quality first and success will be yours eventually.

CEYLON AND INDIAN AT THE PARIS EXHIBITION.

We give the following extracts from Lord George Hamil- ton's report on "the Indian and Ceylon Sections":—

The exhibits of Ceylon occupied the large portion of the eastern side of the Indian pavilion, as well as a considerable space in the grounds, which as before mentioned I was able to allot for this pur- pose. In the Commercial Court the great staple products of the island, such as tea, coffee, cocoa, cinchona, spices, etc., were well represented by exhibits from every important garden and estate in Ceylon, and the adjoining verandah contained a fine collection of plumbago and graphite, shown by the Morgan Crucible Company of Battersea.

* * * *

In the grounds of the Ceylon Tea House, a characteristic pavilion, in which tea and coffee in the cup were sold, soon became one of the most fashionable centres of the Exhibition, and it is gratifying to know that the strenuous exertions of Sir William Mitchell and Mr. J. H. Renton, the representatives of the Ceylon planters to make Ceylon tea better known and appreciated in France and the Continent generally, have met with the recognition that the com- mercial enterprise of the planters so well deserved.

* * * *

The popularity of the Indian and Ceylon exhibits may be judged by the fact that not less than six millions of people passed through the pavilion during the period it was opened to the public. It should be mentioned that the main buildings of the Exhibition, being entirely unlighted had to be closed at dusk, whereas, owing to a wise resolution of my Sub-Committee, the Indian and Ceylon sections were brilliantly lighted by electricity, and could thus be kept open later and give admission to the inquisitive crowds who had little else to see after dark.

From the reports of British Jurors we quote;—

Report by Mr. J. H. Renton,

British Juror in Class 39: Vegetable Food Products.

Coffee.—The only exhibitors of this article were Ceylon and the Madras Presidency. The British West Indies were not represent- ed. Notwithstanding the fact that in Ceylon, owing to the ravages of leaf disease, this article is rapidly disappearing from the list of this Colony's products, the exhibits, though small in number and from only four plantations, were excellent in quality and ap- pearance. One plantation made a very handsome exhibit of Liberian coffee, and the Grand Prix was awarded to Messrs. Lipton, Limited, in this section for their collective exhibit of coffee and cocoa. The United Planters' Association of Southern India made a very good exhibit of coffee, to which a Gold Medal was awarded. Awards were given to all the other exhibitors of coffee.

Cocoa.—Ceylon was the only British Colony that made any exhibit in this article; the exhibit, so far as number of exhibitors was concerned, was not to be compared with the large exhibits made by Ecuador, Guatemala, Salvador, and Mexico; yet the appearance and quality of the Ceylon cocoa was admitted to be very superior, and created a favourable impression. It is much to be regretted that Trinidad and the other West India Islands made no

exhibits. Trinidad cocoa is very much appreciated in France. The export of cocoa from Ceylon has grown from 16,000 cwt. in 1890 to 42,700 cwt. in 1899. Cocoa was exhibited from seven plantations; they all obtained awards.

A very interesting sample of cocoa was shown by the Administrator of the Gold Coast. I understand this was collected from a few experimental trees at Accra. The quality of this cocoa leaves nothing to be desired and if suitable labour can be obtained, there is evidently a future for this product in West Africa. There will not be a large increase in the export of this article from Ceylon, as much more suitable land is not now available in that Colony.

Report by Sir W. W. Mitchell, C.M.G.,
Member of the Ceylon Executive Committee;
British Juror in Class 41: Non-edible Agricultural Products.

Non-edible agricultural products comprised:—

Oils.—Animal and vegetable.

Fibres.—Cotton, wool, ramie, aloe, cocoanut, palmyra, and kitul.

Plants.—Medicinal and oleaginous.

France and her colonies were represented by eleven jurors, and the following countries by one each, *viz.*, Germany, Bulgaria, United States, Great Britain, Japan, Mexico, Peru, St. Salvador Hungary, and Russia.

The products of the various countries exhibiting under Class 14 were examined in a painstaking manner, and the awards of merit were judiciously bestowed on the recipients of them; the proceedings of the jury were characterised by fairness and cordial co-operation throughout.

Essential Oils.—There were several exhibitors of cinnamon, lemon grass, and citronella oils, chiefly from Ceylon. These are used principally for perfuming soap and to a small extent in drugs, and in cooking.

A number of oils used in native medical practice were exhibited. Some of these possess ascertained definite properties, whilst others have traditional repute, but they are of no commercial importance.

Fibres.—Cotton—The exhibits from the United States, as might be expected, were exceptionally fine, and the award of a Grand Prix for the collective exhibit is one that is well merited for its excellence in every respect. Specimens of cotton from other countries received attention, but all of them represented a growth insignificant as compared with that of the United States of America.

Aloe.—Many very fine specimens of aloe fibre were exhibited, but those from Mauritius were remarkable for their excellence; those of Messrs. Rougier, Lagane & Goupille were of a stand-out description, and obtained the award of a Gold Medal.

Ramie.—Several samples were contributed, which gave evidence of the great value that may rightly be attached to this article in future from a commercial point of view.

Thus for the endeavours to perfect the process of decortication, and to separate the fibre from the substances enclosing it, have only been partially successful. A conference on the subject is about to be held, when it is expected that special efforts will be made for the achievement of what is so much to be desired.

Palmyra fibre and kitul fibre were shown, and attracted the attention of those interested in the brush-making industry.

Coir Fibre, Rope, and Yarn.—These are produced from the husk of the cocoanut, and a large export trade is done from Ceylon. The finest range of exhibits was contributed by Messrs. C. P. Hayley & Co., of Galle, to whom was awarded a Gold Medal.

Cinchona.—Some choice specimens of cinchona bark were exhibited, chiefly from Ceylon, and a Gold Medal was awarded to Mr. F. G. A. Lane for succirubra description.

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION (CALCUTTA).

The following is a report of the proceedings of a meeting of the General Committee held on the 8th October. Present:—Messrs. A. Tocher (*Vice-Chairman*), W. Brown, A. C. Lawrie, R. Magor, and R. R. Toynbee.

Letter of 26th September, from the Secretary, Indian Tea Association, London, came up for consideration. It was noted among other matters referred to that the British Exhibition at St. Petersburg had been postponed and that the last payment by the Government of India of £1,250 on account of the Paris Exhibit completed the amount due from Government. The informat about the British Exhibition at St. Petersburg was to be passed to the United Planters' Association of Southern India.

In reply to a telegram of 3rd October from the Indian Association, London, enquiring whether any alteration could be m in the estimate of the crop, Mr. Tye has been informed by wire t the Committee were collecting figures of actual manufacture up the 30th September, and in reply to a further enquiry with reg to the new levy, Mr. Tye had also been informed that the amo promised up to the date of the telegram was Rs.33,371-12-9, that a part of this was on condition that general support would given to the levy. It was also stated that further contributi were expected probably on similar terms.

A letter dated Meshed, Persia, 31st August, from Mr. E. G. Fo having been previously circulated, was next considered. In t letter Mr. Foley asks that 15 half chests of Orange Pekoe or N Pekoe should be forwarded to Colonel G. Chenevix Trench, Cons General, Meshed, care of Captain F. Webb Ware, Political Assist Chagai, Quetta. The Secretary was instructed to see that t order was executed.

Mr. Foley's remarks on trade in indigo with Persia were to passed on to the Committee of the Bengal Chamber of Commerce usual. It was noted that Mr. Foley expected to arrive at Que about the 10th October. Letters of 28th and 30th September a 2nd October from Captain F. Webb Ware, Political Assist Chagai, Quetta, were also before the Committee. Under cover these letters Captain Webb Ware forwarded the following do ments:—(*a*) Notes for the information and guidance of mercha and travellers proceeding to Persia or England by the Que Nushki-Seistan overland trade route. Members were to be inform that these documents could be seen on application to the Secreta (*b*) Notice issued by the Agent, Punjab Bank, Quetta, on subject of insurance of goods stored in the Persian caravant-se Quetta. (*c*) Notification issued by His Britannic Majesty's Con in Seistan with regard to the payment of Customs Dues. Cop of this notifications were to be circulated to all members.

Letters of 17th September and 1st October from Mr. Drummond Deane, Stagbrook Tea Estate, Peermaad, Travanco having reference to the manufactures of green teas, were n considered by the Committee. Also a letter of 7th Octo from Messrs. L. C. Baines and H. B. Yuille on the subject green teas for next season. The suggestions made in Mr. Dean letter had been submitted to Messrs. Baines and Yuille, wh opinions were also before the Committee. It was decided inform Mr. Deane that the General Committee were not disposed pay any bounty on fannings or dust. It had not hitherto been do and the Committee did not think it was advisable to make a alterations in the existing rules as regards this point. The Co mittee further were not in a position to sanction the payment freight on green tea to Calcutta. Messrs. Baines and Yuille were be informed that the General Committee accepted their suggest that the selecting of the type of green tea for next season sho be held in abeyance until all samples tendered for bulking had b received and reported on. Letter of 3rd October from the Honor Secretary, Terai Planters' Association, was next considered. this letter a severe outbreak of mosquito blight in the Te gardens was reported, and a request was made that Mr. Mann, Scientific Officer of the Association, should, if it could be arrang pay an early visit to the Terai. Mr. Mann being at present in Darjeeling District, the Secretary was instructed to send him a co of the letter from the Terai Planters' Association, and ask him pay a short visit to the district before his return to Calcutta wit view to advising the Managers of the affected gardens of the st they should take to mitigate the blight.

The Committee next proceeded to consider a notification da 21st September, 1901, issued by the Chief Commissioner of the C tral Provinces under Section 3 of Act VI of 1901 prohibiting fr 1st October, 1901, all persons from recruiting, engaging, inducing assisting any native of India to emigrate from any district of Central Provinces to any labour district otherwise than in acco ance with the provisions of Chapters III and IV of the said A On becoming aware of this notification the General Committee wired to the Chief Commissioner to enquire whether it would followed by any notification under Section 90 of Act VI and telegram in reply was now before the Committee, intimating th

it was not intended to issue any notification under Section 19 of Act VI of 1901. It was decided to address the Chief Commissioner of the Central Provinces pointing out the effect of his notification was to bar half the Province of Assam from recruiting in the manner which planters had followed for a great number of years, *viz.*, free recruiting by specially employed garden sardars. Act I of 1882, which had just been superseded by Act VI of 1901, was gradually being less and less made use of so far as Cachar and Sylhet were concerned. This was recognised by the Lieutenant-Governor of Bengal in Notification No. 2286 of 9th July, 1901, published in the *Calcutta Gazette* of 10th July, of which a copy was to be forwarded to the Chief Commissioner. The special provision in favour of Cachar and Sylhet was of comparatively minor importance as regards Bengal, as recruiting from districts in the Province of Bengal was now very limited for Cachar and Sylhet, which districts looked to the Central Provinces for the greater part of their labour supply. The matter was of pressing importance, as the recruiting season was about to begin. It was decided to postpone the question of dealing with the estimates of the tea crop next year until a fuller meeting of the Committee.

CENTRAL TRAVANCORE.

The Quarterly General Meeting of the above was held on Saturday, 12th October, at Carady Goody bungalow. PRESENT :—Hon'ble Mr. G. L. Acworth (*Chairman*), Messrs. R. S. Imray (*Vice-Chairman*), Buxton Laurie, E. Latter, H. M. Knight, F. Bissett, H. J. Blandford, F. M. Parker (by *proxy*), and W. H. G. Leahy (*Honorary Secretary*).

Notice calling the meeting having been read, the minutes of last meeting were taken as read.

Correspondence.—Read and recorded British Resident's letter No. 2195 of 31st July, 1901.

Read and recorded letter from Mr. J. Thomson of 21st July, 1901.

Read and recorded letter from local Medical Officer of 27th July, 1901.

Read and recorded letter No. 156 from P. M. G., Madras, of 22nd July, 1901.

Read and recorded letter from Secretary, U. P. A. S. I., *re* Government Entomologist's visit to South India.

Proposed by Mr. Imray and seconded by Mr. Leahy:—"That the Honorary Secretary be requested to inform the Secretary, U. P. A. S. I., that this Association will be glad to see Mr. de Niceville as early as possible, and trusts that this District, which was unfortunately not visited by Dr. Watt, will receive his attention first." Carried *nem. con.*

Read and recorded correspondence with U. P A. S. I. *re* American and Foreign Market Funds.

The Honorary Secretary said that the Committee had decided to contribute to the F. M. F. and had drawn out a list of donations for each Estate on the rolls of the Association. These were in addition to what would be contributed to Messrs. A. Yule & Co. in the form of tea, should the Association be called upon by those gentlemen. The subscriptions to the F. M. F. would however be only given in the event of other Associations in South India contributing likewise. It was disappointing to find, that apparently no Association except Central Travancore supported the Fund last year. It is true there were a few isolated subscriptions from individuals in other Associations, but, so far as can be gathered from correspondence, no general Association subscription to the Fund outside Central Travancore was made. This was rather surprising considering the vehement protests made at Bangalore, when it was announced that Central Travancore proposed to retire from the Fund. In reply to enquiries as to what amount other Associations had contributed last year, one Honorary Secretary ignored the question, another said he believed contributions had been made by some of his members, but he did not know how much: a third alleged that he had not called for the subscriptions promised, as there were so many schemes in the air. This last excuse would hardly hold water, as the money should have been paid in to the I. T. A. before 31st December, 1900, whilst no scheme, so far as the Honorary Secretary was aware, was brought forward before April or May in the current year.

Cumbum Agency.—Proposed by Mr. Knight and seconded by Mr. Leahy:—"That Angoor Rowthen should be approached with a view to seeing whether he would be willing to accept Rs.20 per mensem as Agent at Cumbum. This sum to include all expenses." Carried *nem. con.*

Roads.—Proposed by Mr. Leahy and seconded by Mr. Knight:—"To ask the Chief Engineer, P.W.D., to alter the present dates of inspection and payment of planters' roads in the Peermaad District to 15th April and 15th October in each year." Carried *nem. con.*

Asssam Planters.—Proposed by Mr. Leahy and seconded by Mr. Knight:—"That this Association wishes to express its sympathy with the Assam planters in their difficulties caused by the arbitrary action of H. H. the Chief Commissioner and trusts that the protest to the Government of India made by the Indian Tea Association will lead to a final and satisfactory settlement of the labour question." Carried *nem. con.*

Cardamoms.—A resolution on cardamoms was withdrawn as the proposer was absent, and the same did not receive the support of the Committee.

With a vote of thanks to the Chair the meeting terminated.

Papers laid on the table:—

Travancore Government Gazette.
Indian Gardening and Planting.
Planting Opinion.
Circulars—Indian Tea Association.
Do. U. P. A. S. I.
Leeming's System of Coffee cultivation.
Proceedings of Wynaad Planters' Association (2).
Do. Nilgiri do do
Do. Shevaroy do do
Do. Nelliampathy do do

W. H. G. LEAHY,
Honorary Secretary.

THAT "LITTLE DISH."

How we do like a little dish of something nice, served up hot! Charles Lamb would have sold his shirt for a tender suckling pig done to a turn Doctor Johnson used to say that a dish of tea was the most fragrant of life's beverages. "Why, what am I a-thinking of, I shall forget my own name next," said Toby Veck, "It's tripe—the best tripe ever stewed." And his daughter Meg smilingly gave him the basket, in which reposed a hot steaming dish of his favourite meat.

"My wife prepared nice, dainty little dishes to tempt my appetite," said Mr. Henry White, of that beautiful Devon town, Torquay, "but somehow I seemed to have lost all inclination for food, and after sitting at the table trying to swallow a little, I used to say to her:—

"It's no use. I can't eat it. You may as well take it away." This sort of thing soon told a tale, for one can't go without food for long without losing strength. Seeng my condition, a friend strongly advised me to try Seigel's Syrup. He said it had cured him, and might do me good.

"My appetite no longer needed coaxing. I could eat well-nigh everything that was put before me. Each dose seemed to give me life and vigour. To-day, no matter what ails me, Seigel's Syrup puts me right."

That "little dish." in fact is once again the favourite.

"Some three months ago my wife got thoroughly run down. For over a fortnight she could keep nothing on her stomach." Mr. Henry White, when certifying to the truth of this on September 13th, 1900, at his house, 10, Pediford Terrace, Torquay, Devon, does not say what was the matter with his wife.

We know why the "little dish" failed to digest, and we quote the words of the famous physician to prove it: "In the nervous and irritative form of dyspepsia, this is a very prevailing symptom. As is also a sensation of sinking, as if the stomach required food, due to the fact that the food has left the stomach in a half-digested condition."

Who could enjoy a "little dish," when the food could be but half-digested? "She was troubled a good deal with wind, and seemed to

be losing her strength. I fetched a bottle of Mother Seigel's Syrup from Holloway's Drug Stores, and she commenced taking it. In a short time she was quite well again." H'm, some men would now sell their shirt for a bottle of this remedy.

This essay, then, upon "little dishes" proves that while man and woman can in no wise *always* relish that favourite dish, yet a cure is ready to hand. On that has served men and women alike for more than the past thirty years.

MARKET REPORT.

[*Per Mail advices of 4th October* 1901.]

COFFEE.

The London Commercial Record says:—There is no new feature of interest to report in this market during the part week; supplies at auction were again limited in extent and included a considerable proportion of parcels in second hands. A fairly steady demand has prevailed, and prices are unaltered. In "futures" the tone was stronger and December Santos advanced to 30s 6d, but latterly there was a decline of 9d to 1s per cwt., with a partial recovery at the close. We quote:—

London	Santos ...	Dec. delivery	... 29s 10½d.
New York	... No. 7 Rio...	,,	... 5·10 cents.
Hamburg...	... Santos ...	,,	... 30 pf.
Havre ...	... Santos ...	,,	... 37½ francs.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	15,941	17,385	39,784	31,047
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	15,341	12,517	23,028	15,829

The preceding figures exhibit— Tons.

In the Imports an increase this year of	8,737
Home Consumption an increase of	2,824
Export an increase of	7,199
Stock a decrease of	1,444

Auctions this week have gone off as under:—

Ceylon.—*Plantation*—40 casks 15 tierces 13 barrels 24 bags nearly all sold—smalls 38s to 42s 6d, fine blue smalls 69s to 69s 6d, middling to good middling 52s 6d to 58s, peaberry 45s to 61s

East India.—1,347 bags 144 cases partly sold, *Mysore*, overtakers 64s to 64s, bold 68s; *Coorg*, smalls 36s to 44s, low middling to middling 43s to 50s, common bold 50s to 54s, fair 69s, peaberry 50s to 69s; *Neiligherry*, smalls 41s 6d, middling greenish 50s to 52s, bold 62s to 66s, peaberry 53s to 62s.

Costa Rica.—197 bags about half sold, good middling colory 65s 6d to 67s.

Guatemala.—1,061 bags catalogued and 500 bags sold, smalls 33s to 44s 6d, bold 62s 6d to 73s, peaberry 43s to 67s 6d.

Mexican.—250 bags offered partly found buyers, smalls 37s 6d to 44s, low middling 45s to 45s 6d, middling 57s, bold 71s 6d, peaberry 62s.

Colombian.—682 bags sold, partly damaged smalls 35s 6d to 39s 6d, ordinary to good 34s 6d to 38s, low middling brownish to middling 43s to 46s 6d, bold 52s 6d to 54s, peaberry 38s to 45s 6d.

Ecuador.—Of 115 bags 39 bags sold, ordinary pale 33s to 33s 6d.

Brazil.—Of 4,117 bags Washed Dumont Santos 2,335 bags sold, smalls 29s 6d to 34s, medium 33s to 34s 6d, fine medium blue 48s 6d, bold 39s to 40s, fine bold blue 60s, peaberry 36s to 63s 6d. 511 bags Unwashed, quay terms, sold, foxy brownish 34s, peaberry 34s.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99. Bags.
Rio ...	1,953,000	941,000	1,300,000	1,098,000
Santos ...	3,799,000	2,862,000	2,964,000	2,288,000
Total ...	5,752,000	3,803,000	4,264,000	3,386,000
Crop ...	—	10,900,000	8,971,000	8,772,000

Rio Exchange 11⅝d, previous day 11 21/32d.

Havre, *October* 3.—Good average Santos October opened ste at 36¾f. and closed steady at 37¼f., December opened at 37f. closed at 37½f., March opened at 37¾f. and closed at 38f., opened at 38¼f. and closed at 38½f., September opened at 39f. closed at 39¼f.

Hamburg, *October* 3.—Good average Santos October ope steady at 29¾pf. and closed steady at 29¾pf., December opene 30pf. and closed at 30pf., March opened at 31pf. and closed at 3 May opened at 31¼pf and closed at 31½pf., September opene 32¼pf. and closed at 32¼pf.

New York, *October* 3.—Closing prices of No. 7 Rio were follow:—

	Oct.	Nov.	Dec.	Jan.
October 3...	5·00	5·00	5·10	5·20
October 2...	5·00	5·05	5·15	5·25

East India sold in Public Sale since 26th September 190

Sept.	Mark.	District.	Size 1.		Size 2.		Size 3		P. B.
27	Patycumbay ..	Nilgiri...	8	58/6	12	not sold	5	36/	3
	Glenmore	,,	8	65/6	22	49/	8	40/6	5
Oct.	Sobungudgi ...	Mysore ..	106	not sold	38	not sold	..	.	2
	Matheson's Woshully...	Coorg ...	157	,,	140	,,	12	43/6	60
	Do. Cotta Betta.	,,	56	69/	64	50/	3	44/	21
	Grant and Abbs Coweri Betta ...	,,	9	50/	32	43/	3	36/	3 ...
3	Hoolikul	Nilgiri	9	66/	23	not sold	6	41/6	5
1	I M Santi Coopa .	Coorg ...	7	54/	48	45/45/6	14	39/	11

TEA.

Indian.—Auctions were much larger, totalling 51 200 packa compared with 33,900 packages in the week before and 43 packages a year ago.

The selection was a very useful one, the tendency as rece being towards improvement in the general quality with fe choice Assams about. A good demand was experienced; desir ordinary kinds and the best finding the strongest market. Th is not much change to note in values, but the lower grades h continued to creep up, while here and there among the hig priced lines those without special point were a little ten particularly towards the close.

For 41,300 packages on estate account 8½d per lb. was real against 8¼d per lb. for 36,200 packages, and 9¼d per lb. 35,000 packages in the two preceding seasons.

Latest cable advices confirm reports as to the shortage of crop, Assam especially, owing to unfavourable weather, hav fallen much below anticipations in the past month. The m manageable supplies, together with their generally taken charac appear to be stimulating business throughout the country. September deliveries were 10,452,000 lbs. *versus* 9,832,000 lbs. year, while for the three months from the 1st July they v almost 3 million lbs. above those in the corresponding perio of 1900. The London bonded stock of British-grown Tea, accord to the figures issued by the Tea Brokers' Association, is now ab on a par with that of the previous year.

Ceylon.—A similar quantity was again brought forward, 18,900 packages, as opposed to 19,000 packages in the forego week and 22,600 packages twelve months since. A firm t prevailed for nearly all descriptions. Teas up to 7d per lb. above 10d per lb. being in greater request and usually dea Medium Broken Pekoes were scarcely so well supported and pa irregularly and slightly easier. Quotations for fine and ch parcels were well maintained, the most attractive bringing so what enhanced rates.

The average is 8d per lb. On the 27th ultimo it was 7⅞d per and 7¼d per lb. in 1900.

Java.—Nearly 700 packages of direct import were submit The bidding was a little uneven, but on the whole prices did alter much.

Deliveries.—Clearances of all tea (on which duty has b paid) from the London warehouses, as per official returns are, *vi*

From 1st to 30th September, 1901 ...		...	16,789,638 lb
Do.	do.	1900 ...	... 16,124,142

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	44,045	7,121	51,166
Ceylon	17,173	1,723	18,896
Java	462	226	688
Total	61,680	9,070	70,750

Also 937 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated October 4th, 1901, says:—

Quantity brought to Auction in London from 1st June to date.

	Indian	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1901-1902	371,340	448,075	24,776
1900-1901	359,531	476,222	18,530

51,609 *pkgs* Indian
19,207 „ Ceylon
688 „ Java
} Total 71,504 packages were offered in public auction this week.

Figures to the 30th September given below show that the imports of Indian tea from the commencement of the season to date are about 3½ millions below the same date last year, while those of Ceylon from 1st June are 7 millions less

Indian.—Although sales were somewhat heavier than last week, the quantity was not too much for the existing demand, and with a very strong market prices were again a trifle dearer. Quality from Assam and Darjeeling continues very fair, whilst Dooars are now commencing to show a distinct improvement. The official wire gives exports to U K. for the second half of September (including Chittagong 952,470 lbs.) as 12,072,470 lbs, against 11,050,000 lbs. same period 1900, making the total from 1st April to 30th September as 72,991,800 lbs., against 76,030,000 lbs. in 1900. Averages:—"Beheating," 1/3¾; "Jaipur," 1/2½; "Amal. T Est. Lattakoojan," 1/2

Week's average of New Season's Tea sold on Garden Account, 1901, 40,835 pkgs., av. 8·47d. 1900, 36,775 pkgs., av 8·08d.

New Season's Tea sold on Garden Account 1st June to date, 1901, 258,188 pkgs.. av. 8·45d. 1900, 287,062 pkgs., av. 8·19d.

Ceylon.—With a good general demand all grades passed very steadily, everything being fully ¼d. per lb. above last week's rates, except perhaps medium broken pekoes, which could occasionally be purchased at rates then current The official wire gives exports to U. K. during September as 6 million pounds, against 5 millions same month last year, making the shipments to end of the month 79,750,000 lbs, against 86,500,000 lbs. last year. It also estimates the shipments for October as 8 millions, against an actual shipment of 7,500,000 lbs. during October last year. Averages:—"Carolina T Co. Goatfel," 1/2¾; "Portmore T Co.," 1/-.

Average for week 8·03d., against 7·15d. same week, 1900.

Ceylon Tea sold on Garden Account 1st January to date, 908,136 pkgs.. av. 6·68d. 1900, 975,812 pkgs., av. 7·16d.

Java.—The few Javas brought forward were all of direct import, and included some teas of very fair quality, good averages being made by the following Estates: "Goalpara," 9½d.; "Perbawatte," 9d; "Djattie Nangor," 7d. The teas sold well, the tendency being towards rather better rates.

Bank Rate 3 per cent. Exchange on London three months' sight:—Calcutta 1/4 5/32. Colombo 1/4 3/16

In our Circular dated 20th September, the average for Ceylon Trade Auction should have read 7·31d, not 6·31d. as printed.

COCOA.

The auctions on Tuesday offered 2,687 bags, and barely 400 bags sold, prices being about unchanged. Of 256 bags Trinidad only two lots sold—middling 66s. Of 84 bags Grenada, 24 bags sold—good 63s. 112 bags Surinam about half sold at 61s to 64s. 3 bags, Seychelles sold at 56s 6d. 3 bags Dominica, 84 bags Jamaica, 49 bags Costa Rica, 215 bags Bahia, 39 bags Para, and 308 bags Haiti were bought in. Of 1,525 bags Ceylon, about 300 bags sold small 51s to 55s 6d, dull brownish to fair 57s to 64s 6d, good to fine 70s to 86s.

COCOA POWDER.

At public sale on Tuesday, of 240 packages Dutch 30 packages sold at 5d to 10½d. 23 packages English and 8 cases French were bought in.

PEPPER.

Black.—A quiet market and prices close a little easier. Sales of fair Singapore have been made on the spot at 6 1/16d. For arrival no transactions reported.

Wednesday's auctions catalogued 69 bags Singapore, which sold at 6 1/16d per lb cash, less interest.

The shipments of Black Pepper for the month of September compare as follows:—

	1st-half.		2nd-half.	
	1901.	1900.	1901.	1900.
	Tons.	Tons.	Tons.	Tons.
U.K.—Singapore	70 } 80	70 } 70	80 } 80	70 } 70
„ Penang ...	10 }	*nil* }	*nil* }	*nil* }
Continent ...	170	290	290	240
United States ...	260	*nil*	350	190
Total	510	360	720	500

White is dearer and a good business done. On the spot sales of fair Singapore made at 9 3/16d to 9¼d, and fair Penang at 8 11/16d to 8 13/16d. For arrival 150 tons have changed hands, *viz.*, Singapore, October-November and December-January shipment at 9 5/16d to 9⅝d, and Penang, December-February at 8 15/16d to 8 31/32d, and January-March at 8 31/32d to 9d.

Nothing offered at auction on Wednesday.

The shipments of White Pepper for the month of September compare as follows:—

	1st-half.		2nd-half.	
	1901.	1900.	1901.	1900.
	Tons.	Tons.	Tons.	Tons.
U.K.—Singapore	90 } 130	220 } 320	70 } 120	*nil* } 80
„ Penang	40 }	100 }	50 }	80 }
Continent	140	270	210	40
United States ...	90	..	20	...
Total	360	590	350	120

GINGER.

Cochin.—A better feeling has been noticeable during the past week than had been the case recently, and a really good business has passed privately. Auctions offered only 11 cases bold and medium cut and scraped, which were bought in at 95s per cwt.

Privately Cochin rough washed has realised 39s to 41s 6d, and Calicut rough sorts 38s 6d per cwt, the extent of the week's business summing to about 3,000 bags.

Jamaica.—76 barrels about half sold at steady prices—good ordinary to middling washed 38s 6d to 41s per cwt

CARDAMOMS.

A good business has been done in the seed since the auctions to 2s 4d per lb., and 2s 6d is now asked.

CINCHONA.

At to-day's Amsterdam auction the offers consisted of 6,155 bales 307 cases = 577,375 kilos. Java cinchona-bark, containing 28,941 kilos., sulphate of quinine, of which 90,854 kilos. was druggists' bark, containing 2,313 kilos. Q.S., and 486,521 kilos. manufacturers' bark, containing 26,628 kilos. Q.S., or an average percentage for the manufacturers' bark of 5·47 per cent., against 5·68 per cent. in the August auction, and an average of 5·26 per cent. for the ten auctions held in 1900.

QUININE.

A considerable amount of business has been done this week, and sales on Tuesday of 60,000 oz., on the basis of 1s per oz. on the spot, were reported; but there was much dubiety about the transaction, which, however, turns out to have been perfectly genuine. Yesterday the market was better, and the price stood at 1s 0¼d to 1s 0⅜d for some time, but the market closed with the quotation at 1s 0⅜d. Owing to the Amsterdam auction opening so well (8c.) the price jumped up suddenly this morning, and business was done at 1s 1d, while the closing quotation on 'Change was 1s 1¼d. For December 1s 1½d per oz. has been bid and refused. As we close for Press our Amsterdam telegram comes in reporting the advance of the unit to to 8·25c., or 10 per cent., so that an official advance in quinine is likely.

(AVERAGE FOR ALL INDIA 8·55d., OCTOBER 4TH.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, D and Variou	
	Quantity	Price	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Pr
Neilgherry ...	**203**	**8·08**												
Kodanaad ...	130½c	8½	63½c	8½ 10½	7½c	7	20½c	6 6¾	..	..	...	...	...	
Prospect ..	32	8	18	7¾ 9½	14	6¾	...	..	...	...	...	...	...	
Seaforth .	41	7½	20	8¼ 9	8	7	...	..	10	6	..	...	3	8
Travancore ...	**1055**	**6·40**												
Ashley ...	60	6½	...	...	30	6	30	7	..	..	...	..	..	
Do. ...	60	6½	...	..	32	6	28	7¼	...	...	...	...	...	
Ellangy .	133 p	5½	...		60	5½ 5¾	28	6½	34	4¾	...	..	11½c	3½
Invercauld ...	106 p	6¼	20	6¾ 7¼	44	6	17 p	7 8¼	22	5¼ 5½	..	...	32	4
Isfield T Co Isfield	19	5½	...	...	19	5½	...	..	.	...	..	...	..	
Mount .	50	6¾	...		11	6	21	7¾	5	5½	...	...	13	6
Poonmudi T Co B	105 p	6½	17	7½	40	5¾ 6¼	25	7¼	20	6	...	...	3½c	3
S T T Co Venture	133 p	6½	..		51	6¼	52	6¾ 7½	20	5¼	...	...	22 p	4
Trav T Est Co KK	133	6½	..	...	50	6¼	63	7¼ 7½	20	5¼	...	...	...	
,, Bon Ami ..	92	6¼	...	..	41	6	31	7¼	...	...	...	...	20½c	4
,, Munja Malai	38	6¾	19	6¾ 8¼	19	6	...		...	...	...	..	...	
,, Pambanar	50	7¼	18	6¼ 6½	7	5¾	25	7¼ 8¼	...	...	...	...	...	
Vembenard	76 p	6¾	19	7¼	21	6 6½	26	7¼ 8½	...	...	...	...	10½c	4
Wynaad ...	**173**	**6·75**												
Chulika ...	82 p	7½	36½c	10	14	6¾	...		28	6¼	...	..	4½c	7
Sanga Mulla ...	91	6¼	...	...	41	5½ 5¾	50	6¼ 7	...	...	...	...	...	
TRADE AUCTION, AVERAGE 8·03d.														
Travancore ...	**390**	**7·33**												
Kan Dev H Co G ...	153½c	6¼	26½c	6¾	62½c	6 6¼	11½c	6¾	42½c	5½	...	...	12½c	3½
Do. Munaar ...	155 p	7¾	22	9¼	30	7½	37½c	10½	45	6¼	...	...	21½c	6½
Do. Sevenmally	82	7¾	25	9¾	35	7½		..	22	6¼	...	...	...	

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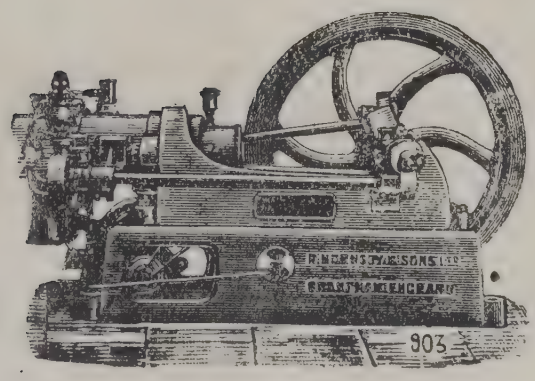
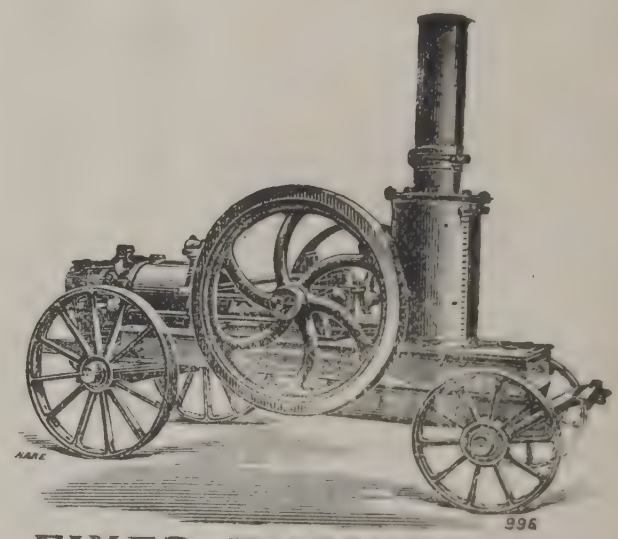
MASSEY & Co.





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Extra for Water Vessel ... .. ,,	45	50	60	75	85	100	120	180	200	260	370	460	540	
Extra for Standard connections to Water Vessel ...	35	40	45	50	53	55	60	100	100	150	200	240	300	
Extra for Foundation Bolts ...	7	8	12	15	15	17	17	40	50	60	60	70	80	
Extra for Exhaust Piping about 5 ft. to Silencer and 9 ft. to atmosphere	27	35	43	55	60	65	65	90	90	110	130	150	190	
Extra for Pulley of list size	12	13	20	27	32	38	38	53	58	70	100	150	200	
Extra for Self-Starter with Hand Pump .	...		...	...	...	...	...	...	...	...	600	600	700	

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PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

VOL. VI.] MADRAS, SATURDAY, NOVEMBER 2, 1901. [No. 44.

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 8th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Coorg.

Polli Betta, 30*th October*.—*Weather*—Occasional heavy showers continued up to Sunday evening, on which evening and the evening previous the rain came down very heavily. A characteristic of these N.-E. showers is that they come down at the rate of an inch in ½ an hour, sometimes more, and cause a great deal of "Wash." The rain seems to have passed off now. For the past two days the sky has been perfectly clear, and it has been chill. Out West leaf disease has been bad in parts. On the East there has been no severe touch of it yet, but crop this side is ripening later, so it may come on badly afterwards. All this rain has been a good thing for the paddy fields. *Interesting item*—Annual Inspection of "B" Co., Coorg and Mysore, Rifles passed off successfully on 22nd instant.

THE AUSTRALIAN TEA DUTY.

Alert Ceylon.

We announced recently that it was proposed to levy a higher duty on tea imported into Australia. Ceylon has already taken action in regard to this matter. On the 12th ultimo Messrs. Curfield, Lampard & Co. of Colombo, wrote to the Chairman of the Ceylon Chamber of Commerce urging that the proposed Federal Duty will act so distinctly against India and Ceylon to the benefit of China, that some endeavour should be made at once by the Colombo and Calcutta Chambers to get the whole question of the Tea Duty held over until Ceylon and India have had an opportunity of laying before the Federal Government their reason for making such a request. It was pointed out that the real effect of the Duty—if carried as proposed—means lowering the class of tea consumed in Autsralia. It will be an immense gain to

China, the largest producer of the commonest teas, and most detrimental to Ceylon and India, who together produce the whole of the good and fine tea now being imported. If the duty were uniform upon all teas, there would be no necessity for any interference in the Tariff question, by Ceylon or India, but an *ad valorem* duty is so manifestly against British interests and in favour of China that the above firm considered it the duty of the Chamber to move in the matter at once. The Chamber of Commerce promptly addressed the Colonial Secretary, Ceylon, on the subject. On the 15th instant it addressed him to the following effect :—It is understood that the Federal Government of Australia proposes to levy a duty of two pence per pound, *plus* twenty per cent. *ad valorem*, and the new duties are to come into force forthwith. The duties hitherto levied in the various Colonies were as follows :—

Queensland	6d. per lb.
Victoria, South Australia, and Tasmania ...	3d. ,, ,,
New South Wales	1d. ,, ,,
Western Australia	*Free.*

Ceylon exports for the year 1900 were as follows :—

	Lbs.		Lbs.
To Queensland ...	774,713	To Tasmania ...	145,710
,, Victoria ...	5,410,338	,, N. S. Wales ...	6,024,897
,, South Australia ...	1,651,196	,, W. Australia ...	522,469

For customs purposes, the average value of this tea has been taken as 36 cents per pound, but as a matter of fact, the class of tea exported hence to Australia is usually of good medium quality, and may be taken as worth nearer 40 cents or 8d. per pound. From China a certain quantity of low grade tea is imported into Australia, the value of which would probably average 3½d. to 5d. per lb. The incidence of the proposed taxation would be as follows :—1 lb. of Ceylon tea at 8d. per lb. introduced into South Australia would pay a duty of 2d. *plus* 20 per cent, or say 1½d., in all 3½d., as compared with 1 lb. of China tea at 4½d. per lb., which would pay 2d. *plus* 20 per cent., or say ¾d., in all 2¾d. only, as against 1d. per lb. hitherto common to both. It is feared that the result of the *ad valorem* taxation now proposed will be gravely to the disadvantage of Ceylon and Indian, that is to say, of all British-grown teas—practically amounts to a differentiation of duty in favour of China as against such teas. If the duty were uniform upon all teas, there would be no necessity for any interference in the Tariff question by Ceylon or India, but an *ad valorem* duty is so manifestly against British interests and in favour of China, that it is earnestly hoped that the Government of Ceylon will take prompt steps through the Secretary of State for the Colonies (or as may seem best) to secure at least the postponement of the new duty, until these views can be laid before the Federal Government of Australia.

There is room for some little doubt as to what the new duty is to be, for, though Reuter gives it at 2d. per lb. *plus* 20 per cent. *ad valorem*, the Australian Minister of Customs recently stated that it would be 2d. on the very low teas worth 2d. per lb. and less, and 20 per cent. *ad valorem* on higher qualities. Even taking it that Reuter's version is correct, it must be admitted that the proposed duty is not heavy ; it compares very favourably with the British duty. Hence, perhaps, the remark that if it were uniform on all teas there would be no necessity for interference. The reply may well be, however, that as the Ceylon planters are really asking that China should pay as heavy a duty upon low-class teas as Ceylon upon high-class leaf, the request is not altogether reasonable. However, the Chamber pointed this out in preference to arguing that any enhan ment of duty must necessarily have the effect of enhanc prices and thus restricting demand. The Ceylon Cham has invited the co-operation of the Bengal Chamber, has apparently overlooked the representatives of Mad trade. True, the quantity of tea grown in Southern Indi not yet important, but it is increasing year by year, and invitation to the Madras Chamber of Commerce to give support would at least have done no harm. Apparently, the Indian Tea Association has not been addressed on subject ; though it has since taken action and expressed hope that time will be permitted for it to submit its vie While, therefore, congratulating Ceylon upon its alertness taking this matter in hand, we cannot altogether approve its method.

We also notice that in acknowledging the receipt of letter of the Ceylon Chamber of Commerce, the Colon Secretary observes that the following telegram was sent the Governor-General of the Commonwealth of Australia the 16th instant :—"Ceylon Chamber of Commerce rep sents that proposed *ad valorem* duty on tea will give che China tea great advantage over British-grown tea. Th would prefer higher specific duty and beg postponem until they and India can represent their views." The Cha ber's letter does not contain anything to warrant the seco and last sentence ; so we must presume that there has be some semi-official or non-official communication betwe Ceylon merchants and the Local Goverment. As the Sec tary of State has also been informed of the action tak Ceylon's "case" is likely to get a fair hearing. We dou however, if any good result will follow. As regards t Secretary of State, at any rate, it is difficult to concei how he can press an objection to an Australian du that is considerably lighter than the duty now levied on t by the British Government ; nor can he very well oper advocate the acceptance of the principle of differential duti the application of which in the case of the British tea duty now so conveniently masked. However, Ceylon has do well in moving promptly, and the outcome of its represen tions will be awaited by Indian tea-planters with no lit interest.

BOARD OF TRADE RETURNS.

SEPTEMBER, 1901.

From tables showing the Imports, Consumption, and E ports of the undermentioned articles for the 9 months endi September 30 in the present and 2 previous years, compil from the Board of Trade Returns, with stock in U. K. September 30 we take the figures given below :—

Coffee.—Stocks have assumed healthier proportions, b are still somewhat bloated :

—		1899.	1900.	1901.
Import	cwts.	907,057	695,563	838,259
Home Consumption	,,	196,691	210,476	254,355
Export ...	,,	458,842	381,321	543,802
Stock ...	,,	521,000	386,000	355,000

Cocoa (Raw).—Stocks have risen in spite of increase of consumption. Comparing last year and the present there has been little development of imports, but since 1899 a very considerable increase has been recorded.

—		1899.	1900.	1901.
Imported	lbs.	37,935,179	43,146,779	43,691,019
Home Consumption	,,	25,974,865	28,865,552	32,749,077
Export	,,	8,701,495	7,551,760	8,428,905
Stock	,,	18,341,000	18,028,000	19,305,000

Cocoa (Prepared).—Since 1899 Imports have increased by 70 %, Home consumption by nearly 50 %, and Exports by nearly 10 %, while stocks have shrunk to little more than $\frac{3}{8}$ths of their former proportions.

—		1899.	1900.	1901.
Imported	lbs.	3,697,108	5,280,856	6,144,544
Home Consumption	,,	3,978,051	4,693,708	5,695,721
Export ...	,,	572,207	691,129	626,715
Stock ...	,,	407,000	166,000	153,000

Tea.—The statistics are satisfactory, but stocks continue large.

—		1899.	1900.	1901.
Import	lbs.	187,022,199	197,996,766	190,928,332
Home Consumption...	,,	178,562,356	188,113,805	190,568,971
Export ...	,,	23,172,557	32,008,863	32,100,675
Stock ...	,,	83,646,000	92,801,000	89,018,000

MR. P. C. LARKIN

Unfriendly critics have judged from letters addressed to the Canadian, Ceylon, and Indian Press that he is a man given to self-advertisement. Let it stand at that. Where is the harm, so long as the advertising is of a genial, business-like kind, as it is in Mr. Larkin's case ; and especially when his success is closely connected with the cultivation of demand for Indian and Ceylon tea? In London recently, Mr. Larkin stated that he had been originally in the Japan trade and was thoroughly acquainted with the workings of that trade and the qualities of the teas, but for some years now he had been devoting himself to the pushing of British-grown teas, and, during the last three years, especially to Ceylon green teas. He was convinced that in time they would, because of their superior merits, entirely displace Japan teas in the North American continent. They were, he considered, better teas. As Canadian consumers lean greatly towards Japan teas, Ceylon could scarcely have a better champion. Mr. Larkin remarked however, that if Ceylon now allowed trade to take its natural course it might be twenty years before they obtained the command of the Canadia market. If they took his advice and stimulated the trade, it might be done in two or three years ; but that it would come about sooner or later he had no doubt whatever. When he first started handling Ceylon greens they were laughed at as a new article generally was ; but that stage soon came to an end, and now in the Province of Ontario practically all the wholesale grocers, about forty in number, were obliged to handle these teas in chests. At Toronto during the eight weeks he had been absent the sales were 8,000 lbs. During the corresponding eight weeks of last year they were 2,000 lbs., odd. At Montreal, taking the same periods, the figures were 1,800 and 18,000 lbs. At Boston in the States the rate of progress was not quite so rapid, but there also it was satisfactory, the sales being 2,000 lbs. and 4,600 lbs. For next year the increase he had no doubt would be equally encouraging, and he repeated that the prospects for green teas were infinitely greater in the districts he worked than those for black teas. If he was asked why Ceylon greens took better than Japan greens he would say that while similar in flavour they were stronger. The agricultural population in Canada seemed to take naturally to the green variety, and kept the tea simmering on the hob all day. It was found in practice that the Ceylon make "boiled" very well. Many of the country people he had come across considered Ceylon tea "herby" and would have none of it. In reply to a question Mr. Larkin said he had never known Japan and Ceylen tea blended, and he also stated that it was not his experience that high-grown teas were more acceptable than low-grown. The teas from Dewalakande and Arapolakande were of excellent quality, and the finest British-grown green tea he had ever tasted was a sample from a Cachar garden.

In general terms he thought, and Mr. Mackenzie confirmed this, that both in the States and Canada the imports of green or unfermented tea were about three pounds to one of black or fermented tea. Incidentally Mr. Larkin remarked that the wonder was to him that any tea was drunk at all in the States under present conditions, as it was such unpalatable stuff as generally seryed, while the coffee was so good! He maintained that "five years of thorough good work and Ceylon would drive Japan out of the market." "And by the end of the first year they would be getting returns that would cover their outlay, in the diminution of stocks of Black Tea in London, and the higher prices which would follow. And it must be borne in mind that if it is a big sum they are being asked for, they would only have to shell out for a limited time, while we who distribute must go on advertising as long as we sell. They need not advertise once their tea has made its name," but he estimated that "from £80,000 to £100,000 a year would have to be spent, but if the Indian people will join as I have been asking them, Ceylon will not need to be at the whole expense of that" These are figures to give pause to any man less enthusiastic than Mr. Larkin. First, the money would have to be raised ; and, then, comes the question whether, spent as he would have it spent, it would be a good investment.

FOREIGN TEA IN INDIA.

We give to-day statistics of imports and exports of Foreign Tea. For these we are indebted, through the Secretary of the U. P. A. S. I., to the Director-General of Statistics. These statistics and those published last week with reference to foreign Coffees are, we believe, the most complete, as well as the most concise ever published in India to show the trade done here in other Teas and Coffees than those grown in the country itself.

NOTES.

St. Petersburg Exhibition. It is now announced that this Exhibition will be opened in June next.

Indian Tea Exports. Exports to the United Kingdom to the 24th October are :—87,462,068 lbs., against 98,431,209 lbs. at the same date in 1900.

Tea in London. Latest reports show that a large quantity was brought to auction, and with a slacker demand, prices suffered a distinct reduction.—For Ceylon tea there was less competition, but prices were fairly maintained.

The South Travancore Tea Co., Ltd. This Company has shown the enormous net profit of £78, and has carefully carried it forward. As the 1900 balance was £574, the Company does not appear to be in any hurry to pay a dividend. It would be interesting to know how much the Managing Agents have made out of its business.

Tea "Breaks" in Colombo. At the extraordinary general meeting of the Colombo Tea Traders' Association, it will be proposed by Messrs. Crosfield, Lampard & Co., and seconded by Messrs. Odell & Co., that, in view of the increased number of lots offered for local sale, the limit for big breaks should be raised from 700 lbs. to 1,000 lbs.

Amsterdam Bark Market. Further particulars of the bark auctions which were held in Amsterdam early in October, have come to hand, and show that the bark was divided as follows: *Succirubra*, 90,854 kilos.; *Ledgeriana*, 389,880 kilos.; *Officinalis*, 10,155 kilos.; *Calisaya*, 4,987 kilos.; hybrid and other kinds, 81,499 kilos. Of the total thus formed, root bark formed 65,938 kilos.

Mr. Foley's Record Ride. A Quetta telegram states that Mr. Foley, the representative of the Indian Tea Association, arrived there on Wednesday, the 23rd ultimo, after a record ride of one thousand miles on one horse, riding from Meshed. The journey lasted six weeks, and actual travelling occupied thirty days. Mr. Foley reports that the route from Nushki to Robat is fit for wheeled traffic.

Assam Planters and the C. C. With reference to the memorial of the Indian Tea Association to the Government of India, regarding Mr. Cotton's attitude towards the tea industry of Assam, it is understood that the Assam Branch Association is approaching the Viceroy independently with special reference to the Hon. Mr. Buckingham's analysis of the new Form "A" required by Mr. Cotton.

Cinchona. During the three months ended June the exports from British India were :—

	1901	1900	1899
Lbs. ...	666,252	1,321,682	931,456

In the drug auction 4 bales of flat Calisaya sold at from 1s. 3d. to 1s. 3½d. per lb. for country damaged, and for 23 serons of Huanoca quill 6¾d. was paid, and 1s. 2d. for 3 serons good bright Loxa quill.

The St. Louis Exhibition. *Indian Gardening and Planti* urges that planters should avail the selves of the St. Louis Exhibition to make a bit of a spla with Green Tea. As our contemporary says, "Our gre teas will take a lot of beating when Mr. Drummond Dean process is universally adopted. The soil in certain distri appears very suitable." Already three of Mr. Deane's stea ing machines have been purchased by local agents acting behalf of tea companies.

Coffee in London. Latest Home advices show th auctions of Coffee have been on unusually limited scale, and as supplies comprised a consid able proportion of second-hand parcels, the demand was l active and only attractive qualities met with much competitio The market for "futures" has been strong and prices ha steadily advanced and close at the best. Quotations: October 31s 6d, December 31s 9d, March 32s 6d, May 3 9d, July 33s 3d, and September 33s 3d.

Java Quinine. The exports of quinine from Ja during May amounted to 135 cas 50 of which were shipped to Rotterdam, 5[illegible] to the Unit Kingdom, 30 to New York, 2 to Hong-Kong, and 3 Japan. From January 1 to May 31 the shipments ha been :—

	1901	1900	1899	1898
Cases	821	657	755	358

So far this year the U. S. A. has received 579 cases, Holla 31 cases, United Kingdom 41 cases, and Japan 31 cases.

Indian Tea: Regulation of Supplies. Calcutta advices state that it h been decided to keep the remaini Tea sales this season within reasona limits, and to regulate supplies. On Friday, last wee 20,600 packages were catalogued. This was on the 24 ultimo. To-morrow's quantity considered well within the bu ing power of local bidders, and an improvement in pric was expected. London telegrams received report a stro advancing market, with a continuance of the arrangemer made amongst sellers to regulate the quantity offered.

The Question of the increased Cess. A special London telegram, dat 22nd ultimo, to the *Times of Ceyl* states that the Tea and Produ Committee have considered a letter from the Planter Association, of Ceylon, proposing the increased cess; and a of the opinion that the necessary unanimity is unobtainab at present. They think the existing allocation of £12,0 for green tea sufficient for immediate requirements, but th consider a five-cents bonus inadequate, with black tea present prices.

A Pound of Tea. Correspondents of the Londo *Daily Chronicle* have been dilating the "dishonesty" of tea sellers who weigh paper along with t tea in the scale. One man even says that no respectab grocer does such a thing. This sort of writing does no go to the planters. To weigh tea in a bare, and often dirty, sca would certainly be no improvement on the present syste which is fairly general. Many respectable grocers make rough allowance for the weight of the paper, but the wh

difficulty is capable of a very simple solution. All that is needed is that when the grocer puts the sheet of paper for the tea in the one pan of the scales, he should put an identical sheet of paper in the other, and then the weights!

Calcutta Tea Sales. The first sale after the Poojah holidays was held on Friday the 25th ultimo, about 20,000 packages being catalogued, against 21,000 packages in last year's Poojah sale. The offerings generally were of a good useful character, but without anything really fine, Assam and Darjeeling districts being rather sparsely represented. We have had several enquiries lately for really good Darjeelings, and think satisfactory values would be obtained should any be offered. A strong and active tone prevailed throughout the sale, teas under 6 annas being ¼ to ½ an anna dearer, other kinds, though somewhat irregular, remaining about the same. There was a fair demand for the Colonies. Bombay buyers are still quiet.

Methods of Pushing. In a recent letter to a Colombo contemporary Mr. Wm. Mackenzie remarks:—Of course there is ample room for difference of opinion as to methods. Some believe in large expenditure at great exhibitions. I *do not*. What could have been better done than the Ceylon Court at Paris last year? I see the increase of shipments from Ceylon to France is 15,000 lbs. this year as compared to last. I see one writer went twelve times round the world without discovering "a man who required money to induce him to accept a free gift." Mr. Renton without going once round the world discovered many He says "I tried hard to do without the cash subsidy. I wished to make the subsidy all tea, but I found it impracticable."

The Tea Expansion Scheme. Judging from the crowds that are surrounding the doors of the premises of the Indian Tea Expansion Commission in Canning Street, at all hours of the day, a roaring business seems to be going on both in the leaf and the liquor, says *Capital*. During last month, when the start was made, no fewer than about 50,000 pice packets of tea were sold, and this month's returns will be on a larger scale. The Commissioners seem to be going about the expansion business in the proper style. All the railway lines in India will by and by be able to supply their passengers with tea, and the habit of tea-drinking, once formed, is never left off, but tends to become contagious. At the end of the three years Messrs. Andrew Yule & Co. will have a fine Indian tea business to take over into their own hands.

The London Tea Market. In their weekly special telegram dated 24th ultimo to Colombo Messrs. Gow, Wilson & Stanton report that the market generally shows a fractional advance and that for fine teas generally is easier, while the market for teas for price is dearer. The price of fair liquoring Ceylon Pekoe Souchong is 6d (a farthing up), and the average price of Ceylon tea sold on garden account this week was 8d (also a farthing up). The average of the corresponding week last year was 7½d. Reuter reports that there is a good demand for common Ceylon teas. Fair Pekoe Souchongs are quoted at 5¼d (a farthing up) and the average for the week is 8d (also a farthing up), 20,000 packages of Ceylon tea were offered for sale and 18,000 were disposed of; while of the 35,000 packages of Indian tea offered, 33,000 found purchasers, at an average of 8¼d per lb. (⅜d above last week).

The Kajang Coffee and Rubber Company, Ltd. The Kajang Coffee and Rubber Company (Limited) has been registered in London with a capital of £23,000 in £1 shares. The object is to acquire (1) the West County Estate in Selangor, on which the business of growing and dealing in coffee, tea, rubber, and fruit, and prospecting for minerals is now carried on by A. A. Allen, F. R. Hicks, Frances M. Morten, Florence C. H. Morten, and E. B. Skinner, as Allen & Co.; (2) the Belmont Estate, also in Selangor, in which a similar business is carried on by the Hon. E. Field, M. S. Parry, and C. W. Prosser; and (3) the Weld's Hill Estate in Selangor, on parts of which a similar business is carried on, and other parts of which are being developed for building purposes by the same persons, and to carry on the abovementioned businesses. There will be no public initial issue. The first directors are C. W. Prosser, A. A. Allen, E. Fielding, and F. R. Hicks.

The World's Coffee Crop. In report dated October 3rd Messrs. I. A. Rucker and Bencraft say:—The enormous receipts current point to a crop even in excess of the estimates, but crop movements are fickle, they hardly ever run in the same groove two years consecutively, and figures which appear probable to-day, may look less probable later on. The cultivation of coffee in the Brazils covers a huge area, and estimates have been so erroneous, that they have lost their charm. It is more fashionable now to follow receipts, and up to the present receipts are altogether against the bull. As regards the next crop, it is too early to make guesses, but in some districts the prospects are said to be unsatisfactory, in others they may be good or fair. The problem is, will the next two crops on the aggregate give too much, enough, or too little. To-day the last contingency appears remote, beyond that we should not care to go. The basis of about 29s for good average Santos has been, and is, attractive to traders. The heavy advance in mild coffees appears for the moment to have quieted demand, but as stocks diminish rapidly, orders no doubt will be current again before long.

Coffee, etc., in East Africa. The following extracts from the prospectus of Blantyre and East Africa, Limited, will interest many of our readers:—"Blantyre and East Africa, Limited, has sprung from an amalgamation of some of the best Planting Interests in British Central Africa. The main objects of the Company are the cultivation of coffee, tobacco, rubber, chillies, capsicums, sugar, tea, cocoa, camphor, and other products. The (Scottish Central African Syndicate's) land under coffee amounts to over 3,000 acres, and only costs the Company an average of about £13 5s. per acre or £39,970. There are also included 154,385 acres of uncultivated land, costing on average about 1s. 4d. per acre, or £10,047, although part of this acreage, being Township blocks, is worth about £100 per acre. Central African coffee has already made a great name for itself in the coffee market, and this new Company, with its Experienced Staff, and with the economies and improvements to be effected, should give excellent results and substantial Dividends in the near future, for coffee is indigenous, the quality is excellent, while labour is plentiful, and costs under twopence per day." King Coffee has some loyal subjects still!

Coffee in the United States.

The *American Grocer* of 25th September reports :—The market has held very steady and closes firmer than last week. The enormous burden of supplies is reflected in the fact that receipts at Rio and Santos to September 21 were 1,756,000 bags more than for the same time last year, and that the total visible supply is getting close to 9,000,000 bags, being on September 18,654,801 bags. Deliveries continue large enough so as to warrant the conviction that jobbers are willing to carry liberal stocks on the present range of cost. No. 7 Rio closed at 5¾c., No. 3 Rio at 7¼ @ 7⅜c., No. 4 to 6 Santos at 6⅝c. (store terms), c. and f., and No. 5 Santos at 6⅜ @ 6½c. Sales of mild coffee from September 6 to 20 include 10,652 bags Maracaibo, 6,518 bags Central American, 1,044 bags Mexican. and 755 bags Laguayra. Padang holds as last quoted—14 @ 18c. for Interior, 24 @ 28c for fancy marks, and higher for extra fancy ; Mocha, 15 @ 18c., and higher for extra fancy ; good Cucuta, 7½c. ; choice, 10½ @ 11c., and 1 @ 3c. higher for extra fine style and color ; better grades of Central American, 9½ @ 13c., and higher where style and color are particularly attractive ; and this remark applies to all coffee. There is a nominal market for Bucaramanga ; Bogota, 10 @ 13½c., and little here.

GENERAL ARTICLES.

INDIAN COFFEE.

Reports from India concerning the progress of the various crops in which Mincing Lane is interested continue to excite general attention, says the *London Commercial Record*, for there appears to be some chance that after all the great damage done to the young plants by the prolonged drought will to some extent be remedied. Good rains, occasioned by the North-West Monsoon, have visited a large portion of India, and although they have failed to avert partial destruction of the growing crops, they have arrived opportunely enough to dispel a threatened total failure. But at the best the result must be regarded as greatly disappointing to planters, who in many instances have had to contend with small yields, last year, and who, in spite of the improved statistical position—from a bull's point of view—have been compelled to accept very low prices. Coffee planters, for instance, have suffered severely from the unsatisfactory state of affairs, and they are now even more affected by the possibility of a second crop failure. Their position is generally regarded as precarious, unless indeed the London market will assist them by paying full prices to overcome the financial difficulties in which they have been involved by a succession of small crops. Fortunately, however, spot values of fine East Indian sorts have gr improved lately, and there seems to exist a very fair prospect further rise, if planters can be prevailed upon not to press t Coffee upon our market in the same reckless manner in which forced it on us during the last season. Prices had then to give under the sheer weight of Coffee, but a judicious feeding of market this year would, in our opinion, result in a steady ris values. The lack of Coffee should render such a mode of proc ings very easy, unless planters should be forced by circumstanc realise their crop at the earliest possible moment. We are told of all Coffee districts in India South Coorg has suffered the m the smallest crop on record being expected there, whereas N Coorg will probably gather one-third of an average yield, My hardly one half and all the other districts are hoping for about half of the usual gathering. This is indeed a very serious matter one that ought to be well borne in mind by our trade when bidd but so far our dealers and speculators appear slow in realizing state of affairs in India for offers of crops of Neilgherry and My and others in the neighbourhood of 60s c.i.f. have attracted l attention and the only sporting bid they have received has l 54s c i.f. a price which of course has not been accepted. Such a di gence in the opinion of values is nothing new at the beginning o season, with patience and working a reasonable basis will soo found which should be all the easier to establish this season as b sellers and buyers are eager to deal.

INDIAN TEA IN LONDON.

A larger quantity has been brought forward, says the *Pro Markets' Review* of 5th ultimo, but as the demand has materi improved, most of this increased supply changed hands. Pr generally are firm, with a further upward movement of ¼d. in lower kinds, and it is anticipated that a strong market is likel prevail for these grades. Smaller imports up to date are ma responsible for this improvements in values, the decrease comp with the four months of last year being 3,568,000 lbs.. and con ing largely of the lower qualities; consequently but a limited q tity is now obtainable under 5d. The recent advices from Calc estimate the deficiency of the total crop at from 6,000,000 lb 8,000,000 lbs., which appears hardly credible considering that extensions added to the area of cultivation during the past years have been about 107,000 acres. This increase in the cult tion is computed to yield when in full bearing about 40,000,000 of tea and probably one-fourth of this, *viz.*, 10,000,000 lbs., already reached this stage. The statistics for the past mo compared with those of the same period last year, are as unde Imports. 22,773,000 lbs. and 25,007,000 lbs. ; deliveries, 10,452,000 against 9,832,000 lbs. ; while the stock shows an increase 5,000,000 lbs., the respective figures being 44,664,000 lbs. 39,663,000 lbs. There were 51,866 packages catalogued for auc and of this quantity only 6,133 were withdrawn. There was ac bidding for all descriptions at firm and in many cases at hig prices, but at the closing sale the tendency was easier.

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

CROSSE & BLACKWELL'S, LTD.

By Special Warrant Purveyors to His Majesty The King.

CELEBRATED OILMAN'S STORES.

[w. 1-10-98—t.f o.]

COFFEE STATISTICS.

VISIBLE SUPPLY OF COFFEE

on October 1st,	1901. Tons.	1900. Tons.	1899. Tons.	1898. Tons.	1897. Tons.
Stocks eight European markets	240,050	223,050	223,200	205,050	135,300
to Europe afloat — Brazil ...	49,840	43,520	55,840	30,660	55,000
to Europe loading — „ ...	1,760	1,760	—	—	
to Europe afloat —the East...	2,040	4,720	4,380	2.730	7,200
to Europe „ —U. S. A. .	230	470	240	410	590
	293,920	273,520	283,660	238,850	198,090
Stocks U. S. of North-America	94,820	46,000	70,060	63,180	42,060
to U. S. A. afloat — Brazil ...	47,410	25,530	33,410	10,410	24,120
to U. S. A. loading — ...	9,590	7,530	—	—	—
to U. S. A. afloat —the East...	880	700	760	1,060	1,410
	446,620	353,280	387,890	313,500	265,680
Stocks in Rio ...	34,410	14,000	17,470	28,650	27,000
Do. Santos	71,880	61,820	63,000	60,650	61,590
Total ...	552,910	429,100	468,360	402,800	354,270
On September 1st ...	504,160	388,480	444,820	387,070	314,970

MR. P. C. LARKIN'S VIEWS ON THE GREEN TEA TRADE.

At a recent meeting of the Indian Tea Association, at which Mr. P. C. Larkin and Mr. Mackenzie were present, the first-named gentleman expressed his views on the green tea trade at some length. He began by saying that there could be no question of the increase of the sale of green tea in America. "I have," he remarked, "had now the best part of three years' experience, and I have got my tea into practically every retail store in the Provinces of Quebec and Ontario, and I am gradually getting it into other parts of Canada. Also in New York State, the New England States, Pennsylvania, and Michigan, in which quarter, though not so successful, we get repeat orders continually, and the trade is increasing fast.

"My business is a packet business on the same lines as the Mazawattee Company, but on a smaller scale. I advertise largely in the newspapers, and I sample the consumers largely. The retail grocer takes my teas and sells them to the consumer because he is asked for them. I would just like to show you how we have increased our green tea trade in a year. We commenced, I think, by giving an order to a firm in New York for thirty-three half-chests a month—it went up to 50, 100, 200, 300, and for the last seven months we have been getting 400 half-chests a month regularly, besides what we have been getting elsewhere. The great increase I attribute entirely to the enormous outlay we have undertaken of late in sampling, etc."

I reply to an inquiry by Mr. Wallace, Mr. Larkin said his green tea was not, as a matter of fact, always packed in half-chests, but the figures mentioned by him were quite equivalent to so many half-chests. Mr. Larkin read a letter from his Boston manager, in which he said, "The fact of the matter is we could do 100,000 lbs. of green tea a month if we could do more advertising."

"You see," commented Mr. Larkin, "he is great in his praise of green tea."

"There are three or four pounds of green tea drunk for one pound of black, and if the people had your Indian greens, as I have seen them, they would never go back to Japans."

The sample of "Salada" green tea which Mr. Larkin showed the Committee he said was sold to the customer for 25 cents per lb. The way they made the tea in the farm-houses in Canada was to boil it, and the "Salada" green tea was in every way suitable for this. This is one of the principal reasons why Japan and China teas sell in the States and Canada.

The Indian green teas Mr. Larkin saw in Mr. Mcleod's office he said were the finest green teas he had ever seen. They came from a Cachar garden.

Mr. Bryans inquired how the teas were graded, to which Mr. Larkin replied that there were three grades when they reached him—Pekoe, Pekoe Souchong, and Orange Pekoe.

Mr. Stuart inquired what they did with the dust. Mr. Larkin said they ran in about 8 per cent. with the leaf, and Mr. Mackenzie said a considerable quantity was sent to China to be made into "Brick Tea" (the exports having increased to nearly double from Ceylon to China this year).

There was an objection to Japan and China dust in America, bacause the dust caused a scum on the tea in the cup, which was attributed to "rice water." It would be desirable to face the tea for the States.

An offer had been made by American firms to build a factory to do this, and also pack the tea, but nothing had come of it.

Mr. Larkin said his packet tea consisted of "unfaced" tea, and in Canada he made a great point of the absolute purity of the tea, and he thought the American market could be captured with this kind of tea, but Mr. Mackenzie said that other "wholesalers" who sold tea by the chest loose, and not in packets, would require a "faced" tea, and "to capture the market you must begin by giving tea that is similar in appearance to the tea now being sold."

Mr. Bryans remarked that two markets apparently appeared to exist—one for "faced" and one for "unfaced" tea. He asked what the proportions of "faced" and "unfaced" tea now being sold in the States were, to which Mr. Larkin said he should think that nine-tenths were "faced" teas. All China teas were faced, and at least seven-eights of Japan. In Canada the proportions were about the same.

Mr. Larkin said his method of getting his tea to the public was through the "retailer." His traveller would go into a store and say, "Now, I want to sell you some 'Salada' green tea, which is taking the place of Japan. Give me the names of fifty or sixty or 100 (as the case may be) of your Japan tea-drinkers, and I will send them on a 2 oz. sample free, with a small circular or pamphlet pointing out the merits of 'Salada,' with the name of the retailer at the foot. I will not expect the money for the tea you buy until it is all sold."

Mr. Larkin then read out several testimonials from French-speaking "retailers" in the Province of Quebec, whom he had got to take his green teas in that way.

Mr. Mackenzie said the quantity of Ceylon green tea sent into Canada was about 700 chests (of 65 lbs.) a month for the past eight months, and that 250,000 lbs. were sent from Ceylon in August.

Mr. Mackenzie remarked that they could not succeed in making black tea in America, as the Indian tea was not suitable for boiling as the Americans boil it, and it was impossible to overcome that difficulty through the newspapers. Green tea has a big advantage over black in this way, as it can be boiled.

Mr. Larkin said he was still making progress with black tea in the United States. I do not think, he added, that advertising will cost you a copper, as I honestly believe that any money you may spend you will get back the first year eightfold. For instance, an eighth of a penny per lb. on the total output would give you a total of 400,000 dols., and I believe the increase in the sale of tea in America would amount to 10,000,000 lbs. the first year. Your expenditure does not need to be kept up; in other words, you could do in two years what you have done in seven years.

Mr. Mackenzie: In Canada, if you have any money to spare, spend it in the direction of "unfaced" green tea.

CEYLON GREEN TEAS.

The Planters' Association of Ceylon has received the following letter from the Secretary, Ceylon Association in London:—

Dear Sir,—A meeting of our Tea and Produce Committee was held on Wednesday afternoon last, at which Mr. P. C. Larkin, of Toronto, Canada, attended to discuss the position of the tea trade in that colony.

Mr. Larkin reported most favourably as to the progress made with Ceylon green teas and the future prospects of that branch of the trade, and strongly advocated advertising on a more liberal scale to hasten its development.

After Mr. Larkin's withdrawal the matter was fully discussed in Committee, with the result that I was instructed to let you know that the feeling of the members present is in favour of the application of a much larger proportion of the funds at the disposal of the Thirty Committee to the encouragement of the manufacture of green teas.

It seems that at present the only consignments of green teas to London are in very small lots, often of three or four packages. As there is no demand here for these teas except for export for which small parcels are useless, any money expended in the way of bonus on these piecemeal exports is thrown away. It is felt that some arrangement should be made by which in the case of teas exported to this country the bonus should be restricted to shipments, say of 50 packages.

Mr. Larkin and Mr. McKenzie are both leaving for New York this week.

Yours faithfully,
(Signed) WM. MARTIN LEAKE,
Secretary.

CEYLON ASSOCIATION IN LONDON,
4th October, 1901.

SOME TEA STATISTICS.

Imports of **Tea** *(Foreign) by Sea from Foreign Countries into each Province of British India from 1881-82 to 1900-01.*

Years.	Bengal.	Bombay.	Sind.	Madras.	Burma.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1881-82 ...	591,398	2,008,442	20	11,176	234,176	2,845,212
1882-83 ...	290,728	2,135,891	...	9,850	314,616	2,751,085
1883-84 ...	222,404	2,568,605	340	19,470	254,351	3,065,170
1884-85 ...	71,631	3,481,418	2,129	13,412	305,822	3,874,412
1885-86 ...	159,495	3,498,554	2,771	14,361	330,456	4,005,637
1886-87 ...	158,333	3,697,661	105	14,068	344,175	4,214,342
1887-88 ...	48,064	3,226,814	276	10,768	337,950	3,623,872
1888-89 ...	39,188	4,316,811	...	9,634	401,371	4,767,004
1889-90 ...	44,152	4,900,427	64	14,695	423,513	5,382,851
1890-91 ...	58,008	4,350,025	191	14,409	347,375	4,770,008
1891-92 ...	118,862	5,850,708	588	21,463	361,396	6,353,017
1892-93 ...	28.198	5,543,723	5,861	16,129	428,972	6,022,883
1893-94 ...	23,497	7,331,238	4,976	13,781	314,265	7,687,757
1894-95 ..	66,213	5,851,517	8,768	13,551	386,073	6,326,122
1895-96 ...	74,156	7,008,793	5,265	18.916	390,573	7,497,703
1896-97 ...	89,953	7,346,102	5,903	17,386	415,488	7,874,832
1897-98 ...	117,790	2,923,585	36,120	26,052	411,466	3.515,013
1898-99 ...	113,047	3,003,777	16,379	50,849	475,390	3,659,442
1899-1900	126,154	2,579,250	3,843	24,410	469,454	3,203,111
1901-01 ...	143,033	4,269,444	28,087	42,132	466,967	4,949,633

Imports of **Tea** *(Foreign) by Land from Foreign Countries into each Province of British India from 1881-82 to 1900-01.*

Years.	Sind and British Baluchistan.	Panjab.	North-Western Povinces & Oudh.	Bengal.	Assam.	Burma.	Total.
	lbs.	lbs.	lbs.	lbs	lbs.	lbs.	lbs.
1881-82 ...	..	...	1,008	6,160	...	116,928	124,096
1882-83 ...	...	224	1,344	57,904	...	153,440	212,912
1883-84 ...	...	...	672	43,120	...	57,344	101,136
1884-85 ...	...	...	...	60,816	...	102,704	163,520
1885-86 ...	112	...	...	36,736		2,912	39,760
1886-87 ...	.	...	...	71,120	...	12,096	83,216
1887-88 ...	..	...	...	54,432	..	6,832	61,264
1888-89 ...	...	224	...	37,744	...	..	37,968
1889-90 ...	...	...	...	52,976	...	381.136	434,112
1890-91 ...	...	...	...	18,816	..	283,808	302,624
1891-92 ...	...	...	...	70,896	...	485,520	556,416
1892-93 ...	224	..	...	74,256	...	524,720	599,200
1893-94 ...	112	..	..	57,904	.	445,312	503,328
1894-95 ...	112	1,008	...	76,048	112	748,048	825,328
1895-96 ...	...	...	..	122,080	112	794,640	916,832
1896-97 .	112	...	...	106,512	...	852,432	959,056
1897-98 ..	2,352	...	..	70,896	...	913,472	986,720
1898-99 ...	...	..		336	112	1,147,888	1,148,336
1899-1900..	1,456	336	...	672	224	1,289,344	1,292,032
1900-01 ...	112	448	...	18,256	336	1,398,880	1,418,032

Imports of **Tea** *into British India from other countries.*

Countries.	1896-97.	1897-98.	1898-99.	1899-1900.	1900
		(1) BY SEA.			
	lbs.	lbs.	lbs.	lbs.	lbs
United Kingdom ...	38,760	19,607	31,712	39,139	22,
Austria-Hungary ...	5	...	170	..	
France	25	10	34	8,487	
Germany	...	...	100	..	
Malta	...	..	75	...	...
Norway	2	...	...	...	...
Russia	2	11	..	934	1,
Turkey in Europe ...	...	..	40	40	...
Egypt	1,022	...	...	50	
Africa, East (British) ...	..	..	5	1,200	
,, ,, (other Ports)	...	...	.	...	
Cape Colony ...	22	..	...	...	
Mauritius	5	...	5	130	...
Natal	...	...	.	5	...
United States ...	...	30	...	20	
Aden	91	...	42	170	
Arabia	45	42	236	2,688	
Ceylon	748,127	1,059,716	1,108,686	570,161	1,496,
China—Hongkong ...	564,471	375,227	322,619	223,279	186,
China—Treaty Ports ...	5,778,491	1,429,034	1,698.547	1,698,547	2,361,
Japan	4,165	939	46	2,108	
Java	306,328	291,674	286,353	203,103	431,
Philippines	...	...	...	...	
Persia	72	172	308	464	
Straits Settlements ..	431,672	450,585	479,849	452,479	448,
Turkey in Asia ...	196	...	...	34	..
Australia	1,331	2,663	168	73	
Total ...	7,874,832	3,515,013	3,659,442	3,203,11	4,949,
		(2) BY LAND.			
Kandahar	112	2,352	...	1,456	
Thibet	1,568	...	...	326	
Nepal	104,944	63,280	...	...	17,
Sikkim	...	7,616	336	...	...
Bhutan	...	...	112	896	
Western China ...	9,744	3,024	20,160	110,096	129,
Siam	112	...	...	...	...
North Shan States ...	829,472	906,304	1,114,512	1,129,184	1,139,
South Shan States ...	5,600	784	7,280	47,712	117,
Karennee	2,016	1,120	.	336	
Zimme	5,488	2,240	5,936	2,016	12,
Total ...	959,056	986,720	1,148,336	1,292,032	1,418,
Grand Total of Imports..	8,833,888	4,501,733	4,807,778	4,495,143	6,367,

Exports of **Tea** *(Foreign) by Sea to Foreign Countries from ea Province of British India from 1881-82 to 1900-01.*

Years.	Bengal.	Bombay.	Sind.	Madras.	Burma.	Total
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1881-82 ...	...	557,893	337	4,555	832	563,61
1882-83 ...	660	459,922	2.770	3,768	...	467,12
1883-84 ...	62	561,050	200	82	16	561,41
			5			
1884-85 ...	140	985,451	50	20	181	985,84
1885-86 ...	50	881,501	36	...	280	881,86
1886-87 ...	...	1,853,546	401	170	355	1.854,47
1887-88 ...	65	1,466,609	...	150	1,017	1,467,84
1888-89 ...	800	2,327,191	151	50	564	2,328,75
1889-90 ...		1,848,858	515	...	56	1,849,42
1890-91 ...	164	3,177,671	1,476	88	427	3,179,82
1891-92 ...	120	3,366,336	903	672	631	3,368,66
1892-93 ..	...	3,405,494	3,055	20	168	3,408,73
1893-94 ...	...	3,574,202	389	...	550	3,575,14
1894-95 ...	...	4,336,748	1,109	...	2,096	4,339,95
1895-96 ...	...	4,366,963	2,770	120	25	4,369,87
1896-97 ...	120	4,569,604	301	...	3,708	4,573,73
1897-98 ...	...	2,631,691	37,878	...	196	2,669,76
1898-99 ...	5,970	2,324,142	3,310	...	1,556	2,334,97
1899-1900 ...	1,997	1,342,706	1,058	..	2,932	1,348,69
1900-01 ...		1,884,183	907	305	2,584	1,887,97

Exports of **Tea** *(Foreign) by Land to Foreign Countries from each Province of British India from 1881-82 to 1900-01.*

Years.	Sind and British Baluchistan.	Panjab.	North-Western Provinces and Oudh.	Bengal.	Assam	Burma.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1881-82 ...	8,624	1,562,288	...	...	...	...	1,570,912
1882-83 ...	11,088	984,816	...	...	...	...	995,904
1883-84 ...	22,848	1,456,448	112	112	...	12,432	1,491,952
1884-85 ...	12,320	1,075,984	...	...	..	7,280	1,095,584
1885-86 ...	38,264	1,032,752	...	...	...	10,080	1,076,096
1886-87 ...	54,320	1,431,808	...	...	...	15,568	1,501,696
1887-88 ...	48,048	784,336	...	...	...	...	832,384
1888-89 ...	69,888	996,128	...	784	...	..	1,066,800
1889-90 ...	64,848	985,824	...	...	...	...	1,050,672
1890-91 ...	70,224	578,480	...	...	...	...	648,704
1891-92 ...	128,464	816,592	...	...	...	...	945,056
1892-93 ...	87,472	889,840	...	...	...	...	977,312
1893-94 ...	77,504	602,784	...	..	...	336	680,624
1894-95 ...	77,280	408,576	...	...	...	3,472	489,328
1895-96 ...	62,944	177,072	...	224	...	8,288	248,528
1896-97 ..	43,232	471,744	...	1,008	...	4,704	520,688
1897-98 ...	34,384	271,936	...	336	...	6,272	312,928
1898-99 ...	80,752	533,344	...	112	...	17,696	631,904
1899-1900 ...	57,456	357,168	..	...	..	8,288	422,912
1900-01 ...	26,768	419,776	2,128	...	...	5,936	454,608

Exports of **Tea** *(Foreign) from British India to other countries.*

Countries.	1896-97.	1897-98.	1898-99.	1899-1900	1900-01.
		(1) BY SEA.			
	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom ...	8,890	7,098	16,511	127	20
Austria-Hungary	702	...	62	...	60
France	250	...	483	760	80
Germany	...	...	25	20	...
Italy	...	...	12	...	17,750
Russia ...	2,041,953	1,255,064	46,776	6,03 0	47,193
Spain—Gibraltar ...	60	...	...	...	...
Turkey in Europe ..	120	672	20	...	...
Egypt	4,507	7,778	15,691	24,390	7,826
Abyssinia	2,295	...	3,315	7,616	29,867
Africa, East (British) ...	7,984	4,033	4,606	5.76 6	6,591
Do. do. (German) ...	..		...	...	1,149
Do. do. (Portuguese)..	15,716	19,279	20,901	31,083	28,147
Do. do. (other Ports).	2,960	3,159	1,502	4,426	...
Do. South-west(German)	...	...	...	...	165
Madagascar	1,226	650	965	1,362	2,265
Mauritius	...	...	670	360	120
Natal	520	440	1,496	1,285	...
Aden	3,863	8,705	8,412	3,742	6,124
Arabia	47,412	46,435	28,531	34,560	40,624
Ceylon	...	...	...	...	300
China—Hongkong ...	2,600	...	52	...	427
Maldives	...	...	30		
Mekran and Sonmiani ...	161	413	392	588	559
Persia	2,387,319	1,259,871	2,112,935	1,195,759	1,608,081
Straits Settlements ...	3,868	196	1,540	2,912	2,464
Turkey in Asia ...	41,081	55,972	70,051	27,907	88,167
Australia	246	...	...	...	...
Total ...	4,573,733	2,669,765	2,334,978	1,348,693	1,887,979
		(2) BY LAND.			
Khelat	...	...	8,736	448	...
Seistan	...	..	112	...	..
Kandahar	42,336	33,936	71,232	57,008	26,768
Herat	...	...	672	.	...
Zhob and Loralai ...	896	448	...	...	.
Kabul	284,032	144,816	284,368	267,792	317,520
Bajaur	170,800	121,520	242,032	87,696	95,536
Kashmir .. .	15,232	3,584	5,040	1,232	5,488

Exports of **Tea** *(Foreign) from British India to other countries*—continued.

Countries.	1896-97.	1897-98.	1898-99.	1899-1900	1900-01.
	(2) BY LAND—*continued.*				
Ladakh	1,680	2,016	1,904	448	1,232
Thibet	...	...	...	...	2,128
Nepal ...	1,008	...	...	...	...
Sikkim . .	...	336	112	...	..
Siam	112	...	...	224	224
North Shan States . .	224	...	...	...	112
South Shan States ...	4,256	6,272	17,584	7,728	5,600
Karennee	...	...	112	...	..
Zimme	112	...	...	336	.
Total ...	520,688	312,928	631,904	422,912	454,608
Total of Exports ...	5,094,421	2,982,693	2,966,882	1,771,605	2,342,587

THE TAX ON TEA IN NEW ZEALAND.

REDUCED TAX DOES NOT REDUCE THE PRICE.

A great deal has been said lately, and especially in the House, during the discussion on the Financial Statement, concerning the recent reductions in the tariff charges being of little or no benefit to the consumer; and the article chiefly referred to in this respect was kerosene. But we do not all use kerosene, and to my mind these remarks apply with equal force to another commodity which is used probably in every household throughout the colony. The article I refer to is tea. Now, for years past the line of tea placed most prominently before the public has been the 2s blend or quality. It was 2s tea ten years ago; it is 2s tea to-day. There have been two tariff reductions of 2d each on tea since the present Government took office. When each of these reductions was made; I believe only one firm in the colony reduced their tea by the amount of the duty and without any claptrap as to better quality, etc., sold their former 2s tea at the reduced price of, first, 1s 10d and then 1s 8d. Probably the large amount of their tea sales to-day (I believe the largest in the colony) has proved the wisdom of their action. The other firms did not reduce their teas. They told the people they were putting in a better quality of tea for the same money and still sold the usual brands at the same price.

Now, there are two strange things about this business. First, how is it that 2s was the ruling price for tea ten years ago and before the reductions, in reduction yet with the 4d per lb. the tariff, 2s is still the ruling price? Why, either the people are more extravagant or the tea is inferior in quality. I defy anyone to say the tea now is better than it was before the tariff was taken off; and if the tea at 1s 8d now is as good as the 2s was then (which should be the case) why then is it not more patronised? The answer is easily seen. The public are being gulled day by day and they don't know it. This matter is one which concerns Wellington people, I think, far more than some other places. In Auckland the old "*Standard 5*" 2s tea (I have not seen any of it here) is retailed at all the stores at 1s 6d per lb; a few other firms' old 2s tea retails there at 1s 8d; other firms, again, are carrying on the same game there as they are here in Wellington—sticking on the prices on the ground that it is better tea. Wellington is by far the worst place of the lot, which is strange; for one would have thought, with its larger wharfage accommodation and increased shipping, and besides being the capital city of New Zealand, it could be retailed even cheaper than in Auckland.

When these liberal concessions in the duty upon articles of everyday use simply revert to these combinations of wholesale merchants, is it not high time for the Government to interfere, and if there is any possibility whatever of doing so, to enforce regulations that shall ensure the saving going to the consumer?—*New Zealand Mail*, Oct. 2.

Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant the appointment of "Purveyors to Her Majesty The Queen and Empress of India" from the year 1837 until the time of her death, have now had the honour of being appointed by Royal Warrant "Purveyors to The King."

COFFEE IN LONDON.

The strong demand of the last few weeks has shown a very marked falling off, says the *Produce Markets' Review* of 5th ultimo, and in consequence the advance has not only been checked, but there is some reduction from the recent highest prices. This was only to be expected, as the advance was too rapid to continue, but, as stocks are almost sure to show a further reduction till the end of the year, there is every prospect of another upward movement so far as mild coffees are concerned. By the following table it will be seen that London has had a much larger quantity to deal with than last year, but the demand has been more than sufficient to meet this as is shown by the fact that the stock is now lower than last year.

Quantity of coffee offered at public sale during the first nine months of this and last year:—

	Plantation Ceylon.		East India.	Mocha.	Jamaica.	African.	Guatemala, etc.
	casks.	brls.	bags.	pkgs.	pkgs.	bags.	bags.
1901 ...	416	394	139,346	2,022	4,960	4,153	159,637
1900 ...	674	607	73,280	2,238	7,496	5,977	118,804

	Costa Rica.	N. Granada & Colombian.	Other Foreign.	Bahia.	Rio and Santos.
	bags.	bags.	bags.	bags.	bags.
1901 ...	183,915	42,070	43,641	726	42,538
1900 ...	158,198	22,996	34,332	...	28,797

Seeing that the bulk of the above arrived, and were immediately pressed for sale, during the four months April to July, it is not surprising that quotations fell to the low level which was then touched, and that as soon as the pressure to sell was removed a rise took place. In fact the rates then current were abnormally low, and such prices cannot be again looked for except under similar circumstances, which are unlikely to again occur before next June. In the terminal market quotations have again shown a good deal of fluctuation, varying in accordance with reports received from Brazil. The latest estimate of the current Santos crop is as much as 10,000,000 bags, an amount which no doubt the recepts of the first three months point to, but which is hardly likely to be realised. The reports as to the next crop so far as weather is concerned are all favourable, though the trees are said to show the effects of the two last enormous yields, but under any circumstances it is too early to look for reliable estimates.

BRIEF HISTORY OF THE CINCHONA.

BY J. F. SANFORD.

Read before the Massachusetts Pharmaceutical Association.

Let your imagination carry you back several hundred years, to a scene in the district of Loxa, in South America. A poor Indian is struggling through a dense forest, his footsteps are slow and faultering, there is a look of despair on his face, as his bloodshot eyes search in every direction. He is lost, and as wandered this way for hours without food. At last he drops down beside a pool of water and drinks eagerly; at first his parched lips fail to convey the intense bitter taste, and when they do, what does it matter to him, for he is lost, alone, and very near death with fever.

At last he drops into a troubled sleep, and remains so for hours. When he awakens, the fever has left him, but still he is very weak; he crawls to the pool and takes another drink. This time the bitter taste seems more intense; he notices a tree-trunk in the water, and trying the bark it has the same peculiar bitter taste. He has discovered a remedy for the most dread disease of the tropical countries. Thus runs the legend of the discovery of the quinquina, or bark of barks, as it is called by the South American Indians.

But to Anna, Countess of Chincon, the wife of the Count of Chincon, Governor of Peru, is awarded the glory of introducing this, the most valuable of all febrifuge drugs. In the year 1638 she was suffering from an attack of fever, and a magistrate of Loxa sent a package of Peruvian bark to her physician, assuring him that it was a never-failing remedy in fevers. It was administered, and effected a complete cure.

When the Countess and her husband returned to Spain in 1640, they carried large quantities of the bark with them. In this way was the first of what is now one of the most valuable of all drugs introduced into Europe. In memory of this great gift to mankind, Linnaeus named the genus which yielded the drug cinchona, dropping the "h" in the first syllable. Since then there have h several ineffectual attempts to correct this error in spelling. is the first well-founded instance of the use of the Peruvian b though the virtues of certain species must have been known to Indians of South America long before this. The Brotherhoo Jesuits came to know of Peruvian bark soon after the introduc by the Countess, and distributed it through their several stat in Spain, Italy, and Rome. They did more than anyone towa making its medicinal virtue known. It attained great celebrity was sold for enormous prices by the Jesuits, but soon fell into dis

It was again brought to notice by Sir Robert Talbot, who car it to England in 1671. He kept it secret and gained great f with it in curing intermittent fevers. In 1682, Louis XIV. chased the secret, and in 1690 it was brought into general fav by Norton and Sydenhan of England.

The work of gathering the bark is done almost entirely by Indians or cascarilleros, as they are called. A master cascaril with his band, sometimes as many as several hundred, select favourable spot on high land and establishes a main camp, t the party divide and form smaller camps, scattered through forest.

The trees grow alone or in small clumps in the dense fo which is so thick that one has to cut his way through. One or men from each squad are detailed to find the trees, which are fo with their trunks covered with moss and vines; these are remo and the outer bark broken off by pounding with a club. Then bark is peeled off as far as one can reach. After this the tree is and the bark removed from the smallest twigs. Now the bar taken chiefly from branches.

The tract of land in South America that yields the cinch is not so large as many think it to be, nor is the supply of the b inexhaustible. The dealers and natives claim that the old sys of destroying the trees, which was carried on for so many ye and is now to some extent, came near exterminating the tree f its natural sources. In Bolivia, according to the report of Consul of the Netherlands in 1898, private parties have begu replant the denuded cinchona forests, and at the present t there are more than a million young trees growing at La New plantations are springing up everywhere, and the old grou revisited where the sprouts from the stump yield much quill ba

The cinchona flourishes from 7 degrees north to 20 degrees so of the equator, and they grow generally from 5,000 to 8,000 above the level of the sea. The chief sources of bark in So America are in New Granada, in Colombia, Equador, Peru, Bolivia. The bark from New Granada is mostly shipped f Carthegena on the Caribbean Sea. That from Equador is mo shipped from Guayaquil and Esmerildar. The bark from North Peru from Paytu, that from Peru and Bolivia from Arica and I and Calleo. A limited quantity of bark from Bolivia is expo down the Amazon to Pará.

In 1735 the French sent an expedition to South America, and Condamine a member of the party. while journeying through province of Loxa, had an opportunity to examine the plant, an his return published a description of it. It was soon after that Linnaeus gave it the name of Cinchona officinalis, in hon of the Countess of Chincon. For a long time it was not known more than one species of it existed. According to Bentham Hopper, there are 36 species of cinchona, while Howard recogn 39, although only about a dozen have been used to advantage. was nearly a century after this bark was known in Europe that plant producing it was made known to naturalists.

Great difficulty has been found in determining the species by wh the different varieties of cinchona bark known to commerce produced. The common names are derived partly from the co of the bark, partly from the district where grown, or the clipped from.

The Calisaya bark, also called royal or genuine yellow bark, of the best kinds, is chiefly the product of Calisaya, a large grown in the hot mountain valleys of Bolivia and Southern Per

A number of the worthless varieties of cinchona bark are pu the market separately as adulterations of the other varieties. accurate discrimination of the different kinds of bark requ much experience.

The first attempt to transplant these trees was by La Condam in 1737. He started to carry several plants home with him. they were destroyed after he had preserved them for eight mon In 1846, Dr. Weddell was sent by the French to study the ha

and try to obtain plants for transplanting, but the next successful attempt to transplant cinchona was in 1853 by the Dutch, who sent Mr. Hasspar1, former superintendent of the Botanical Gardens of Java. A number of young trees were sent to him and planted in the mountains of Java, but, owing to the worthlessness of some of the varieties, the Dutch reaped success very slowly, although at one time their plantations were among the finest in the world. But during the 12 years ending in 1879, the amount of land devoted to the cultivation of the cinchona fell off nearly one-half.

The first suggestion of transplanting the cinchona trees into the English colonies was by Dr. Doyle, whose long residence in India satisfied him that the climate was adapted to their growth. He was unsuccessful in his effort in his lifetime, but he had set the ball rolling, and in 1859 Lord Stanley, Secretary of the State of India, made another attempt, to which the success of the present day is due. He authorised Mr. Markham to equip an expedition to go to South America for the purpose of obtaining some cinchona plants and seeds, and, despite the opposition by the Government of South America, they left in 1860 with 637 hearty plants and 100,000 well ripened seeds. These were planted in India, and in the year 1863 there were 160,000 of the trees growing, while in 1860 Mr. Markham stated that during his whole stay in South America he only saw one cinchona tree planted by human hands. In India they cut longitudinal strips of bark from the trees and then cover the trunks with moss. This seems to increase the yield of quinine.

The first chemical examination of the bark appears to be by Hermstadt in 1785, who obtained the calcium salt of quinic acid, which he designated as the essential salt of cinchona. Quinotannic acid was discovered by Dereaux in 1793.

Cinchonine appears to have been obtained by Gomez, of Lisbon, in 1811, but it remained unknown until 1820, when Pelletier and Caventou succeeded in obtaining cinchonine and quinine and proving them to be true vegetable alkaloids.

Later investigation in the chemical reaction of the alkaloids seem to indicate that within a few years they may be made synthetically.—*Pharmaceutical Era.*

DISTRICT ASSOCIATIONS.

KANAN DEVAN.

Minutes of the Quarterly General Meeting of the K. D. P. Association held at the Munaar Reading Room at 1-30 p.m., on Saturday, the 19th October, 1901. PRESENT:—Baron von Rosenberg (*Chairman*), Messrs. R. W. Cole, A. J. Wright, W. Hendry, W. D. Martin, W. O. Milne, M. Brewer, Charles Brander, E. E. Williams, G. H. Danvers-Davy, S. L. Robertson, J. M. Bridgeman, C. E. Hancock, M. C. Koechlin, H. S. Holder (*Honorary Secretary*).

Proceedings of last Meeting were taken as read.

Minutes of Committee Meeting held on the 7th September were read out to the Meeting.

Delegate Statement on Bangalore Meeting.—Baron von Rosenberg said that as nearly every thing that took place at the Meeting had appeared in the Press, he would not repeat what those present already knew. He however gave a brief sketch of what had occurred at Bangalore, dwelling on the most interesting topics such as—"The Compulsory Tea Cess," Exploitation of the Persian Market, "Exploitation of the Indian Market," Coffee Cultivation and the Sale of Coffee in India, etc.; he also spoke as to the advisability of this Association supporting the United Coffee Growers' Company, which gave rise to the following resolution being put forward and carried unanimously.

That this Association approach the various Estates of the Districts that are interested in coffee, asking them whether they are prepared to subscribe a tax of 4 annas per acre, the sum thus realized to be invested in shares of the United Coffee Growers' Company and that a copy of the U. P. A. Sub-Committee's report on this subject be sent with each application.

Roads and Bridges, Munaar Chinnaar Road. Read letter from Mr. Towgood having reference to the Munaar Chinnaar Road, in reply to which it was resolved to refer Mr. Towgood to the Kanan Devan Hills Produce Company, Limited.

Panniar and Sembootoluvoo Bridges.—Read letter from Mr. A. W. John *re* Panniar and Sembootoluvoo Bridges, after some discussion the following resolution was moved by Mr. Hendry and seconded by Mr. W. D. Martin.

That as soon as the work on these two important bridges has been completed and the cost ascertained, His Highness' Government be requested to have them inspected and asked to sanction a grant for same. Carried.

Bridge over the Kundale River.—Read letter from the Dewan stating that the Government was not prepared to make any further concession on account of this bridge (over the Kundalé river) in addition to the contribution already sanctioned.

Moved by Mr. Robertson and seconded by Mr. Bridgeman that the Dewan be informed that this Association regrets to learn that His Highness' Government does not see its way to defraying the cost of this bridge over and above the amount of its contribution of Rs.1,000 and begs that the work be inspected and the remainder of the Grant still due, *viz.*, Rs.500 be forwarded at an early date, as considerably more than a month has elapsed since it was requested that the work should be taken over.

The Munaar Mettu Road—Read letter from Assistant Engineer, Muvathupuzha, dated 20th September in compliance with which it was resolved that the Honorary Secretary be asked to write to members who had been in the habit of doing up the road and request them to put in hand the repairs as usual up to the amount of the Grant.

The Bodi Mettu Rest-House.—Read letter from Superintendent and Magistrate, Cardamom Hills, asking several questions relating to the taking over of the bungalow by Government in reply to which, the Honorary Secretary was instructed to furnish plans and to state that the Association desire the bungalow to be reserved for Europeans and accommodation for natives added on. That the bungalow should be taken over entirely by the Travancore Government and run as a second class Travellers' bungalow.

The Chief Commissioner of Assam and the Planters.—The following resolution was moved from the chair and carried unanimously.

That this Association desires to convey to the Assam planting community the expression of its hearty sympathy and support in the trying and difficult position in which it has been placed, in its contentions with the Chief Commissioner, and that this resolution be forwarded to all Associations concerned, through the Indian Tea Association.

Read Circular No. 82/01 from the U. P. A. *anent* Mr. de Niceville's visit.

Resolved that the Secretary, U. P. A. S. I., be written to and informed that this Association will be very glad to welcome Mr. de Niceville at any time, but that he would see our "Pests" at their worst if he visited us late in February or in March.

Mr. R. W. Cole was elected Committee member.

Railway Rates on Coffee.—Read U. P. A. S. I. Circular No. 73/01 and 84/01 and enclosures *re* the reduction of railway rates.

Papers relating to the following subjects were laid on the table—Munaar Chinnaar Road, Bodi Mettu Rest-House, Coffee Cess, Kundalé Bridge, Railway Rates on Coffee, Scaly-bug, Mr. de Niceville's visit. Statistics, Differential Duties, St. Petersburg Exhibition, 1902, Investment of Funds, Assam Planters and the Chief Commissioner, Adulteration of Coffee, the French Import Tariff, Panniar and Sembootoluvoo Bridges, Munaar Mettu Road.

The meeting closed with a vote of thanks to the chair.

H. S. HOLDER,
Honorary Secretary.

MARKET REPORT.

[*Per Mail advices of* 11*th October* 1901.]

COFFEE.

The London Commercial Record says:—Transactions at public auction this week, which have only been held on one day, have been on an unusually limited scale, and as supplies comprised a considerable proportion of second-hand parcels, the demand was less active and only attractive qualities met with much competition. Santos went off at rather easier rates. The market for "futures" has been strong and prices have steadily advanced on good advices from the Brazils and a rise in the Exchange. The market closes at the best point, Santos December delivery selling yesterday at 31s to 31s 6d, March at 31s 6d to 32s 3d, May at 32s to 32s 7½d and September 33s to 33s 7½d. To-day's auctions offered 4 casks

3 tierces 2 barrels 1 bag Plantation Ceylon, 40 ½-f azils Mocha, 24 barrels Jamaica, 100 bags Costa Rica, 115 bags Ecuador, 147 bags Guatemala, 22 bags New Granada, 410 bags Salvador, 99 bags Colombian, and 20 bags Venezuelan. These small supplies went off with a better tone, and the coloury grades realised valuations to a slight advance. "Futures" of Brazil in good demand; a further advance of 6d to 9d paid in the morning and a fresh rise of 3d to 6d per cwt. in the afternoon. We quote:—

London ...	Santos ...	Dec. delivery	... 31s 6d.
New York	No. 7 Rio...	,,	... 5·35 cents.
Hamburg...	Santos ...	,,	.. 30¾ pf.
Havre ...	Santos ...	,,	.. 38¼ francs.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	15,309	17,395	40,212	31,442

	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	15,690	12,745	23,740	15,984

The preceding figures exhibit— Tons.

In the Imports an increase this year of	8,770
Home Consumption an increase of	2,945
Export an increase of	8,770
Stock a decrease of	2,086

Auctions this week have gone off as under:—

CEYLON.—*Plantation.*—1 cask 3 tierces 10 barrels sold—smalls 45s to 46s, medium 55s 6d to 64s, middling blue 85s 6d to 87s.

EAST INDIA.—24 casks 8 barrels (packed in Ceylon) were bought in.

EAST INDIA.—761 bags mostly sold as follows:—*Mysore*, peaberry 50s; *Coorg*, smalls 38s 6d to 40s, low middling 45s 6d, peaberry 60s; *Naidoobatum*, smalls 43s, bold 75s.

MOCHA.—53 ½-bales shortberry sold at 70s.

SINGAPORE.—*Liberian.*—27 bags withdrawn.

JAMAICA.—158 barrels partly sold—ordinary greenish 31s to 34s, fine fine ordinary 46s.

COSTA RICA.—383 bags mostly sold—smalls 49s, fine ordinary greenish 45s 6d, middling brownish and grayish 58s to 60s, bold 75s, peaberry 65s.

GUATEMALA.—Of 738 bags catalogued 190 bags sold—smalls 43s 6d.

VERA PAZ.—Of 124 bags offered 50 bags sold—smalls 48s 6d, bold 80s, peaberry 6[illegible] 6d.

SALVADOR.—503 bags about half sold—smalls 33s to 38 6d ordinary foxy greenish 31s, low middling to middling 46s 6d to 48s 6d, bold 60s; peaberry 47s to 54s 6d.

NICARAGUA.—1 bags were bought in.

COLOMBIAN.—Of 513 bags offered 400 bags sold—smalls 33s to 39s, ordinary to good ordinary 33s 6d to 36s, common bold 45s to 45s 6d, fair bold 49s to 49s 6d, peaberry 50s.

BRAZIL.—Of 2,000 bags washed Dumont Santos, 1,200 bags sold—smalls 28s to 29s 6d, medium 32s to 33s 6d, bold 37s 6d to 39s 6d. Of 1,855 bags Unwashed on quay terms, 1,070 bags sold—small 28s 6d, medium 32s to 32s 6d, bold 33s 6d to 35s 6d. Of 300 bags Rio, quay terms, only a few lots of damages sold. 294 bags Bahia bought in.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99. Bags.
Rio ...	2,152,000	1,017,000	1,382,000	1,183,000
Santos ...	4,146,000	3,182,000	3,141,000	2,469,000
Total ...	6,298,000	4,199,000	4,523,000	3,652,000
Crop ...	—	10,900,000	8,971,000	8,772,000

Rio Exchange 11 9/16d, previous day 11½d.

HAVRE, *October* 10.—Good average Santos October opened steady at 37½f. and closed steady at 38f., December opened at 37¾f. and closed at 38¼f., March opened at 38½f. and closed at 39f., May opened at 39f. and closed at 39½f., September opened at 39¾f. and closed at 40¼f.

HAMBURG, *October* 10.—Good average Santos October opened steady at 30¾pf. and closed dull at 30½pf., December opened at 31pf. and closed at 30¾pf., March opened at 31⅜pf. and closed at 31¾pf., May opened at 32¼pf. and closed at 32¼pf., September opened at 33¼pf. and closed at 33¼pf.

NEW YORK, *October* 10.—Closing prices of No. 7 Rio were as follow:—

	Oct.	Nov.	Dec.	Jan.	
October 10...	5·20	5·25	5·35	5·45	5
October 9...	5·10	5·15	5·25	5·35	5

Chief Marks of East India Coffee sold in Public Auction

Mark.	1st size.	P. B.	Triage.	Dist
	20 @ 67/6			
IM Balakadoo	36 ,, 67/	21 @ 70/	43 @ 39/	Coo
Matheson's Chickenhully Blue-Mountain	3 ,, 75/	5 ,, 75/	3 ,, 41/	,,
Grant and Abbs Cowerie Betta...	34 ,, 59/	6 ,, 52/6	8 ,, 35/	,,
Matheson's Polli Betta ...	69 ,, 68/	25 ,, 69/	44 ,, 37/	,,
PTB Rookma	4 ,, 73/	3 ,, 62/	3 ,, 38/	,,
F Kowerie Cadoo	5 ,, 55/	2 ,, 47/	6 ,, 34/	,,
H F. D. Haradur	14 ,, 64/	4 ,, 55/6	6 ,, 37/6	,,
Moonkwood ..	7 ,, 55/6	4 ,, 44/6	6 ,, 30/	Nelm
Terramiah	9 ,, 65/	2 ,, 50/6	3 ,, 34/	Nilg
Tuttapollium W	7 ,, 53/		3 ,, 31/	,,
Matheson's Kanambaddy ...	113 ,, 66/	68 ,, 64/	24 ,, 34/	Coo
Do. Balamannay ...	150 ,, 66/6	43 ,, 70/	34 ,, 37/6	,,
	20 ,, 81/			
Cota Kadoo	10 ,, 80/6	11 ,, 77/6	16 ,, 42/	,,
Do.	12 bot in	6 ,, 65/	19 ,, 35/6	,,
Do.	18 ,,	7 bot in	5 ,, 37/	,,
Do.	7 @ 55/6	3 ,,	6 ,, 34/	,,
Patycumbay	8 ,, 58/6	3 @ 42/6	5 ,, 30/	Nilg
Glenmore	8 ,, 55/	5 ,, 53/	6 ,, 33/	,,
			40 ,, 41/	
Matheson's Woshully ...	150 bot in	60 bot in	49 ,, 40/6	Coo
Do. Cotta Betta ...	56 @ 69/	21 @ 69/		,,
Grant and Abbs Cowerie Betta...	9 ,, 50/	3 bot in		,,
Santicoopa	7 ,, 54/	11 ,, 50/	30 ,, 36/	,,
OCC Victoria	40 ,, 50/	20 ,, 50/	79 ,, 33/	Nelm
Glenbans	6 bot in	3 bot in	6 ,, 33/	Nilg
Sobungudgi	106 ,,	38 ,,		Mys

TEA.

INDIAN.—A further increased quantity was brought to aucti *viz.*, 56,500 packages contrasted with 51,000 packages previous and 54,000 packages at this period of 1900.

Arrivals were heavier, and the above amount coming after full supplies of the week before was more than buyers could possi grapple with, and this combined with a not unusual reaction af a period of considerable activity, and somewhat rapid advance values, caused an irregular and generally lower market. Consid ing the improving statistical position of this article, and in view the probable appreciable deficit in export from the chief produci centres in the United Kingdom, it would appear to be a favoura opportunity for a combined effort being made, so that in no sin week no undue quantity should be forced upon the trade. Su an arrangement, if all interested would carry it out loyally, co scarcely fail to have a beneficial effect, and would conduce to maintenance of a reasonably steady market. Violent fluctuati are alike prejudical to the interest of importers and distribute and any course calculated to guard against such would undoubte be welcomed.

Low-priced teas, both leafy and broken, were to be purchased easier terms, while medium kinds often marked a decline of ¼d ½d per lb., especially noticeable in the case of Assam Ora Pekoes and Pekoes and Broken Pekoes with thin liquor. The b lines did not show so much alteration, but any falling off strength or flavour from former offerings was fully reflected in reduced quotations recorded. Continental buyers expended c siderable support to useful Pekoe Souchongs and Pekoes, and it satisfactory to note that according to the table given below sh ments from here to foreign ports continue to expand.

For 45,000 packages on estate account 8⅛d per lb. was obtai *versus* 8¼d per lb. for 45,000 packages and 8⅝d per lb. for 39,0 packages in the two preceding seasons.

CEYLON.—Sales comprised 19,500 packages opposed to 18,9 packages on the 1st instant and 17,500 a year ago. There was a g

general demand but the bidding was scarcely so keen as last week, although quality continued desirable. Ordinary to fair Pekoe Souchongs and Pekoes were wanted and fetched firm prices. Medium Pekoes and Orange Pekoes for the most part also passed steadily. Broken Pekoes in many instances marked unevenness in value, especially in the case of the better parcels, which sometimes went in favour of buyers. Choicest Broken Orange Pekoes and Orange Pekoes on the whole sold well.

Clearances from this to outside quarters for the past month again indicate the growing demand abroad for these teas.

The average is 7¾d per lb. On the 3rd instant it was 8d per lb., and 7½d per lb. in 1900

JAVA.—Nearly 1,600 packages of direct import were placed before the trade. Competition was spirited and prices were occasionally fractionally to the advantage of sellers.

Deliveries.—Clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 18th October,	1901	4,951,228 lbs.
Do. do.	1900	4,538,023 „

During the week the following have been printed for sale by public auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offered. Pkgs.
India	39,423	17,045	56,468
Ceylon	17,020	2,463	19,483
Java	1,281	283	1,564
Total ...	57,724	19,791	77,515

Also 1,997 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated October 11th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian. Pkgs.	Ceylon. Pkgs.	Java. Pkgs.
1901-1902	429,534	469,329	26,372
1900-1901	414,175	494,668	18,530

57,598 *pkgs.* INDIAN
21,254 „ CEYLON
1,596 „ JAVA
} Total 80,448 packages were offered in public auction this week.

Recent arrivals of Indian Tea have been heavy, and the late rise in the market induced Importers to sell freely. Consequently prices have somewhat receded.

There appears now to be little doubt that the crop from India will be below that of last year. It therefore seems unnecessary to risk overstraining the market, because immediate arrivals are large.

The question of regulating supplies, therefore, becomes very important, and if sales can be spread sufficiently to relieve too great a pressure upon buyers, considerable benefit may result to producers.

GREEN TEA.—Seeing how soon the black Tea market becomes overweighted, the advisability of relieving it through the manufacture of green and unfermented Tea is very apparent, and well merits the greatest encouragement from the India and Ceylon Associations. India is giving a bonus of 1½ annas per lb. for the manufacture of green Tea, but Ceylon of only 5 cents per lb., a sum which does not seem to afford sufficient encouragement to the enterprise. When making this class of Tea, sorting into very small breaks should be avoided, and all grades should be as free as possible from dust and fannings.

INDIAN.—The quantity brought forward was heavy, comprising 57,598 packages, not very much behind the largest sale of Indian Tea ever held in one week in London, which consisted of 60,606 packages, in January, 1900. The market not unnaturally showed weakness, and prices for all grades were a farthing to a halfpenny cheaper. The following averages are worthy of note:—"Seeyok." 1/1¼; "Tingri T Co Keyhung," 1/0¾; "Amal T Est. Lattakoojan," 1/0½.

TRAVANCORE.—This district is now assuming greater importance, considerable quantities being brought forward as a rule every week; some of the Estates situated at high altitudes are making Teas of nice flavour and obtaining averages considerably above the general run of Teas from this district.

Week's average of New Season's Tea sold on Garden Account 1901, 45,065 pkgs., av. 7·77d. 1900, 45,537 pkgs., av. 8·01d.

New Season's Tea sold on Garden Account 1st June to date 1901, 303,253 pkgs., av. 8·35d. 1900, 332,599 pkgs., av. 8·16d.

CEYLON.—The easier tendency noticed in the Indian market was reflected in Ceylon growths, the tone being distinctly in favour of buyers, and prices showing occasionally a fall of over a farthing per lb.

Average for week 7·79d., against 7·44d. same week, 1900.

Ceylon Tea sold on Garden Account 1st January to date, 926,837 pkgs., av. 6·71d. 1900, 993,092 pkgs., av. 7·18d.

JAVA.—In sympathy with other growths the Java market passed with a somewhat quieter tone, rates generally being below those ruling last week.

Bank Rate 3 per cent. Exchange on London three months' sight:—Calcutta 1/4 5/32. Colombo 1/4 3/16.

COCOA.

Public sales on Tuesday offered 3,423 bags, of which only 1,150 bags sold; prices were unchanged. Of 741 bags Trinidad, 485 bags found buyers at full rates—72s 6d for very fine red, 70s to 70s 6d for fine, and 68s to 69s for fair to good. Of 339 bags Grenada, 270 bags were placed at valuations—good to fine 63s 6d to 66s, common to fair 60s to 62s. 51 bags Demerara realised 66s. Of 46 bags Jamaica, a few bags sold at 58s for common. 24 bags St. Lucia mostly sold at 57s to 58s for common. Of 169 bags Surinam, 20 bags fine sold at 72s, the remainder being withdrawn. Guayaquil very slow, and of 1,104 bags catalogued, only 30 bags grayish Caraquez sold at 64s. 110 bags common wormy African sold at 55s. Ceylon quiet, but steady; 520 bags offered and 160 bags sold—good red 71s, brownish to fair red 59s to 66s, smalls 40s to 46s per cwt. 156 bags Pará, 10 bags Maracaibo, and 160 bags Venezuelan passed the hammer unsold. Privately sale embrace 150 bags Pará ex the auctions at about 70s, and 300 bags Guayaquil —common grey Machala at 65s 6d, and grey Caraquez at 64s to 65s 6d per cwt.

PEPPER.

BLACK.—The market is rather lower on the spot, and only very small sales made at 6d to 6 1/16d per lb. for fair to good fair Singapore. For arrival no business reported.

At public sale on Wednesday, of 50 bags Singapore offered, 5 bags sold at 6d. 193 bags Penang and 69 bags Trang retired.

Singapore is very quiet to-day, no sales reported; prices unchanged.

Tellicherry sold to arrive at 57s 6d per cwt., c.i.f., delivered weights Liverpool December-February (s).

WHITE is steady, with sales to a fair extent on the spot at 9 3/16d 9¼d for Singapore, 9 1/16d to 9⅛d for fair Siam, and 8¾d per lb. for fair Penang. To arrive a firm tone prevails, but transactions are restricted to 20 tons Singapore October-December (s.) at 9⅜d per lb.

At auction on the 9th instant 147 bags Penang were withdrawn.

GINGER.

COCHIN.—A continued improvement in the tone of this market can be reported, and values have further risen. Since our last about 1,500 bags have sold privately at 42s 6d to 43s for medium and small washed rough Cochin, and 40s per cwt. for rough Calicut sorts. Under the hammer 160 cases 401 bags were offered, but only 36 bags sold—fair medium and small washed rough at 43s per cwt.

AFRICAN.—80 bags clean small and ends bought in at 40s per cwt.

JAMAICA.—45 barrels ordinary middling washed realised 40s 6d per cwt.

CINCHONA BARK.

Offered, 41 packages. Sold, 36. Of these 4 bold flat *Calisaya* rather rough and damaged fetched 1s 3d to 1s 3⅛d, and the other 32 being *Peruvian* realised 6¾d to 1s 2d.

QUININE.

Quinine has been a very unsettled market in second hands this week, quotations fluctuating daily. Opening at a decline on Monday, it subsequently went firmer, but on Wednesday prices were barely steady again, and good German brands of sulphate were quoted 1s 1½d per oz. nominally on the spot. December delivery 1s 1¾d, and March 1s 2d. To-day the market is flat, and these prices can be shaded by ¼d. Some of the makers are still sellers at 1s 2d, and others are offering at this figure. In Batavia, on October 9, 3,100 kilos. of Ed. 11 sold at an average of 20½fl per kilo. (about equal to

8c Amsterdam unit), against 20fl per kilo. paid at the previous auction. The next auction to be held in Batavia will take place on November 13.

CARDAMOMS.

In fair demand at slightly easier prices. The following were the sales: Ceylon-Mysores, extra bold pale heavy, 3s 6d; medium to bold pale, 3s to 3s 1d; bold medium pale, 2s 9d to 2s 11d; medium pale, 2s 5d to 2s 7d; long pale lean, 2s 3d; medium brownish, 1s 9d; bold splits, 1s 9d; small pale, 1s 7d to 1s 9d; very small ditto, 1s 3d to 1s 5d; small splits, 1s 2d to 1s 4d; and brown splits and pickings, 1s 3d to 1s 5d. Ceylon-Malabar, small and medium, 1s 4d.

Six cases of medium brown Tellicherry sold without reserv 1s 10d per lb. Decorticated seeds brought from 1s 10d t 4d per lb.

INDIA-RUBBER.

A considerable business has been done throughout the week, prices are ¼d to ½d per lb. higher for fine, closing quiet. Hard Para at 3s 7½d, soft fine at 3s 6¼d. Negroheads are steady; scra 2s 8d to 2s 8¼d Island s 11d to 2s, Cameta 2s 1d per lb. Peru ball 2s 5½d to 2s 6d, and large sales of slab at 2s 1d per lb. T have been sales of medium qualities at about steady prices. auctions to-day.

(AVERAGE FOR ALL INDIA 7·77d., OCTOBER 11TH.)

GARDEN.	Total.		Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, D and Variou	
	Quantity		Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Pr
Travancore ...	**498**		**5·94**												
Ellangy ..	97 p		5¼	...	...	64	5¼ 5½	...	...	23	4¾	...	.	10½c	3¾
Glenmary ...	121		6½	53	6¼	...		37	7½ 8	31	5½	...	...	...	
Riviera ...	101		4½	...	..	69	4 4¼	29	5½	2	3½	1	3¼	...	
Trav T Est Co Pa	76		6¼	26	5½ 5¾	8	5	27	7¾ 7¾	10	4¾	...	...	5	4
Vembenard	103 p		7¼	38	7½	35	6¼	...	...	..	...	...	...	30½c	4½
Wynaad ...	**149**		**5·62**												
Perindotty ...	128 p		5¾	...	...	40	5¼	51½c	7¾	37	4¾	...	.	...	
Richmond ...	21		5	8	6	3	4¾	...	...	10	4¼		..	...	
TRADE AUCTION, AVERAGE 7·78d.															
Travancore ...	**467**		**7·63**												
Kan Dev H Co A ...	27 p		6½	...	.	...	..		..	...	...	9	5⅓	18 p	4
Do. Munaar ...	140 p		8½	22	9½	38	7½	36½c	11	25	6½	...	...	19⅓c	9
Do. Perai Vurrai	131		7	62	7¼ 8½	25	6½	...		37	5½	7	6	...	
Do. Sevenmally	169		7¾	...	...	66	7¾ 8	22	10¼	58	6½	...	...	23	8

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PLANTING OPINION.

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 15th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad. *November 4th.*—*Weather*—Heavy showers of rain, almost daily for the last two weeks; it is to be hoped that the East wind, that has now set in, will free us of their unwelcome presence. *Crop*—ripening up rapidly. The crop is a record one for its shortness. *Coffee diseases*—Coffee remarkably healthy. *Health*—Good. *Labour*—Abundant.

Coorg. Polli Betta, *6th November.*—*Weather*—The N.-E. showers are continuing. It rained all last night. Eastern places are now getting leaf disease, due probably to all this wet. *Crop*—on the western side of the district, where there was a February blossom, heavy pickings are now the rule. Out East gathering has hardly begun as yet. Weeds are much in evidence again, and are being got under. *Labour*—There is an abundance. *General Health*—Fair. *Interesting item*—Visit of the Inspector-General of Volunteers to Mercara on 24th instant.

THE COFFEE CRISIS IN BRAZIL.

In an introduction to his report for the year 1900, the Brazilian Minister of Finance has a good deal to say about Exchange and Currency and a little about Coffee. Dr. Joaquim Martinho speaks out plainly, and his remarks, even though they do not present matters in any new light, are well worth attention. What he says about exchange and currency may be left over for future treatment. What he states in regard to coffee is that the present crisis is due to over-production, and that the only remedy is to increase consumption, which low prices will greatly encourage,

and to restrict production. All this has been said before, but we must recollect that the opinions of the Minister of Finance are more likely to sway those of the Government than are the arguments of any outsider. DR. MARTINHO's utterances acquire additional importance from the fact that he touches upon the question of State intervention. If the development of consumption is to be aided by the State, it must, he says, be effected by the local Governments who can acquire a certain amount of produce at a moderate tax on it. As to the agency to the employed, it can only be carried out by those in a position to advertise the produce and who are directly interested in it. The Governments of the States would, therefore, if they adopted DR. MARTINHO's suggestion, buy coffee and sell it through one of the firms of exporters. If, he says, each State provide a certain amount of produce, the Agent could contribute a certain amount of capital, and no more would be required for its introduction into Russia for example.

This last sentence gives point to the whole suggestion. "New Markets" are to be worked up in behalf of Brazilian Coffee just as it is suggested they should be in behalf of Indian Consumption, and to be stimulated in old markets also ; but it is seen that all this is too slow a process to conjure away the present crisis, and DR. MARTINHO comes to much the same conclusion as we have ourselves expressed in the past. The doctrine of the survival of the fittest must, we have remarked, settle this matter. DR. MARTINHO says :— "the only remedy is to remove the weak by a natural process of selection and let the strong survive." In spite of its severity the law thus invoked is, as he says, "the law *par excellence* of progress, and on the day when it does not hold good in business, agriculture, industry and all human relations, all classes will be represented by inferior individuals and all society will infallibly degenerate." Such, says the Brazilian Minister of Finance, is the only solution for our present difficulties, for the crisis is not due to under-production, want of capital or labour, natural effects such as frost, drought, disease among the coffee, in which case assistance would be both advisable and useful. Far from this, however, the crisis is due to over-production, the result of wrongly applied energy, neither Government nor any one else can change the direction of these forces based on natural selection.

So far almost every word said in regard to Brazilian Coffee applies with equal force to the smaller Indian crops. But there is a difference marked in the next sentence, for it must be remembered that whereas coffee is a minor product in India it is the great staple of Brazil. DR. MARTINHO remarks :—"No doubt many agriculturists are in difficulties but it cannot be said with truth that the country is impoverished, seeing that our exports this year amount to 35 millions sterling and are not inferior to former years." Indian coffee-planters certainly are impoverished for the most part. We feel sure that they will approve of what DR. MARTINHO suggests for Brazil. The weeding out of the weak by the natural law of fitness and unfitness for the struggle for life ; the development of the country and its communications ; and the cheapening and increasing of the supply of capital. It is interesting to note also that DR. MARTINHO gives as his final suggestion the following :— "it will be advantageous to encourage the foundation of banks to render efficacious aid to agriculture, industries, and commerce. This can be effected by a law which will keep in view these two principal points—assimilating credit for agriculture and industries to that employed in commerce, guaranteeing the creditors to the utmost. The capital these banks will be furnished by the Government itself redeeming its internal debt." The last sentence shows the Brizilian Minister of Finance is a man of greater fores and greater courage than any Viceroy or any holder of financial portfolio that India has had of late years. Des the inferior credit of his country, DR. MARTINHO see way out, he realises what ought to be done, and he has pluck to tell the Government plainly that they should g their nettle.

WEEDY TEA NOT SUBJECT TO BLIGHT.

A practical planter writes a very interesting little lette the *Ceylon Observer* with reference to Java tea. The p upon which he lays stress is that *young* tea, like young chona, grows stronger and heartier if amongst weeds. So times old tea seems to do so, too ; not among bad gras The planter suggests that the fertilising weeds should left, though not to a too luxurious amount, and then dug He says :—"Young tea on my estate and on others I hav do with, seems to me to revel in such conditions—and su it is only following 'Nature' that it should do so—for young stems and crowns of the roots are all the time tected from excesses of sun, wind, wash and all form exposure and in the warm season kept cool and regul re-dewed." He saw really bad "Grey Blight" for the time in Java recently and that was on the young estate of a Ceylon co-Director of him, now resident in Ja on whose estate there is not a single weed of any sort to seen. It is a perfect example of a clean tea estate and weeding cost per bouw is very cheap, but "on more or 100 bouws the bushes were bare, from the joint attac Helopeltis and this awful Grey Blight, and at that rate weeding cost cannot be very cheap per lb. even if it is bouw !" This naturally suggests the question :—Can it not possible, the young tea would have been hardier and be able to withstand these attacks, if left to run a bit wild at fir

COFFEE IN DISTANT LANDS.

XXXIII.

Hawaii.—Following Porto Rico's example, Hawaii is n petitioning Congress for a protectionist duty on Coffee to s out the cheaper Brazilian article from the islands. Little little Brazilian Coffees are monopolising the markets even Coffee-producing countries and making competition impo ble. As it becomes unprofitable, Coffee-planting will be gi up and the circle gradually narrowed until with an imme consumption and practical monopoly of production we sh have it all to ourselves and dictate prices to the world. I this that Brazil should aim at to eliminate competition ; a that can be done only by selling at prices at which competit is impossible. The process may be painful to ourselves bu is certain, and in the long run will amply reward the sacrif Instead of limiting the output, what is wanted is to prod more and cheaper and flood the world with our Coffe

The following is a resolution passed by the Hawaiian Leg lature about to be presented to Congress :—

"Before Hawaii was annexed to the United States" s Mr. Kalanokahlani, "the coffee industry was fairly prosper

nd the growers were making money, but since the admission f coffee free of duty the business of the Hawaiian Coffee rowers has steadily declined, until now the industry lan-guishes.

"There are very rich coffee lands in Hawaii that, if worked, re capable of producing large crops of the most delicious offee in the world, but under existing conditions our planters annot compete with the cheap labour employed on the coffee lantations of Brazil, Mexico, and other South American ountries, and hence it is that they will ask Congress for rotection.

"It seems to me that since the Supreme Court's decision in he Porto Rican case Congress would have power to levy a tax n all coffee imported from foreign countries into Hawaii, while admitting free of duty all Hawaii's coffee into the United States and Territories. The duty on foreign coffee would give us protection and enable our coffee-growers to build up a home market in the Territory. The farmers of the United States re protected by the tariff, and why not extend like protection o the owners of coffee plantations in Hawaii?"

NOTES.

Java Cinchona Bark. Java shipments during first half of October were 680,000 Amsterdam pounds, as against 364,000 last year, and 657,000 in 1899.

Indian Tea Export. Exports from the 1st April to the 29th October to the United Kingdom amount to 93,585,430 lbs., against 102,868,434 lbs. in 1900.

Tea Exports from London. Exports of tea from London for the last nine months of 1901 have exceeded those of last year by 3,543,000 lbs.

Drought in Brazil. In his circular of 8th September, Sr. Rezende Carvalho, of Santos, says, "advices from Ribeirão Preto state the drought to be very bad as also at S. Simão."

A Fire in Brazil. At Cantagallo 25·499 kilos. of coffee were destroyed by fire on the 8th September. The building and coffee machinery, valued at 30:000$, were also destroyed.

Labour in Sao Paulo, Brazil. In the eight months from January 1st to the 31st August, 1901, there entered the State 34·973 immigrants, of whom 21·615 were assisted by the State government and 13·358 came spontaneous. In the same period there left the State *viâ* Santos 18·832.

Tea Stocks in London. At the beginning of this month stocks of Tea in London were as follows:—Ceylon, 21,000,000 lbs.; Indian, 53,300,000. As compared with 1st October, 1901, these figures show a fall of 3,500,000 lbs. in stock of the Ceylon leaf and a rise of 10,600,000 lbs. in that of Indian tea.

Unknown in Canada. Writer after writer competing for the prize offered by the *Canadian Grocer* for the best Essay on Buying, Handling and Selling Coffees ignores Indian coffee. Thus one writer, dealing with The Best Kinds of Coffee, says:—Mocha, Java, Plantation Ceylon, Ceylon, Jamaica, and Maracaibo coffee are amongst the best qualities, and would be classed high-grade coffees, particularly the first four named.

Indian Tea and its Flavours. Mr. Mann has returned from Darjeeling where he was engaged in experiments with the object of elucidating the problem of how the various flavours of tea are produced. The result will be laid shortly before the Association. He also paid a flying visit to the Terai Gardens which are suffering from mosquito blight of a different species from that usually known, the only resemblance being that it possesses wings.

Tea Statistics. Statistics are beginning to show a comparatively strong position, say Messrs. Stenning, Inskipp & Co. in their report dated 10th ultimo. Deliveries for the first four months of the season mark an increase of 3,276,000 lbs. over the corresponding period in 1900; the stock which on the 1st June stood at 12,680,000 lbs. more than at the same time in 1900 is now only 5,001,000 lbs. more, and the total stock at the end of September of Indian and Ceylon together is on a level with that of last season.

Coffee in the U. S. The *American Grocer* of 20th ultimo says:—Mild sorts firm for all very desirable lots, with fancy grades commanding 1@3c above current quotations. The September auction resulted in sales of 14,000 piculs, of which 12,000 piculs Interior brought equal to 15½c, delivered here. The local market for Padang Interior is 17@19c, with extra grades at 24@30c, and very fancy higher; Mocha 16@18c, and better for very fine lots; good Cucutta, 7½c, with better grades at 9@11c; Central American, 9½@13c

Tea Crop Prospects. The following telegram with reference to the tea crop in the various districts has been despatched by the General Committee of the Indian Tea Association here to the Committee of the Association in London, *viz.*:—Assam—Outturn last month about normal; immediate prospects fair: Cachar—Outturn last month good; immediate prospects fair: Sylhet—Outturn last month about normal; immediate prospects fair: Dooars—Outturn last month good; immediate prospects good: Terai—Outturn last month about normal; immediate prospects bad: Darjeeling—Outturn last month about normal; the season is practically closed.

Indian Tea in Canada. Reporting from Toronto on the 3rd ultimo, the *Canadian Grocer* remarks:—The demand here for Indian and Ceylon teas is only moderate. Since last week some shipments of new season's green China teas have been received and they have been gradually bought up at full prices by the trade. There is likely to be a distinct shortage of these teas, and high prices are ruling. Orders placed at limited prices have not been executed, and very few consignments of China green teas are likely to be seen on this market this season. A cable received in Toronto this week from Wisner & Co. reports a further advance of 1c. per lb. in China green teas generally. A cable received on Wednesday from Calcutta said that they were unable to ship Indian green teas up to

the standard required for the Canadian market, owing to the small quantity of that description being brought forward.

Brazilian Legislation. The *Brazilian Review* of the 24th September, 1901, says :—During the past week, in the Chamber of Deputies, among the bills introduced were the following :—a bill empowering the Government to monopolize the exportation of coffee and india-rubber ; a bill making an appropriation of 60:000$ for defraying the expenses with Brazil's exhibit at the Buffalo Pan-American Exposition ; . . . . a bill making an appropriation of 50:000$ for the Agricultural Congress at Rio de Janeiro ; a bill empowering the Government to contract with some bank for the redemption of the currency now in circulation. . . . . The debates on the general revenue bill and on the bill changing the import duty on cattle continued in the Chamber, which also discussed . . . . a bill for guaranteeing 6 % interest on capital to the amount of 2.000:000$ to be invested in an agricultural bank in Sergipe.

London Tea Market. Weekly special telegram dated 31st ultimo from Messrs. Gow, Wilson & Stanton to Colombo reports that competition for Ceylon tea is general and well distributed and that the market for medium liquoring Pekoes and Broken Pekoes is steady, while the market for teas for price is dearer. The price of fair liquoring Ceylon Pekoe Souchong is 6¼d (a farthing up), and the average price of Ceylon tea sold on garden account this week was 8⅛d (an eighth of a penny up). The average of the corresponding week last year was 7½d. Reuter reports that there is an upward tendency in common qualities of Ceylon teas. Fair Pekoe Souchongs are quoted at 5⅞d (⅛d up) and the average for the week is 8¼d (a farthing up). 17,000 packages of Ceylon tea were offered for sale and 15,000 were disposed of ; while of the 44,000 packages of Indian tea offered, 42,000 found purchasers, at an average of 8⅛d per lb. (⅛d below last week).

Calcutta Tea Sales. Sales on Friday the 1st instant totalled about 26,000 packages, most of which were disposed of in the auction room. The quality generally was again good average, although here and there inferior tea was shown from the Dooars. A better selection from Darjeeling was before the trade, and sellers were fortunate to meet a particularly strong demand and keen competition : indeed, the spirited bidding for these kinds was the feature of the sale ; otherwise there was no change in the tone of the market. It was again strong and active, and certain types of high class tea were dearer ; on the other hand, for plain liquoring sorts and commonest descriptions there was no inclination to follow the smart advance last week ; if anything these kinds were a shade easier, though they were not quotably lower. This was to be expected, as it is not unlikely that the recent advance on the home market may prove to be spontaneous, coming as it has before London has handled one-third of this year's crop.

The Fluctuations of Quality. In their report dated 17th ultimo Messrs. Gow, White & Co. remark : —Assams have mostly fallen away from the high standard reached before the rainy season had fully set in. Cachars and Sylhets however, moved up somewhat ; Dooars generally and with more rapidity than usual, recovered from the slump in quality, which quickly came after a very promising start, and advices point to a further improvement in invoices on the water. It is worthy note that several gardens in this district, which had in rec years earned the unenviable character of being among "undesirables," have demonstrated that, given favoura conditions and handling, they can still produce a re attractive article. The majority of the finest Darjeeli from the second flush have now been disposed of, and me while there is little from this quarter, of real distinct Travancore and other South India teas have chiefly b showing useful style and appear to be gaining in popular

Coffee in London. Stocks during September have v materially increased in all positi says the *Produce Markets' Review* of 17th ultimo, and world's visible supply is over 49,000 tons in excess, hav reached the enormous total, a record one, of 550,300 t which is almost eight months' consumption even on the b of the heavy deliveries of last year. From such figures would be easy to argue in favour of lower rates, but on contrary there has been a persistent advance in prices in the "terminal" markets of the world. Here in Lon quotations have risen 2s, and the anticipation of those m interested in Brazil is for a much higher range. Apparen however, the sole cause for such an advance is the rumou a poor flowering. Seeing that there is no official confirmat of this, and that it is only natural for those interested in present prodigious crop to want to obtain as high a price possible and therefore to favour such rumours, we thin would be dangerous to encourage buying until someth more definite is known. Supplies of actual coffee, except Santos, are now so short that only very small auctions h been held this week, and on only two days. Prices w steady, but hardly up to the best of the last few weeks.

Annam Tea in France. The *Board of Trade Journal* s that according to the *Politi Coloniale* of 26th ultimo, the consumption of Annam tea Paris is rapidly increasing. Several provision mercha advertise and recommend it, and it is believed that product will assume an important place in the trade to detriment of Indian teas. The recent drop in the price the latter is attributed in India to a too great extension of cultivated area, and to the abundance of the last crop. Fr these considerations the writer of the article in the *Politi Coloniale* advises the tea producers of Indo-China to deve their production only in proportion to the assured mark On the Paris market it will find a ready sale, although consumption of tea in France is small compared to that other countries. Meanwhile there is nothing to prev producers from directing their efforts to Indo-China its where it has lately been observed that Chinese teas imported in smaller quantities than hitherto. In the months of April and May last, 60,000 kilogs. of tea, val at nearly 100,000 francs, were exported from the port Tourane. Annam tea is, therefore, on the way towa occupying an important position among the Colonial produ imported into Paris.

Indian Tea in London. The quantity brought forw exceeded that of last week by wards of 18,000 packages, says the *Produce Markets' Rev* of 12th ultimo, and was more than sufficient to meet a active demand. Prices in consequence have been irregu with a distinctly easier tendency for most grades.

common teas, for which there has been a good inquiry and a strong market for some time, have shared in the fall, and a considerable quantity is now obtainable at 5d and under. The medium descriptions are coming forward freely, and meet with a good demand at prices which are more favourable to buyers, and a steadily improving business has been transacted. The most important decline has taken place in the finest grades, which is due mainly to the falling off in quality, especially noticeable in the Assam teas. At the public sales 57,608 packages were offered, and the unusually large proportion of 18,159 withdrawn, only a limited quantity of the latter having since been disposed of privately. The bidding throughout was inactive, the lower grades having declined ¼d, and the medium teas ½d per lb., while the finer qualities have fallen from ½d to 1d per lb. For next week the quantity catalogued is much smaller, and it is probable that a reduced supply will be offered at the public sales for a week or two.

GENERAL ARTICLES.

THE PERSIAN TEA MARKET.

Mr. E. Bradford Ouseley writes from Birjand, Persia, under date 25th September, to the *Pioneer* :—

I have read with much interest Mr. Foley's reports and letters printed in the *Pioneer* from time to time, and with all due deference to that gentleman's thirty years' experience, I should like to make a few remarks about some of his statements. Firstly, about the prices of teas Mr. Foley gives and quotes. I think these are very liable to give people in India quite a wrong impression about the Persian tea market. In one of his letters he says "I was besieged by buyers of tea at their own price, 7 and 6 krans a pound for Orange Pekoe and Pekoe, equal to Rs.2 and Rs.1-13-6 per lb." At the same time Mr. Foley should have mentioned that in this place, *viz.*, Seistan, at the very outside, the yearly sales of tea do not reach three thousand pounds. In another of his letters Mr. Foley says his "tea was valued at 30 krans (or Rs.2-5-6 a pound) and this was confirmed by an Afghan trader, whom I met on the desert journey on his way to Meshed *viâ* Heerat with 22 camel-loads of black tea (Dehra Dun) purchased in Bombay." and he goes on to say—"I give him samples of Orange Pekoe and Pekoe, one pound tins with labels. He valued the samples at 30 and 25 krans and pronounced them superior to his tea from Bombay (*viz.*, Dehra Dun) which he would sell at 20 krans a man. Now I had the pleasure of being under the hospitable roof of the British Consulate at Meshed at the same time as Mr. Foley was there, and I think even Mr. Foley will allow that Meshed is the largest and most important tea mart in these parts. Well, the highest *offer* Mr. Foley had in Meshed for these very "*sup-rior*" samples which he says were *valued* at Rs.2-5-6 a pound was 15 krans a maund of 6 lbs. 6 oz., or well under ten annas a pound. This was an all-round average price, and the only *bonâ-fide* offer Mr. Foley had for any respectable amount of tea in Persia. I also saw, and Mr. Foley could hardly have helped seeing (in fact in one case Mr. Foley pointed it out to me), Indian black tea selling in the bazaar for ten annas a pound and under: Dehra Dun in one shop, Kangra in two, and Assam tea in six different shops. Now in one of Mr. Foley's letters he says, (I haven't the letter by me, but words to this effect): —"Gardens and Associations should all amalgamate, and not send up caravans under irresponsible agents to Persia" Yet what is more likely to cause a rush of such; than the—I can call them nothing less misleading statements in Mr. Foley's letters, and I think any business man looking at the above figures will agree with me. I have refrained from writing on this subject up to this for many reasons; but have at last come to the conclusion that it is only fair to intending explorers of the Persian tea market to give the above facts

As to Mr. Foley's sound and laudable plan of getting the Persian merchants to come to Quetta and take delivery there of tea I thoroughly agree with him, and should advise all gardens and Associations joining him if he could accomplish it; but if the mountain will not come to Mahomet, Mahomet must go to the mountain, and what is Mr. Foley's idea of progressing? This:—To send four large caravans with indigo and tea, each under a responsible agent, *i.e.*, a retired military officer from four different quarters. These columns, under their respective leader, to make a simultaneous attack upon the the Persian tea market, while Mr. Foley directs the operations from the base. It sounds quite like General Cleary's "Minor Tactics," and makes one think of Lord Kitchener's flying columns after De Wet. But I trust Mr. Foley won't find his campaign as hard as the latter. Still, to anyone knowing Persia and the Persians, the idea will I feel sure being a smile (at the least) to their lips—of the veteran soldier hawking his tea and indigo from village to town and town to village, seated on his double humped camel singing—"Oh! Won't you come and buy? Come and buy my pretty Indian teas." But there is one serious point I should like to remark on in Mr. Foley's letter, *viz.*, "British influence is *nil*." This passage occurs in Mr. Foley's letter, dated Calcutta, 27th August, and having seen as much if not more of Persia than Mr. Foley; I (with all due deference to Mr. Foley's thirty years' experience in tea) say this is quite a misapprehension on Mr. Foley's part, and anyone looking below the surface and even carefully at the surface cannot help seeing and feeling the very strong current of British influence that is rapidly spreading and drowning that of Russia in these parts of Persia, and being an important point to intending traders in these parts I feel bound to refute Mr. Foley's statement *in totum*, and wonder at his allowing such an unwarrantable error to occur, for he surely cannot have helped hearing the distinct hum (I can call it nothing else) of "*Ecce homo*!" in a large city of Persia when a certain man rides through it. Yes, a man held in high esteem by the people and fear by his opponents, and I can only think, Mr. Foley has fallen into the small error as Kipling's Wali Dad, and perhaps:—

> "He harked to a rumour, and snatched at a breath
> Of "this one knoweth" and "that one saith,"—
> Legends that ran from mouth to mouth
> Of a grey-coat coming and sack of the south.
> These have I also heard—they pass
> With each new spring and the winter grass."

PRODUCE, PLANTING, AND COMMERCIAL NOTES.

An advertisement which recently appeared in one of the papers shows that the commercialism of the age is by no means confined to the male sex, and that in the tea trade the weaker sex are deemed useful allies. "Pinmoney.—A well-known firm of tea growers are open to pay a remunerative commission to any lady who can influence the introduction and use of their teas among her friends. No risk, and every application treated in strict confidence. References permitted to ladies already acting for us. Apply in the first instance to——."

In their review of the coffee market, Messrs C. J. Leech & Co. say: "There is undoubtedly going to be a large expansion in the consumption of Brazil coffee this season, owing to the low prices. It is a remarkable fact that there has been absolutely no pressure from Brazil, and the planters have realised far better prices than they could have hoped for. In the speculative markets more animation has been observed than for many months past, the London market in particular having been very active with large buying orders to hand daily from influential quarters, giving rise to the idea that adverse news concerning the new or 1902-1903 crop had been received, but nothing really definite transpired. The weight of the present huge Rio and Santos production has no terrors, and the great question is the growing crop. Should the unfavourable advices concerning the latter become confirmed during the next few weeks, a further advance in values would seem likely, taking into consideration the present highly bullish sentiment. Since writing the foregoing Messrs. Naumann, Gepp & Co, Limited, inform us 'Our Santos firm cables prospects for next crop unfavourable'."

While Englishmen generally have been reminding themselves of the second anniversary of the war the West India Committee has been reminding the readers of its fortnightly circular of another anniversary—the fourth anniversary of the despatch to the West Indies of the Royal Commission to investigate the parlous state of

those Colonies. Each anniversary deals with an event of importance to Imperialism: the war is being waged for the strength and integrity of the Empire; the West Indian Royal Commission's appointment was a preliminary attempt to fulfil the Mother Country's obligations to a more loyal part of the Empire. But here, the *Financial News* points out, the parallel ends. The Imperial Government in the one case perseveres unflinchingly in its task, though that task is wearisome and hugely difficult, and attended with phenomenal sacrifices of blood and treasure. In the other case the Government abandoned its task in the preliminary stage, though the work might have been carried to a successful conclusion quickly and easily, and without the expenditure of any money or an ounce of blood. The task which the Government is still battling to accomplish has provoked an exhibition of world-wide hatred, of which we have not yet, perhaps, seen the end or the worst; the task which has been laid aside would only have provoked a professional and meaningless remonstrance, coupled with a real sentiment of congratulation upon our backbone. The performance of this task would have brought immediate prosperity to our oldest and most devoted Colonies; the carrying-out of the other task, necessary though it is, involves devastation and perhaps a long time of depression, preparatory to the resumption of the progress of Colonies in which half of the inhabitants detest us. Not only has our Government ceased to go forward with the easy task of procuring Imperial justice for the West Indian Colonies, but only this year it deliberately turned its back upon the obviously right course when a new chance offered in the reimposition for revenue purposes of the sugar duties. Nay, three years ago it also turned its back, and wantonly destroyed an opportunity of getting the sugar bounties abolished, by sending its representatives to the International Conference without power to sign the only kind of agreement which could be effectual; so bringing the otherwise promising labours of the Conference to naught. Upon the other side, all that the Government can claim is that it has given to the West Indies a few doles and subsidies (out of the overburdened British taxpayer's pocket) which are as powerless to restore the Colonies to prosperity as are alms to turn a pauper into a capitalist.

In his "Suggestions for British Traders with Turkey in Asia" our Vice-Consul at Adana incidentally draws a picture of the commercial conditions operating in that part of the world which almost prompts "Don't" as the best suggestion; for the commercial classes of Asia Minor seem to possess even less honesty than capital. Moreover, the British merchant, who invariably employs Levantine agents and German commercial travellers, loses his money and trade in seeking to gain business. The Levantine has ways of disposing of the former which do credit at least to his ingenuity; and the German traveller represents German as well as English houses, and works upon a patriotic basis. However, in these days of competition and closing markets we cannot afford to let even Asia Minor slip, and attention might well be bestowed upon Colonel Massy's suggestion of a central agency or inquiry office for English traders, to be established by an Association of them in Constantinople.

BUYING, HANDLING, AND SELLING COFFEES.

THE THIRD PRIZE ESSAY.

By R. H. HUDSON (Wahbunung), Toronto.

I am not asked to say anything in this article as to the history of the coffee bean, or as to the amount used in our own or foreign countries. Instead, as the preacher would say, my text has been given to me and I shall proceed with the subject on hand.

To my mind the buying, handling and selling of coffee, is the most important by far of all the duties of the grocer; and it must, of necessity, call for the greatest possible care and intelligent consideration on his part and the faithfulness of those associated with him in seconding his efforts to maintain a high standard. For no matter what care and wisdom have been manifested in buying, unless they are handled properly, the selling of them will eventually amount to but very little in building up and holding your trade.

THE MOST SUITABLE COFFEES.

In buying your coffees you must know what kinds suit our water; that is, what coffees are the best to use where you have hard water, and what kinds are best where the water is soft. The kinds which I believe to be most suitable here are Mocha, Java, Ceyl Maracaibo, Santos and Rio; and grocers, in Canada, at least, sho be very sparing indeed of any other kind. Two of the kinds m tioned should never be put in where finest quality is sought, delicate flavor departs when you sprinkle Rio or Santos in yo blend-, just in proportion to the extent in which you use them.

THREE GOOD BLENDS.

If your trade demands what mine has you need about th regular blends. The first should be a well-colored, strong flavored blend of about 10 parts Mocha, 4 parts Java, 2 pa Ceylon and 1 part Maracaibo. A second blend, very mild for th who delight to smack their lips and say, "There's the flavour would be of about 10 parts Java to 4 parts Mocha and 1 Maracaib while a third blend to please the cheap trade can be made of abo 4 parts Mocha or Ceylon, 4 parts Maracaibo and 3 Rio or Sant (Santos preferred).

But whatever blends you have keep them the same, and buy that you may be able to do so. You may as well attempt to fly to please your trade by giving one good blend this time, and different one next time, and so on. Give a poor blend, if you mu all the time, rather than a good one and a poor one alternately.

Seeing, then, it is so important to have a fixedness of flavor, y must necessarily obtain the same coffees and not go hunting fr Dan to Beersheba for something cheaper to palm off on your trad for when it comes to drinking coffee, the trade worth seeki demands the best and will pay for it. The proper way, no dou is to have a sample of your last purchase on hand and draw match; and never buy, or, at least, never have roasted more th a week's supply on hand at one time. Never mind that quarter a cent extra for roasting often, for the resulting benefit will exte into dollars.

BACON'S OPINION OF COFFEE.

The philosopher, Bacon, said of coffee: "This drink comforte the brain and heart and helpeth digestion." Fortunate for hi that he does not live in this day and be forced to drink some of t mixtures sold for coffee!

There is a reason for the large sale of package coffees whi give so little profit on a turn-over; and possibly you've guess it by what I have said. "There the same poor quality," do y say, "but they can always be relied on for one thing, namely, t same flavour as last time." And the demand for these packa goods is on the increase and will be still greater if you will n buy what will change your cereal, or chicory, or paste-drinki customers into substantial coffee customers; and your casual coff customers into well-pleased and delighted customers, who mu have your blends no matter where they move, so long as it within reach of you at all.

There is no food which gives the mental exhilaration a physical buoyancy which coffee gives: hence the importance purchasing with this high ideal in one's mind and not merely gratify a fancied whim on the part of your customers. Be firm your resolve to have the best procurable, and to always ha the best.

CARE IN HANDLING.

Then, there is the handling of coffees, so dependent on the bu ing and so fraught with important issues. For how true it is th the best coffee ever imported can be spoiled entirely by carele handling; handling by wholesalers or jobbers, and later by t retailer or his assistants! Grocers err mostly in some of the fo lowing ways: By exposing the bean in the store or window f show or advertisement, leaving it in the same store-room wi coal oil, or fruit, such as oranges, lemons, pineapples, etc., or veg tables, such as turnips, cabbage, and potatoes. You remember wh

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THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, oth have no effect, and none do good. Sugar and water, or a little glycerine, giv relief when the throat is inclined to be dry; this applies to persons whose thro are affected by the weather. About a third of a teaspoonful of Condy's Fluid a tumbler of water, if used as a gargle every morning, will clear the throat a brace up the uvula, which, in some singers, is so long that it interrupts the p emission of the voice, and introduces a grating undertone, while it also tends make a tremolo on the upper notes."—*The Idler*, February, 1900.

the proverbial preacher said: "Brethren, these things ought not so to be." And so we must lay all the emphasis possible upon the importance of keeping this delicate berry away from its grocery store associates: for nothing can improve the flavor of the bean, but dozens of fruits, vegetables, etc., can do untold harm.

Another thing I must mention is the

PACKING OF ORDERS,

a very important matter, and yet one which is relegated to the freshest boys in the store. A lady returned a pound of coffee a short time ago, complaining of a taste of sulphur about it, and the fact was revealed that it had been packed on the top of a box of matches which went in the same order. And I could give you similar instances, where good coffee had been rendered almost useless and the trade of the customer in question jeopardized. Be sure always to pack the tea and coffee away from anything and everything which could possibly affect it, and the best plan is to have a separate box, clean and dry as a bone, for teas and coffees, then it will run no risk of being packed in a fish box, a haddie or codfish box, for instance. I spoke about this not long ago to a delivery clerk and he replied, "Why, haddie boxes are the nicest delivery boxes we have!"

I have often thought how much I would like to take some of our grocers and clerks through some good coffee-milling establishment where they could see for themselves how very particular the operators are in their work of sorting, then cleaning and grading, then roasting of the berries. While the coffee is yet warm it is ground and packed in tin boxes, half-pound, one pound, and up to fifty pound tins, when it is labelled and taken to the wareroom ready for shipment, the whole manipulation, from beginning to finish, being a practical demonstration of the

NECESSITY OF CLEANLINESS

and the utter absence of all foreign flavors. It is not a question of what our mothers twenty years ago thought about coffee, or how the grocer around the corner used to handle his coffee, for likely he had only one scoop, and it had to do duty for pepper and tea, cloves and coffee, as well as salt, sago and snuff. This is a day when law and order should be recognized everywhere, and especially should we have the best going in our up-to-date stores. I would just as soon think of taking the peck measure or oyster ladle to fill up my coffee with as the scoops which are used by some grocers daily. No wonder your customers have been driven to the package goods, for they have seen some of your habits and they "beg to be excused," and so take the other fellow's brand, while you are out a nice little profit. Worst of all, you have by your carelessness forced them to use some brand which can be purhased anywhere else, and so they need not put themselves about to come to your store, when they can just send across to the little corner grocery. A customer lost through careless handling! Are our customers particular? Are they cranks? Let us praise them for it, and be even more particular, for it is right and will surely pay.

And so the proper handling means the easier selling, for after all

SELLING IS THE GOAL.

We buy and handle to sell. We read and think what and where to buy and how to handle that we may sell the goods. And how pleasant and comparatively easy it is to sell what we have confidence in ourselves; what we know comes up to our ideal of what is possible in coffee blending.

If there is one kind of an individual for whom I have no respect, it is that storekeeper who prates about relatives, friends, weather, the latest in novels or shows; but when he is asked about coffee is as dumb as an oyster. What is the matter? Why, his heart is in these things and not in his business; and the day seems so long, and dinner time or supper hour so tardy in coming, because he doesn't enjoy his work, and he is not trying to do his best. Know how to prepare coffee yourself and you will be able to speak from experience.

When the boys came home from South Africa how we endeavoured to get near them to talk with them! Why? Because of their experience, thrilling and interesting as it was! And their words burned themselves on our memory, and we said: "What splendid fellows!"

And if we wish to impress our opinions upon our customers, we must

SPEAK WITH AUTHORITY,

though humbly and kindly, and be able promptly to give a reason why we recommend any special blend of coffee, so that if Miss A. wishes a nice, mild drink, we shall explain the character of our No. 2 blend, and if Mrs. B. wants a good, strong drink, our No. 1 blend will just suit, and so on. Take your customers into your confidence, and explain the proper mode of preparing for use; for really very few people know how, but will follow your advice gladly.

Sell your customers your best. Rather sell half a pound of good than a pound of cheap coffee, and it will pay you to do so. Few are attracted by low prices. It is quality that draws, and quality that retains.

Demonstrate your best blends occasionally. Serve with dainty cups and saucers.

Advertise judiciously. Let the people know that you are stil alive and in the old stand.

Be good-natured, courteous, attentive, and keep your blends always up to the standard and enclosed in well-fitting tins, arranged in sight of your customers.

SHADE FOR COFFEE.

The Central African Times states that the Head of the Administration Scientific Department has been visiting estates from time to time and has published in the *Gazette* his opinions on what he saw. Our contemporary adds:—We are glad to see the Scientific Department evincing such a practical interest in planting matters, and hope that the system will be continued and extended. There is, however, one little suggestion we would make by the way, and that is that the notes should not be published under the heading of each estate without the express consent of the Proprietor or Manager. It is obvious that no Proprietor or Manager likes to have his methods cut to pieces or his shortcomings exposed to the public gaze, while in the case of commendations the article is too apt to form a free advertisement. Equal good would result by merely stating the district, except in any special circumstances, while invidious distinctions would be avoided.

It is pleasing to note that the Head of the Scientific Department is not at all despondent about Coffee and we quite agree with him there. We are also pleased to see that he puts his finger on the chief cause of past failures, *viz.*, want of Labour. While agreeing with most of the opinions expressed we would however draw attention to his dictum on shade. Mr. McClounie quotes a former statement of his, written in 1898, in which he says:—"It is not consistent with reason that any shrub such as Coffee can derive any benefit from another tree growing in close proximity, requiring as much and more nourishment as the plant from which is expected marketable produce." To this he now adds "Unfortunately the above remark has been proved to be too true."

This is exactly where we join issue with Mr. McClounie. We have advocated shade since 1895 but owing to the exigencies of the Coffee Leaf Disease Regulations we have been forced to limit ourselves to three imported trees, all of which may be said to have been proved failures. Had Mr. McClounie said that Albizzia Moluccana, Grevillea Robusta and Pithecolobium Saman had all been proved unsuitable as shade we would have agreed with him. That these trees have proved unsuitable does not necessarily mean that shade trees are a failure. Can Mr. McClounie point to any estate which is under proper shade and which has proved a failure? Undoubtedly he cannot because at present we are prohibited from importing proper shade trees and have had to experiment with the three above named and indigenous trees. In another case he refers to the native ficus and concludes that they appear "to exert no influence on the coffee under them whatever." He then goes on to instance the case of some of the coffee under the shade of these trees carrying as heavy a crop as that in the open, while in other instances there is no crop. Naturally this is so. We can point to unshaded coffee where some trees are bearing heavily and others are not but what does that argue. Merely that in the case of the unproductive bushes there is a want of some essential, such as plant food, or that it is suffering from some enemy or disease, while the bearing coffee is not. The fact that some of the coffee under the native figs is bearing heavily on the other hand argues that coffee can be got to flourish and to bear crops under shade and therefore disproves his quoted statement. Mr. McClounie's statement however contradicts the whole present practice of the Coffee-growing districts of India where

Coffee is grown successfully only under shade. Perhaps in a year or two, when we have found the most suitable trees for shading our Coffee, Mr. McClounie will change his opinion and we hope that it may be so and that this matter of shade will be solved at an early date.

Shade, we repeat, is necessary at low elevations to keep down the ravages of borer, which, as Mr. McClounie admits, do a vast amount of harm. Shade lessens the work of weeding, lessens the pruning operations, and also lessens crops but compensates for that by prolonging the life of the tree and making crops more regular and certain. The only way in which it adds to the work is in the manuring and where good shade is established it will usually be found that liberal manuring is the only thing necessary in order to produce regular crops. The shade tree ought to find its nourishment far below coffee feeding grounds. It brings this nourishment from the lower levels and by means of its cast leaves adds it to the surface mould so that it is to some extent a direct feeder to the Coffee. We can profit by the experience of Coorg which at first grew coffee without shade The result was total failure. Shade was introduced and a flourishing Coffee industry was established. Let us hope it will be so here and that the Administration will relax the Regulations against the introduction of seed from India so that proved shade trees from the Coffee districts may be obtained.

REGULATING THE SUPPLIES OF TEA.

We are glad to learn that steps are being taken to prevent undue pressure in the offerings of tea for sale this season. In view of the marked shrinkage of the exports to the United Kingdom, and considering the reduced crop indicated by the latest telegram from India, preventive measures are necessary, so that only manageable quantities of tea are placed on the market. The Indian Tea Association, at their meeting this week, resolved to resume the regulation of sales until January 31, 1902, and a circular has been issued to all tea companies and proprietors acquainting them with the facts and urging them to co-operate for the mutual interest of all concerned.

The Chairman of the Brokers' Association has been informed of the decision arrived at by the Committee, and it is hoped that the Ceylon Tea Association will see their way to come into line and adopt a similar course of action.

It is hardly possible to exaggerate the advantages to be gained by united action in this matter.

The following is the circular referred to:—

INDIAN TEA ASSOCIATION (LONDON).

14, St. Mary Axe, E.C.,
October 15, 1901

Dear Sir,

Regulation of Sales.

At a meeting of the Committee of the Indian Tea Association held yesterday, the figures telegraphed from Calcutta of the amount of crop made to the end of September .... were considered. These go to show that there will be a heavy deficiency in yield for this season from India, while the Ceylon crops also are short.

But, owing to the greatly improved means of communication in India, teas have been reaching London much more rapidly than they did in past years, and in the absence of any organised system of feeding the market, large quantities have been thrown on to it lately to the great detriment of prices.

The Committee were therefore unanimously of opinion that prompt steps should be taken to regulate the supplies offered for sale in order to give confidence to buyers, to steady the market, and to prevent any unnecessary fall in prices.

I am therefore instructed to inform you that a resolution was come to to resume the regulation of sales until the end of January next on the lines of the regulation of 1893-9.

Will you therefore be good enough to instruct your brokers every Wednesday what amount of tea you wish to sell during the week commencing the following Monday week, *i.e.*, ten days before the earliest sale date, with instructions to forward the same to the regulating Committee.

I remain, yours faithfully,
Ernest Tye,
Secretary.

LECTURE ON TEA BLIGHTS.

At a general meeting of the Ambegamuwa Planters' Asso ciation on the 29th ultimo Mr. Carruthers gave the followin interesting lecture :—

Coming to Ambegamuwa to talk about the diseases of tea i somewhat like taking coals to Newcastle, as your Chairman ha observed so carefully and knows so well the nature and effects o your common blights. Still, if you are already interested in ther by means of Mr. Collett, you may be more willing to hear what have to say.

We may for practical purposes group the diseases which tea an other cultivated plants are subject to as environmental and specifi Environmental are those diseases which are due to physical cond tions injurious to the vigorous growth of the plant such as drough excess of water at the roots, continuous and powerful win absence of nutritive substances in the soil, etc.; these are evi which the planter knows well and he knows the way to cure th plant suffering from a disease of this order—remove the condition if possible and the plant recovers if it is not too late. Whi mentioning this I may say that it would be an advantage if th planter would make himself acquainted with the usual symptom in the leaf of some of these environmental diseases. If he can d it no other way, let him select a bush of no great value, somewher that he can conveniently examine each day, and damage the root by severely cutting them, so as to imitate to some extent th physiological effects of drought. He will then have an objec lesson of a tea bush suffering from an environmental disease— disease which he is able himself to deal with quite as well as, i not better than, a plant pathologist. I have frequently sent to m specimens of tea leaves, and the leaves of other cultivated plants which are merely discoloured and partially dead from the effect of drought or "wet feet." It is not always easy to say without microscopical examination if this is so; but in many cases a acquaintance with the effects caused by drought, wind, etc., woul lead to the planter being himself able to remedy the evil.

The other class—the specific diseases—are more common, perhap and more difficult to remedy or cure. They are diseases due to th attacks of a foreign organism on the plant—an insect, fungus o bacterium. It is the duty of all to endeavour by observation an experiment to get all the knowledge possible of these enemies, s that we may be able to war intelligently against them and reduc the loss to the tea bush. It is important to remember that thoug the fungus or bacterium is called the "cause" of the disease yet i is only one of the causes, strictly speaking. Such diseases are th effect of a number of factors working together. In the case of lea diseases on tea we can see what conditions in addition to th presence of the spores of fungi are needful. We have in tea i Ceylon some specific leaf diseases, of which grey blight (*Pestalozzi Guepini*) is the most widely distributed and best known; and as i is known so well a great many leaves which are dying owing t environmental diseases, and other specific diseases not grey bligh are attributed to it. Grey blight is due to the presence of th growing mycelium of *Pestalozzia* in the leaf tissues, but the attac of blight in any spot on the leaf cannot take place unless when th spore lights on the under-surface of the leaf, when there is moistur in the atmosphere to allow it to germinate. Here, in Ambagamuw you have exceptionally favourable conditions for the germinatio of spores of fungi. Your days in which there is a moist atmospher sufficient for spores to germinate are in a tremendous proportion t your anti-fungus growing days, *i.e.*, with dry atmosphere. Th spore of the grey blight lights on the under-surface of the leaf- .....—and in a moist air—a very damp atmosphere is no needed. I have grown the spores of grey blight on dry glass plate in the evening and early morning of an average day at Peradeniy when the air was not either by the wet and dry bulb thermomete or to one's own senses damper than usual. The spore grows along th surface of the leaf until it reaches a breathing hole or stoma in th leaf, of which there are large quantities on the under-surface of th tea or other leaves. When it reaches one of these holes, it turn in and grows in the spaces between the cells of the leaf. After

Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant t appointment of "Purveyors to Her Majesty The Queen and Empre of India" from the year 1837 until the time of her death, have no had the honour of being appointed by Royal Warrant "Purveyors The King."

as grown for some time in these spaces, it penetrates the cells nd kills them successively. The time taken to kill any definite rea of tissue in a leaf varies with the condition of the leaf, the noisture of the air, and other factors. In some experiments of tea eaves I found that a discoloured patch about the size of a ten-cent iece was produced some time after the spore had been sown on he leaf. In one case a visible patch of this size was caused in 12 ays, in another 19, and in a third in 24 days. It is important to eep in mind that the time of the visible signs of disease is not he same as the time of the outbreak of the disease or rather the rigin. Planters frequently say of tea diseases as well as others a sudden outbreak—I know exactly when it occurred;" but it nust be remembered that the time responsible for the evil may ave been 12, 19, 24, or even more days previously. The mycelium f the fungus is present in the leaf long before the discolouration s perceptible. In fact, there is, no doubt, in some of the flush icked and taken to the factory, some mycelium of the fungus, so hat, if these leaves had been left, in a few days the disease would ave been noticeable.

The methods of cultivation of tea are, most fortunately, the nost excellent means of combating leaf diseases. The grey blight n nearly all cases is confined to the leaf tissues, not spreading to he leaf stalk, but I have, in a few cases, found this not to be the ase, and I have received specimens from three different districts n which the fungus has spread to, and partially killed, the leaf talk and the young wood of the bush. This should be looked out or by all planters carefully, and directly it is observed the bush hould be pruned back below the discoloured leaf stalks and young ranches. If the grey blight began to invade the permanent por- ions of the tea bush, it would prove a much more serious enemy han it is at present.

After the grey blight mycelium has grown for some time and roduced a fairly large discoloured patch, spores are produced, and hese, becoming detached, float about in the air and are carried by the wind to other tea, and the same process goes on again.

A most interesting instance of the nature of the wind distribution of spores is to be seen quite near to this place. There is a belt of jungle along the crest of a hill about 30 yards wide and a road cut through the trees. The tea on the far side of the jungle was blighted fairly badly, but the tea on the near side—the leeward—was only blighted just at the place where the wind blew through the gap in the jungle, a clear case of wind-borne spores and a most instructive one.

With regard to the measures to be taken to reduce or avoid the evils caused by grey blight, our knowledge of the life history of of this (though this is not yet complete) shows us the direction in which success is most likely to be gained. The destruction of as many diseased leaves as possible removes an immense quantity of spores Burning is the only effective means of destruction. Unfortunately, men who had taken trouble and spent money in removing their blighted tea leaves, were discouraged when the effects were not so markedly beneficial as they hoped. This would always be so while only one man here and there went in for preventive measures: universal co-operation in such sanitary means was essential to a complete success.

The study of the factors which are needed for an outbreak of grey blight is of importance, and it is a matter for surprise that after an abnormal prevalence of this disease in 1898, followed by two years of rather exceptionally favourable weather for the spread of fungi, the quantity of grey blight is less than before. What factor is missing is not known. It is probable that the distribution of spores by the wind has been in some way favourable—perhaps a larger quantity are being carried away from the areas of tea cultivation than at other times.

The other diseases of the leaf in tea common in Ceylon are *Colletotrichum camelliæ* and *Cladosporium herbarum*. The former was observed in 1897, and sent home to a mycologist, Mr. Massee, at Kew, and named. I had not seen it on any tea in Ceylon until some months ago I got it from the same estate as it was got from before, so that in the four years intervening it has not spread, and therefore need not be considered as a serious danger. *Cladosporium* is also comparatively rare.

Turning to root diseases, for I am thankful to say we have no stem diseases, there is a disease which must be watched for, and guarded against, as carefully as possible. It is known to science as *Rossellinia radiciperda*, and is characterised by a white thread-like mycelium which can easily be seen with the naked eye. The majority of fungi are either saprophytic, *i.e.*, living on dead and decaying substances, or parasitic, *i.e.*, preying on living animals or plants; but in this case of *Rossellinia* the fungus starts as a saprophyte on any dead timber, roots especially, and spreads to the living roots of tea and other plants. The white threads of mycelium can stretch out 7-10 inches from the dead root on which they are growing until they reach the young and tender rootlets of the growing tea bush Those roots of jungle trees, like *Simplocos*, which are soft and spongy in tissue, afford the best home for the fungus and enable it to spread more luxuriantly. In connection with this I have been working for some little time lately upon a disease of *Grevilleas* which may be due to the ravages of this same root disease. I have not yet discovered whether the root disease (*Rossellinia*) is the cause of the death of the grevilleas, or whether it comes on the dead roots of that tree after the tree is killed. I am experimenting by infecting the roots of a grevillea tree with the fungus to see if it is capable of killing the tree. However, it is important for every planter to recognise that the grevillea roots may be the harbourers of this dangerous disease, and when they have a tree dying or dead to use preventive means. The best preventive means for this and other root diseased is to isolate the diseased tree or trees by means of a trench one foot wide, and at least two feet deep, over which the mycelium of the fungus cannot stretch—in addition lime should be put into the affected patch and all diseased roots should be taken out and burnt. If this is not done the roots of supplies will contract the disease; sometimes three or four supplies dying in the same way and from the same cause. Buried prunings also, where this root disease existed, are a source of danger, as the fungus could start there on a piece of buried prunings not thicker than a pencil. In affected spots it is best not to bury prunings at all, and in places where, from damp or adjacency to infected places, danger is feared, lime should be freely used with the prunings. Damp and undrained spots were the most likely to be the starting points of this evil, and the cutting of the isolating trenches wound tend to reduce this condition.

At the close of Mr. Carruthers's lecture, which was illustrated by diagrams, and was listened to with great attention, the Chairman said that Mr. Carruthers had intimated that he would be glad to discuss any points in detail, and would be willing to answer any questions put to him by those present.

Mr. Nelson asked whether the root disease just referred to caused the death of plants in young clearings.

Mr. Carruthers said that no doubt *Rossellinia* was the cause.

Mr. Horn mentioned a case of some plants which were killed by being planted near a poisonous tree, and

Mr. Carruthers said that decaying trees often became poisonous because of the presence of *Rossellinia* in them.

Mr. Shand asked if the tree *Simplocos* was generally harmful to tea.

Mr. Carruthers pointed out that all dead roots of trees are harmful when *Rossellinia* commences to grow upon them, and they are a favourable starting point for it. Roots which are spongy like *Simplocos* are the best home for the fungus causing the root disease.

After a few more questions, chiefly relating to root disease, had been answered by Mr. Carruthers, the Chairman rose and said:—

"I am sure we all feel grateful to Mr. Carruthers for the trouble he has taken to come here and lecture to us to-day. Now that the Scientific Department at Peradeniya is fully organized and equipped, we may, I hope, look forward to the pleasure of receiving more frequent visits and lectures in the future. Mr. Carruthers, when speaking of grey blight, referred to a question of special interest, —*viz.*, the unknown cause of its remarkable disappearance from most of our fields since the great outbreak of 1898. This is a matter which has exercised my mind for some time, and I am inclined to think—perhaps Mr. Carruthers will correct me if I am wrong—that it is one which is more intimately connected with the condition of our labour supply than has been generally supposed. Let me explain. There is, as you know, a condition into which tea falls, after it has run through its flushing season and awaits pruning, which may be described as one of *inertia*, or stagnation. In my observation, it is while in this state of reduced vitality that tea becomes specially susceptible to attacks of disease. You may remember that when addressing you on the subject of tea diseases some time ago, I ventured to suggest that more frequent pruning would probably tend to keep the grey and brown blights of tea in check. Now I cannot help thinking that the comparative immunity from

these scourges which we have enjoyed during the past two seasons has been in great measure due to a plentiful supply of cooly labour, which has enabled us to carry out the timely pruning of our fields while they were still in good heart. Probably other factors have also been at work, but they have not yet been identified. What we want are observations—and at present there is great lack of them. Yet they are easily made, and it surely forms part of our business as cultivators to study as closely as we can the habits and wants of our plants, in health as well in disease. Gentlemen, I ask you to pass a hearty vote of thanks to Mr. Carruthers for his very interesting lecture."

Mr. Carruthers, in replying to the vote of thanks, said: "It has given me great pleasure to come here to-day; to have obtained information, and—I hope—to have given some. I should like to say how glad I am to see your Chairman in his place again. It is a good thing that local Planters' Associations, like that of Ambegamuwa, have Chairman who, by observation and experiment, add to our knowledge.

THE CEYLON PLANTERS' RUBBER SYNDICATE, LIMITED.

THE FIRST GENERAL MEETING OF SHAREHOLDERS.

The first general meeting of the shareholders of the Ceylon Planters' Rubber Syndicate, Limited, was held at Colombo on the 31st ultimo.

On the proposal of Mr. Harrison and seconded by Mr. C. A. Ferguson Mr. A. M. Forbes was elected Chairman.

The notice convening the meeting having been read

THE REPORT OF THE DIRECTORS

with the accounts to the end of August, 1901, audited by Mr. W. H. Graham, were submitted and accepted by the meeting. The report was as follows:—

Acreage.—The acreage of the Syndicate's property is as follows:—Opened land, 615 acres; reserve, 269 acres; total 884 acres. At 31st August, 1901, 615 acres had been felled, of which:—480 acres were lined 12 in. by 12 in.; 350 acres were holed, 12 in. by 12 in., 310 acres were filled in, 12 in. by 12 in., and 300 acres were planted, 12 in. by 12 in.

The manager expected to have 350 to 370 acres planted by the 30th September, and the remainder by the end of the year, the plants not yet being large enough to put out. Thus the whole 615 acres should be planted in 18 months instead of 2 years, as estimated in the prospectus. Most of the land is given out to Chinese to weed in return for being allowed to plant vegetables. The amount expended on the property to the end of August was Rs.82,993·82; Coast advances outstanding $1,910·34 say Rs.2,865·51. These are recoverable. Estimated expenditure September-December $9,157·84, Rs.13,736·76; this does not include Ceylon expenses. As will be seen from the above figures, the funds in hand will not suffice to carry on the working of the estate until next July, when the last call is due. The Directors therefore think it advisable call up the 20 per cent. still unpaid, early in 1902 instead of July, of which formal notice will be given. As the 31st of Aug is an inconvenient date for closing the accounts, the Direct purpose to call a general meeting early in 1902, to receive accounts made up to the end of December, 1901. The pres meeting is called to conform with the ordinance. The shareholc will have to appoint Directors, Secretary, and Auditor, the pres office-bearers having only been appointed until the 1st ordin general meeting could be called. Mr. Carey, a well-known Str Planter, has been asked to give a report on the property.

ELECTION OF OFFICE-BEARERS.

Messrs. Halliley, Hamilton and Wilson-Wood having left island, Messrs. Harrison and Dunsmure were during the y appointed as Directors in their place, under clause 91 of the Artic of Association. As all office-bearers were only appointed till first ordinary general meeting, it was proposed by Mr. A. Forbes and seconded by Mr. C. A. Ferguson:—"That Mes Harrison, Dunsmure, and Clements be elected Directors; Harrison, Secretary; and Mr. W. H. Graham, auditor, at a fee Rs.25 for each audit." Agreed.

A CALL ON THE SHAREHOLDERS.

It was proposed by the Chairman, and seconded by Mr. H. Harrison:—"That, in view of a much larger acreage having b taken in hand than was at first proposed, and the funds in ha not being sufficient to carry on the working of the estate u next July, the Secretary be requested to ask the shareholders they will consent to pay half the amount of the remaining call c 1st July, 1902, on or before the 1st March, 1902."

A vote of thanks to the Chair brought the meeting to a close.

WHICH IS THE CHEAPEST?

Which is the cheapest beverage, coffee or tea? According the correspondent of an American contemporary, who takes a v rosy view of the question of the consumption of tea, coffee literally "not in it" with tea, so far as cheapness is concern but there is certainly not the wide difference between them t the aforementioned authority would have the trade believe.

We quote his estimate, as follows:—

"The cost of tea yearly to each family is a mere bagatelle. Co is more expensive. There is contained in one pound of tea cups—at 40c. per pound, seven cups for one cent. In one pound coffee thirty-two cups; it requires eight and one-half pounds coffee to equal one pound of tea. Coffee at 20c. per pound wo cost $1·70. Calculations are in order. Consumers are ignorant these facts. No beverage is so nutritious, so healthy, so cheap whatever the cost."

The best authorities credit coffee with a potency of two-gall of beverage to the pound, and tea with a potency of six gallons the pound. Calculating that the ordinary cup holds half a pint beverage these figures would give us 32 cups to the pound of co

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

CROSSE & BLACKWELL'S, LTD.

By Special Warrant Purveyors to His Majesty The King.

CELEBRATED OILMAN'S STORES.

[w. 1-10-98—t.f.o.]

and 96 cups to the pound of tea. No doubt a good many people get more than 96 half-pints of beverage from each pound of tea they use, but, on the other hand, the average consumer of coffee obtains more than two gallons or 32 cups from each pound of the aromatic berry, many people using chicory to eke out the coffee and give it the body which cannot be otherwise obtained save by a generous use of the coffee berry. Consequently any shortage in the estimate of six gallons or 96 cups of beverage to a pound of tea would be offset by an equal deficiency in the estimate of two gallons or 32 cups of beverage to a pound of coffee.

Now, as to the average cost of tea and coffee to the consumer The above-mentioned correspondent does not err much if at all in estimating the average price of coffee at 20c. a pound, but 40c. is a little low as an estimate of the price of tea. Fifty cents would be nearer the mark, at least since the duty was laid upon the article. Say, then, that coffee costs 20c. and tea 50c. a pound. With tea furnishing only three times the quantity of beverage that coffee furnishes, the consumer of coffee, in order to get 96 cups of beverage, must pay 60c., just 10c., more than the consumer of tea pays for his 96 cups. Whether he obtains 10c. extra in gratification, the pleasure of the palate, which only a well-made rich cup of aromatic coffee can give, depends upon what sort of coffee he buys and how it is made.

It may be urged against the lower estimate (96 cups) of the number of cups in a pound of tea that the average tea cup holds less than the average coffee cup, and that therefore more cups should be counted to the pound of tea than we have given; but it is obvious that it is not fair to calculate in so one-sided a way. The same measure of quantity must be used with each article, if the estimate of the relative cost of tea and coffee is to be worth the paper it is written on. This being so there is no apparent reason why the 10c. difference should not be accepted instead of the grossly exaggerated difference which the aforesaid correspondent arrives at.—N. Y. *Merchants' Review.*

THE AUSTRALIAN TEA DUTY.

MEETING OF MELBOURNE IMPORTERS.

THE AD VALOREM METHOD CONDEMNED.

An Australian paper records the following :—

A meeting of tea imports, brokers, and distributors was held at Messrs. Fraser & Co.'s rooms, Marketstreet, Melbourne, to discuss the proposed duties of 2d. and 3d. a pound and 20 per cent. *ad valorem* on teas. Mr. Charles King (Messrs. Henty & Co.) presided, and the attendance numbered about fifty. The chairman explained that the meeting had nothing to do with either free trade or protection. There was no desire to even suggest the amount of duty that ought to be imposed, but there was a strong feeling in the trade that the attempt to collect an *ad valorem* duty on tea would prove costly and clumsy, and probably unworkable. It would, moreover, be injurious to buyers, as the duty would have to be paid on invoice values at ports of shipment whether the teas sold at cost or at loss. The effect would be to increase importers' losses, and to make it impossible to fix prices for teas, pure or blended, re-shipped to ports outside the Commonwealth. The Government had had a difficult task in framing the first tariff, and he was sure Mr. Kingston would be ready to listen to any statement on behalf of the trade. The proposed 20 per cent. only meant a farthing per lb. on average values, but it would entail such cost and confusion, besides exposing confidential business, that they would prefer to pay a higher fixed duty.

Messrs. Albert Harvey, Shelley (Griffiths Bros.), C. Crespin, T. D. Edwards, W. Harper, M. Mitchell, R. G. Wilson, and Thompson also addressed the meeting, and pointed out the peculiar difficulty of applying an *ad valorem* duty to a variable commodity such as tea. It was ultimately decided to ask Mr. R. Harper, M. H. R. to introduce a deputation to the Minister of Customs on the subject and a deputation was appointed to lay the views of the trade before the Minister.

During the meeting the Chairman read a telegram from Sydney, stating that a similar meeting, with a similar object, was being held in that city.

THE PUBLIC TO PUT UP WITH AN INFERIOR TEA.

"The tea trade," said Mr. Charles King, principal of the importing firm of Henty & Co., in conversation last Friday with a representative of the *Melbourne Age*, "is but little understood, and if I spoke to you all night I doubt very much if you would leave me any wiser than before. That, of course, refers to the trade as a whole, and the many technicalities that are involved. You ask me what the effect of the new tariff will be. It is simply this—the public will have an inferior tea. Under the Victorian tariff, we and all the trade knew what duty we had to pay, but under the new tariff we do not. A fixed duty as in the past enabled us to buy and regulate our prices according to the quality of the tea. Under the new conditions we can't do that, simply because it is a matter of impossibility for any man to grade an article without testing it. The trade want a fixed duty—what that duty should be we are perfectly willing to leave to the Government."

BRINGING THE TEA TRADE IN SORROW TO THE GRAVE.

The following comment on the same subject gives the experience of the first three days of the tariff :—

The composite duty of 2d. per lb. and 20 per cent. *ad valorem* on tea has been in operation three whole days, and in that short period has nearly carried the whole tea trade in sorrow to the grave. There are many and varied objections to such an impost, the chief of which are that tea is sold in bond, the buyer paying the duty. He has no original invoice to produce. If he prevailed on the seller to produce one, it would disclose the importing profit! Again, tea is mostly sold at public auction. A buyer might purchase a tea at 7d. in bond, and when the original invoice was produced, the actual cost might turn out to be anything from 5d to 8d. The duty he would have to pay would be incalculable! The tea traders are strongly adverse to the new duty, and intend to do all in their power to secure an alteration. The Committee appointed at the recent meeting of the tea trade, after deliberation has prepared a statement of the various reasons which have guided the trade in arriving at the unanimous conclusion that the *ad valorem* duties will prove unworkable, and this statement will be presented to Sir G. Turner next week, through Mr. R. Harper, M.P.

THE TARIFF AND THE TEA TRADE IN SYDNEY.

AN IMPORTER'S VIEWS.

A well-known importer in Margaret-street yesterday expressed to a *Herald* representative several objections to the tariff as it would apply to the importation of tea. He pointed out that the proposed duty was 2d per lb. in the bulk, and if packed in small parcels an additional differential duty, according to the size of the packet. Strong exception was taken to the latter clause, which, he asserted, would deprive the public of securing their tea in the most popular form, while it would yield nothing to the Federal Government. He traced the history of the tea trade for the past 15 years, during which time the bulk of the Australian trade was transferred from China and India to Ceylon. In 1880 Ceylon produced no tea worth mentioning, whilst at the present day, out of a total of 25,000,000 lbs. imported annually into Australasia no less than 18,000,000 lbs. came from that island. Of very recent years there had been an increasing popularity among the public for pure Ceylon tea made up in small packets of lead. This tea is chiefly packed at Ceylon, where the favourable climate enables the fresh supply to be kept up during the whole of the year. Tea packed locally is mostly put up in tins or paper packets. It is maintained that the tins absorb the taste, and injuriously affect the quality of the tea, while that placed in paper packets rapidly loses its freshness and flavour. If the object of the Government in taxing the packets was to raise revenue, it would meet with failure, for the reason that the duty was prohibitive, and the trade in that line would cease. On the other hand, if protection to local labour was aimed at the game was insignificant, as the packing was but a small matter, and was accomplished chiefly by boys and girls. In any case, the public were being deprived of a most popular article. Astonishment was expressed that tea should be singled out specially for a duty in that form, while other commodities were allowed to come in in the smaller packets without extra duty being levied.

SPIRITS AND TEA.

Mr. T. G. Kenny, acting manager for the Civil Service Co-operative Society, when asked his views on the tariff, said frankly that he would not express any opinion as to whether it was too high or too low, but he fully believed that the proposals brought forward by the Federal Government would raise the revenue that was required. The duties on spirits had been altered, inasmuch that spirits in

bottle imported under the new tariff would be required to pay an additional duty. In regard to whisky, the increase would amount to about 4s 6d per two-gallon case, brandy 3s per two-gallon case, and gin 9s per four-gallon case. This seemed to mean that at present the duties would entirely shut out the trade for whiskies and brandies imported in bottle, and the consumer would purchase certain brands which are imported in bulk and "bottled upon the premises," for the reason that on the spirits imported in bulk which are generally "proof" or "over proof" no alteration has been made in the rates. Mr. Kenny said the idea of the Government might be to provide additional labour in the way of bottling these lines of goods in bond, as, he believed, had been done in Victoria, but he thought the importers of known brands were sure to make arrangements for the future for bottling to be done here, so as to avoid the increased duty now levelled against them. In his view a specific duty upon tea would be preferable to the proposed system, whereby both specific and *ad valorem* duties were imposed. The imposition of both duties would not, he thought, bring about the importation of higher grade leaf. It seemed to him that the importers might possibly adopt the system of keeping down the *ad valorem* duties as low as possible, which would bring about the importation of low-priced teas. Mr. Kenny added that it was to be hoped that a specific duty on tea of, say, 4d per lb. would be imposed, and that the *ad valorem* duties would be abolished, but he admitted that the Federal Government's device was an ingenious attempt to get at the consumer of the higher-priced article. —*Sydney Herald*, Oct. 12th.

BRAZILIAN COFFEE NOT WANTED.

SAN JUAN OF PORTO RICO, *Aug.* 10.—The merchants of San Juan are alarmed concerning the importation of Brazilian coffee, which has been made possible by the removal of the tariff. Yesterday the steamer *Ponce* brought two consignments of coffee, one of 120 bags and the other of 113 bags. This coffee can be sold here at about one-half the price of the Porto Rican product, thus destroying the market for the latter. The merchants of Manita met to-day and resolved not to trade with the importers of coffee from Brazil, and meetings were held in other towns. Governor Hunt has consented to ask Washington for relief by the enactment of a measure declaring that the proclamation does not refer to the special duty of five-cents on coffee, as per section 1, but only to section 3.

The importers of the coffee arriving to-day, fearing public feeling, announced that the coffee received would be shipped back again by the next vessel, the newspapers having demanded that a boycott be instituted against the dealers on patriotic grounds until Congress can act, considering a favourable construction of the law to be impossible.—New York *Journal of Commerce.*

COFFEE AND COTTON COMPARED.

The New Orlean *Times Democrat*, of July 18th, after presenting a table of coffee supplies and prices since 1883, says:—"In the light of this information, the disease is not difficult of diagnosis. The very high level of value coincident with the years 1893—96 (both inclusive) brought about the over-production which has been the planter's undoing. Coffee is not an annual plant like cotton, but is a tree which bears through several successive seasons. A heart-breaking collapse of prices is, therefore, bereft of immediate influence on the area under cultivation. *Per cohtra*, brighter prospects for the industry do not make themselves instantly felt, because several years are needed to bring new trees to the productive age.

"In a general way, the position of coffee is similar to the status of cotton, in the days when every price on the New Orleans boards began with the figure 5. The crisis has been accentuated by events in the financial world. The Rothschilds hold great blocks of Brazil's obligations, and have, in self-defence, set to work to lift the rate of exchange, as between milréis and sterling. The efforts of the great bankers have succeeded so well that the Brazilian planter now receives less per pound in his own currency than he did in the historic depression of 1899.

"In the very nature of things, there can be but one end to conditions that spell out ruin for many millions of people. Nature works on the law of average, and one may, therefore, safely inf that an under-production will come in its turn. Coffee is still article of universal use, but has pratically ceased to be an arti of value. It has, indeed, been seriously proposed in Brazil that fixed percentage of the present monster crop be burned, so th living prices might be had for the remainder. Human natu being what it is, no such palliative is within the bounds of t possible. Every man would be willing to help to burn his neig bour's crop, provided his own were spared.

"It is at such junctures that the speculator performs his legi mate function, by carrying the destructive surplus against the r current seasons of scarcity. Old Stephen Girard declared that had made his fortune by buying what nobody wanted and selli what everybody wanted. The plan has lost none of its effectivene with the lapse of time. Fortunes were amassed by far-seeing oper tors who bought cotton when it went begging, and calmly awaite their opportunity. Such a method of procedure requires mu more nerve and patience than the average man can ever hope possess. The vast majority of speculators prefer to sell what nobo wants and buy what everybody wants Hence the tears that a secretly shed on the international exchanges from year to yea The buyer of coffee may be sure that many a bad quarter of hour lies before him, for the gloom will deepen as the price go down. It is, assuredly, no game for weaklings, and even the gian may grow weary of the work. This is only another way of sayin that, in the markets as in the more prosaic avocations, the labour is worthy of his hire."

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange, *September 14th*, 1901.—Ninety days' Bank rate London opened on Monday, 9th instant at $10\frac{17}{32}$d. and closed th evening at $10\frac{27}{32}$d.

Since our article on the subject in July the situation has unde gone a profound modification. The failure of speculators to deliv the bills for which they had engaged in July last obliged son brokers to come to arrangements with the Banks for payment differences by instalments, whilst others broke down altogethe Consequently liquidation of the Bank's overdrafts was likewi postponed and, as soon as this pressure was withdrawn from th market, rates reacted and rose almost at once to 10d. and, unfettere by troublesome liquidations now show an unmistakable tendency rise. The improvement of Exchange in its turn reacted on foreig quotations of coffee so that in spite of enormous entries and stock gold prices did not give way so much as they otherwise must, an fell since 1st July only 11%, from $5\frac{5}{8}$c to 5c, whilst currency pric were maintained at about 7$000 per *arroba.*

In this way the terrible menace of simultaneous fall of Exchang and gold coffee prices, that seemed imminent, was averted and th *degringolade* practically saved the situation.

The value of coffee shipments (embarques) here and at Sant during the past week was £512,000, whilst declared sales were al very large, £244,000 bags.

Coffee.—The aggregate value of coffee cleared from the two port from 1st July to 13th September was £4,418,770 as again £4,486,745 for the corresponding period last year.

Entries at Rio and Santos during the week ended the 13th i stant show a slight falling off at Santos, Saturday being a holida and were 492,774 against 516,454 the preceding week and 342,6 the corresponding week last year.

The aggregate entries since 1st July were up to the 13th insta 4,317,420 as against 2,745,840 bags last year, or an increase of 57

Shipments (embarques) were 17,049 larger than last week' 371,818 against 354,769 and 249,667 for the corresponding perio last year, their respective values being £512,000 for this wee £497,000 for last and £487,000 for same period last year.

Declared sales show also a considerable increase, being 244,0 as against 177,000 for the preceding week and 154,000 last year.

Stocks on same date were 1,576,831 bags, or an increase of 59,8 bags on last week's and 561,021 bags larger than on same da last year.

Exchange, *20th September.*—Extremes during the week endi September 20 were $10\frac{3}{4}$d—$11\frac{7}{16}$d. for 90 d/s Bank paper and $10\frac{13}{16}$d- $11\frac{1}{2}$d for private.

The average Bank 90 d/s counter-drawing rate for the week comes out at 11 3/32d., the corresponding sight rate being 11 1/32d. against 11 7/64d., the average sight rate of the *Camara Syndical*.

Coffee, 21*st September*.—Entries at Rio and Santos during the week ended the 20th instant show again a large increase, the respective figures being 566,837 bags, as compared with 492,774 for the week before and 402,573 for same date last year.

The total entries for this crop up to the 20th instant amount to 4,884,257 bags as against 3,148,353 for same period last year, showing an increase of 1,735,904 bags.

Shipments (embarques) totalled 479,680 bags as against 371,818 for the preceding week and 283,722 for the corresponding week last year, their values being £696,000, £512,000, and £440,000 respectively.

Declared sales were 204,000 bags for this week, 244,000 for last, and 243,000 for corresponding date last year.

Stocks continue to increase, and are 5,274,879 bags against 4,952,439 bags last year.

Crop.—A correspondent on whose information we can rely writes from S. Carlos as follows:—"The current crop will no doubt be a big one, the biggest one we have yet had as regards volume. The yield, however, is 8 to 10% under last crops, but this will be swamped in the general increase. When comparing this crop with the last, it is well to remember that up country sentiment is very different to what it was last year, planters for some unintelligible reason having got the idea that prices were going to 15$000 per arroba, in which they were encouraged by commissaries who had all underestimated the crop. Consequently those who had sent down their coffee to Santos witheld it from sale, whilst others did all they could to keep it on their farms, a big currency drop being the result. This year no one talks of holding back; every one wants to sell, whilst exporters want to keep on the short side and the general short interest has kept prices in sterling very steady.

"Prospects for 1902-1903 are for a smaller crop, how much smaller is difficult to say at present. The first flowering was late and irregular and in most districts the trees are not up to the mark, but there will be no crop failure, from the point of view of consuming markets, unless prospects change for the worse, six million bags will probably be about the Santos figure."

Entries at present at Rio are over the usual average as regards quality, the coffee being mostly handpicked, and the higher grades, which at present command a premium, mostly forwarded to market. Later on the lower grades, which are now being withheld, will come down and redress the general average.

The first flowering in the Minas and Rio districts has been good and seems to hold out prospects of a good crop again next year. The weather has been also very favourable and the trees in spite of the heavy bearing are looking strong and healthy.

DISTRICT ASSOCIATIONS.

COORG.

Proceedings of a Quarterly General Meeting held at the N. Coorg Club House, on Saturday, October 12th, 1901.

PRESENT:—Messrs. W. H. Ball, P. Beni Singh, H. F. Davy, G. C. Garrett, C. J. Maclean, W. G. Mackilligin, E. Meynell, C. M. Nunjappa, E. Richter, A. J. Wright, W. R. Wright, W. H. Sprott (*Chairman*), and A. Lambert (*Honorary Secretary*).

The Minutes of last Meeting were taken as read.

The Chairman then read the Report of the Delegates to the U. P. A. S. I. Meeting which was approved of, under the proposition of Mr. Meynell, seconded by Mr. Sprott.

Proposed Coffee Cess.—After some discussion, the following resolution was put to the Meeting, proposed by Mr. Meynell, seconded by Mr. A. J. Wright, that a circular letter be sent to all coffee owners in the province, asking their consent to the imposition of a cess at the rate of 2 annas per cwt., the money to be collected by the Association, and utilised for purposes of advertising our coffee in India. Mode of advertisement to be decided upon after a sufficiency of funds has been guaranteed.—Carried unanimously.

The Chairman read a letter from Mr. Parsons on this subject.

Remission of Taxation.—With reference to this question it was decided on Mr. Sprott's proposition, seconded by Mr. Meynell, that a Sub-Committee be appointed to draw up a petition to the Chief Commissioner during his coming tour, and that a deputation be also elected to meet him and present the same, if convenient and agreeable to him. It was also arranged on the motion of Mr. Ball to include the Railway question therein.—Unanimously agreed to.

The following gentlemen were appointed as members of the delegation: Messrs. Murray-Aynsley, C. Appiah, A. Boponna, H. F. Davy, G. C. Garrett, H. J. Grant, J. W. Irwin, A. Lambert, J. Logan, J. Macpherson, E. Meynell, W. G. Mackilligin, C. M. Nunjappa, H. G. Parsons, W. H. Sprott, and C. Thimmiah, R. B.

The Sub-Committee to consist of the following:—

Messrs. Meynell, Sprott, Nunjappa, and A. Lambert.

General.—Read U. P. A. S. I. Circular No. 77/01

Resolved that this Meeting unanimously accords a hearty vote of sympathy with the Assam Planters in their present labour difficulties, and the apparent want of consideration they are receiving from the Chief Commissioner of Assam.

Read U. P. A. S. I. Circular No. 75/01.

Resolved to write and suggest that Mr. de Niceville, Entomologist to the Indian Museum, Calcutta, should visit Coorg during his tour through South India.

Read U. P. A. S. I. Circular No. 80/01 *re* a General Cess on Coffee.

The feeling of the Meeting was not in favour of the proposals contained therein.

It was unanimously resolved to forward a hearty vote of thanks to the Government of Mysore for the loan of Dr. Lehmann's services, expressing a hope, too, that he will be able to visit Coorg again in the future.

The following papers were laid on the table:—

Proceedings of the Nilgiri Planters' Association, Sept. 3rd, 1901.
,, Wynaad ,, Oct. 2nd, 1901.
,, Shevaroy ,, Oct. 7th, 1901.

A vote of thanks to the Chair terminated the Proceedings.

(Signed) A. LAMBERT,
Honorary Secretary, C. P. A.

POLLI BETTA,
October 27th, 1901.

THE UNEASY ROCKS.

Earthquakes are the cause of much destruction, but what is the cause of earthquakes? The scientific fellows say the heat inside the earth, and the big rocks trying to get into more comfortable positions. That being so we can't cure earthquakes; the cause is too deep and too big.

Here is a matter easier to handle and yet not easy enough to make us vain or conceited. Humility and modesty are well-fitting coats for the backs of the best of us.

"Rheumatic fever laid the foundation of all my trouble many years ago," says Miss Jane Williams. Yes, but what laid the foundation of the rheumatic fever? The man who can answer *that*, with a sound of sureness in the talk of him, will do more good than the long-headed statesman who captures a fresh foreign market or cuts off the heads of a million Chinese Boxers.

Whatever may turn out to be the cause of rheumatic fever Miss Williams (with lots of other afflicted persons) has no doubts about the effects of it. "The early atttacks," the lady tells us, "left me very weak and low. They took away from me pretty nearly all my relish for food, and the power to digest (I mean to digest quickly and thoroughly) the morsels I did eat."

Does the reader think Miss Williams has put the cause and effect in the true order here? She thinks so, to be sure. But we will not be hasty to conclude. She wants us first to hear the rest of her story.

"After meals," she goes on to say, "my stomach became filled with wind and I was tortured with pains in nearly every part of my body. They were worse, however, in my chest and at the pit of my stomach. I was often bilious, too, and had violent sick headaches."

(Thus far she speaks, you perceive, of indigestion or, as it is sometimes called, acute dyspepsia. He is the same hungry beast, though—whether we put a Latin or a Greek collar on his neck).

"No matter what I did," continues Miss Williams, "my strength would not come back; and small wonder, for I could neither eat nor sleep properly. Instead of getting stronger as the months passed by I grew more feeble and depressed."

We can well credit that. If all at once the wind-mills, the water-mills and the steam-mills should stop grinding grain for a year what should we do for bread and cake?

"My life," says this patient woman, "was one dreary and monotonous round of suffering and weakness. I was always weary and exhausted, although I did no work to make me so. All the strength went out of my back and at last it got to be so painful and weak I couldn't even sit up. *For seven years I spent most of my time on the couch*, unable to get about the house."

"At length, and a tiresome length it was, as the doctor's medicines seemed to be doing me no good, I was in some way led to try Mother Seigel's Syrup. After taking it a few weeks the improvement began. At first it was not much to notice, but it kept up, and little by little my strength returned.

"The Syrup gave me an appetite, a *real* appetite, and I began to enjoy my meals as I had not done during all the years I have spoken of. I had no longer any pain after eating; and oh, what a relief it was to eat and not be punished for it. I need only add that in the end Seigel's Syrup restored me to health and strength, such as I had not been blessed with for time almost out of mind.

"Once in a while when, through thoughtlessness or for any other reason, I feel a touch of any of my old symptoms, I fly to my bottle of Seigel's Syrup and that marvellous medicine sets me right. I believe I owe my life to it, and my *health*, which is better than life. If you think what I have said may be useful to others you may print it as you think fit." (Signed) Jane Williams, Chapel House, Llanrug, near Carnarvon, Wales, September 4th, 1900.

Anybody who would like to see this lady may find her at her home at Llanrug, a village between Carnarvon and Llanberis, and a very pleasant spot in Summer, where she does her work and commends Seigel's Syrup to all.

Earthquakes are caused by the mighty fires in the earth's bowels and rheumatism is caused by indigestion. The latter fact is of the greatest practical importance.

MARKET REPORT.

[*Per Mail advices of* 18*th October* 1901.]

COFFEE.

The London Commercial Record says:—Supplies at auction during the week have been even smaller than in the previous week, and little alteration can be reported in value. The first arrivals of new crop Nyassaland were actively competed for at some advance, the quality being better than previous importations. Privately a moderate amount of business has been transacted at steady prices. Unfavourable reports respecting the 1902-1903 Brazil crop have caused an advance in the market for "futures"; prices have fluctuated in the last day or two, and close slightly below the highest point, but still at an improvement for the week of 1s 9d to 2s per cwt.; yesterday December Santos sold at 32s 10½d, March at 33s 6d to 34s, May at 34s 1½d to 34s 6d, July at 34s 6d to 34s 9d, and September at 35s to 35s 4½d per cwt. Auctions to-day comprised:—32 casks 5 tierces 15 barrels 6 bags Plantation Ceylon, 132 bags East India, 271 bags Nyassaland, 40 bags Java, 110 half-frazils Mocha, 452 bags Salvador, 114 bags Mexican, 120 bags Nicaragua, 11 bags Columbian, 28 bags Coban, and 284 bags Vera Paz. The sales passed off with good competition at full values to in some cases 6d per cwt. dearer. We quote:—

London ...	... Santos ...	Dec. delivery	...	33s 0d.
New York	... No. 7 Rio...	„	...	5·75 cents.
Hamburg...	... Santos ..	„	...	32½ pf.
Havre ...	... Santos ...	„	...	40½ francs.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	14,746	16,944	40,542	31,646
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	16,066	13,010	24,244	16,333

The preceding figures exhibit— Tons.

In the Imports an increase this year of	..	..	8,896
Home Consumption an increase of	...	...	3,056
Export an increase of	...	...	7,911
Stock a decrease of ...	...	...	2,198

The details of the auctions are as under:—

EAST INDIA packed in Ceylon.—3 casks 2 barrels 3 bags part sold, smalls 40s, pea berry 40s.

EAST INDIA.—963 bags 14 cases partly found buyers:—*Mysor* triage 39s 6d to 42s 6d. *Coorg*, smalls 38s 6d to 42s, low middlin 45s 6d to 46s 6d, bold 58s 6d to 63s 6d. peaberry 54s to 66s.

NYASSALAND.—375 bags sold, smalls 43s to 45s 6d, middling good middling 47s 6d to 55s, fair bold 59s, good to fine bold 63s 70s 6d, peaberry 52s 6d to 65s.

COSTA RICA.—Of 173 bags offered 40 bags sold, bold 80s to 84s.

GUATEMALA.—49 bags sold, middling greenish 50s 6d.

SALVADOR.—Of 251 bags catalogued about 200 bags sold, good fine foxy greenish 39s to 41s, bold bright foxy pale 47s to 48s, goo blue bold 70s 6d, peaberry 40s to 43s.

COLOMBIAN.—418 bags mostly sold, smalls 35s to 41s, low middlin brownish to greenish 42s 6d to 47s 6d, middling to good middlin greenish 53s to 58s, common bold brownish 53s to 54s 6d, fair good bold 57s 6d to 66s 6d, peaberry 41s to 55s 6d.

BRAZIL.—Of 1,630 bags washed Dumont Santos 1,450 bags sol smalls 31s to 32s, medium 35s to 37s, bold 40s to 44s 6d, peaberr 36s 6d to 44s. Of 322 bags Santos, part washed, 170 bags sol good pale grayish 44s.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-9 Bags.
Rio ...	2,315,000	1,082,000	1,441,000	1,252,0
Santos ...	4,459,000	3,448,000	3,325,000	2,636,0
Total ...	6,774,000	4,530,000	4,766,000	3,888,0
Crop ...	—	10,900,000	8,971,000	8,772,0

Rio Exchange 11⅝d, previous day 11$\frac{19}{32}$d.

HAVRE, *October* 17.—Good average Santos October opened stead at 40¾f. and closed quiet at 40¼f., December opened at 41f. an closed at 40½f., March opened at 41¾f. and closed at 41¼f., Ma opened at 42¼f. and closed at 41¾f., September opened at 43f. an closed at 42¾f.

HAMBURG, *October* 17.—Good average Santos October opene steady at 31¾pf. and closed steady at 32pf., December opened at 32¾p and closed at 32½pf., March opened at 33¾pf. and closed at 33¾pf May opened at 34pf. and closed at 34pf., September opened a 35pf. and closed at 35¼pf.

NEW YORK, *October* 17.—Closing prices of No. 7 Rio were a follow:—

	Oct.	Nov.	Dec.	Jan.	Fe
October 17...	5·60	5·65	5·7	5·85	5·9
October 16...	5·45	5·45	5·55	5·65	5·7

East India sold in Public Sale since 3*rd October*, 1901.

October.	Mark.	District.	Size 1.		Size 2.		P. B.	
4	Manalaroo	Nelmpthy .	15	not sold	40	not sold	10	50/
8	Matheson's Kanambaddy	Coorg	114	„	102	„	56	60/
	Do. A. F. ...	„	22	„	51	„	5	54/
	Rungiahs	Mysore ...	36	„	53	„	13	not sol

TEA.

INDIAN.—Auctions were much smaller, totalling 38,400 package compared with 56,500 packages from 4th to 10th instant, an 54,900 packages in 1900.

Assams have mostly fallen away from the high standard reache before the rainy season had fully set in. Cachars and Sylhets however, moved up somewhat; Dooars generally and with mor rapidity than usual, recovered from the slump in quality, whic quickly came after a very promising start, and advices point to further improvement in invoices on the water. It is worthy o note that several gardens in this district, which had in recent year earned the unenviable character of being among the "undesirables," have demonstrated that, given favourable conditions and handling they can still produce a really attractive article. The majority o the finest Darjeelings from the second flush have now been disposed

, and meanwhile there is little from this quarter, of real distinc-on. Travancore and other South India teas have chiefly been nowing useful style and appear to be gaining in popularity.

The curtailed weight put forward was easily absorbed by the rade at firm values based on the previously recorded decline, and lore dispositon to purchase was evinced. At the moment the eadiest market is to be found in sweet consuming varieties above ommonest; this tendency being doubtless fostered by a growing elief that the probability of an appreciable shortage in the crop vailable for the United Kingdom has passed the stage of surmise. n view of the more assured position given in latest cablegrams, im-orters have considered the advisibility of exercising so far as may e, some check in the direction of regulating the weekly offerings, nd it is to be hoped that the proposed arrangements will meet with dequate support. The object is not to endeavour to force up prices o an unhealthy level, but rather, by placing manageable quantities efore the trade at a time, to guard against sudden relapses, hich in view of supply appear unwarrantable, more especially aving regard to the moderate scale of value now existing.

For 32,000 packages on Estate Account 7⅞d per lb. was realised pposed to 7⅝d per lb. for 44,700 packages, and 8¾d per lb. for 6,000 packages in the two seasons before.

Entries for export to Great Britain from 1st April to 15th instant ncluding Chittagong) were 84,002,000 lbs., *versus* 90,150,000 lbs. or the same period in 1900.

CEYLON.—Catalogues comprised 16,200 packages, contrasted with 9,500 packages on the 6th instant, and 19,600 packages a year ago.

This limited amount was taken up with fair competition, on with-ut much change. Flavour was on the whole about maintained, hough here and there a slight falling off from the best point eached was noticeable, which will account for some irregularity in uotations. Clean common to fair leaf teas met with the most de-nand, both for home consumption and outside quarters. On the ther hand, although choice liquoring parcels were in good request, nedium to fine grades did not seem so much wanted.

The average remains as on the 10th instant, *viz.*, 7¾d per lb., at hich it also stood twelve months ago.

JAVA.—Rather over 1,200 packages (800 packages of direct im-ort) were submitted and went off with spirit in favour of sellers.

Deliveries.—Clearances of all tea (on which duty has been paid) rom the London warehouses, as per official returns are, *viz.*:—

From 1st to 15th October,	1901	... ...	9,736,815 lbs.
Do. do.	1900	... ...	8,867,987 ,,

During the week the following have been printed for sale by ublic auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offered. Pkgs.
India	30,294	8,058	38,352
Ceylon	13,506	2,665	16,171
Java	973	240	1,213
Total ...	44,773	10,963	55,736

Also 570 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated October 18th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian. Pkgs.	Ceylon. Pkgs.	Java. Pkgs.
1901-1902	469,107	486,064	27,585
1900-1901	470,587	515,061	20,633

39,573 *pkgs.* INDIAN
16,735 ,, CEYLON
1,213 ,, JAVA
} Total 57,521 packages were offered in public auction this week.

There seems now to be absolutely no doubt that the crop from India will be very short, while it is almost equally certain that a considerable diminution will take place in the production of Ceylon tea.

An official telegram from India states that up to the end of September only 111,000,000 lbs. had been produced by gardens which had manufactured 125,000,000 lbs. up to the same date last year. These returns include the great majority of estates in North-ern India.

Under these circumstances the circular just issued by the Indian Tea Association in reference to the regulation of supplies has appeared at a most opportune moment. The Association state that figures go to show that there will be a heavy deficiency in yield this season from India, the Ceylon crop being also short, but that Indian teas have been arriving in London more rapidly than usual, and have been offered in such quantities as to depress the market. The Committee therefore consider that supplies should be regulated in order that confidence may be imparted to buyers, and the market saved from an unnecessary fall in price.

INDIAN.—With a material diminution in offerings, which fell from 57,598 pkgs. to 39,573, buyers purchased with more confidence, and the sharp fall noticeable towards the close of last week was not only checked but a reaction took place, some recovery being apparent in the later sales of the week. The official wire gives exports to U. K. for first half of October (including Chittagong 1,070,000 lbs.) as 11,010,000 lbs., against 14,120,000 lbs. in 1900, making the total quantity from 1st April to 15th instant. 84,001,800 lbs., against 90,150,000 lbs.

Week's average of New Season's Tea sold on Garden Account 1901, 32,005 pkgs., av. 7·75d. 1900, 44,516 pkgs., av. 7·61d.

New Season's Tea sold on Garden Account 1st June to date 1901, 335,258 pkgs., av. 8·29d. 1900, 377,115 pkgs., av. 8·10d.

CEYLON.—There was a marked decrease in the quantity offered, only 16,735 being catalogued this week against 21,254 pkgs. last. This smaller supply, together with the reduced offerings of Indian tea, was sufficient to steady the market. and caused good general competition at the lower rates of last week, and although the market was here and there irregular, the tone was, generally speaking, somewhat steadier. Shipments to U. K. for first half of Octoder were 3,800,000 lbs., against 3,500,000 lbs. same period 1900, quantity available for the month being estimated 7,500,000 lbs., against 7,500,000 lbs. Average for week 7·79d., against 7·62d same week, 1900.

Ceylon Tea sold on Garden Account 1st January to date, 941,290 pkgs., av. 6·72d. 1900, 1,011,792 pkgs., av. 7·19d.

JAVA.—Only 809 packages were of direct import; these com-prised some teas of very fair quality. Prices were very steady. "Goalpara," "Malabar," and "Djati Nangor" averaged 9½d., 7¾d., and 7½d. per lb., respectively.

COCOA.

The auctions on Tuesday last were very uninteresting; 3,010 bags were catalogued, but only 520 bags found buyers; prices were practically unaltered. Of 302 bags Trinidad 65 bags sold at steady rates—very fine red 72s to 72s 6d, dark 65s. 23 bags Grenada partly sold at 63s to 64s, for good red. 159 bags Jamaica nearly all sold—fine red 6s 63d, common 55s, being valuations. 53 bags common St. Lucia realised 56s. Of 205 bags Colombian 60 bags good bold brought 72s. Of 1,194 bags Guayaquil only 80 bags were placed—greyish red Caraquez 67s, good Arriba 74s to 74s 6d. Of Ceylon 618 bags were brought forward, of which 140 bags sold without material change—fine bold red 80s, small 49s 6d to 52s 6d per cwt. The bought in growths comprised—31 bags Surinam, 17 bags Bahia, 207 bags Venezuelan, 102 bags Puerto Cabello, 50 bags Haiti, 30 bags African, and 8 bags Seychelles.

PEPPER.

BLACK is cheaper and very slow of sale; on the spot fair to good Singapore sold at 5$\frac{15}{16}$d to 6$\frac{1}{16}$d; near at hand Singapore sold at 6d, and October-December (s.) quoted 6$\frac{1}{16}$d per lb.

Nothing offered at auction on Wednesday.

The shipments of Black Pepper for the first half of October compare as follows:—

	1901.		1900.
U. K.—Singapore	40	130	130
,, Penang	*nil* } 40	*nil* }	
Continent	20		200
U. S.	350		100
Total tons ...	410		430

Black Pepper firm to-day, 15 tons Singapore near steamer sold at 6$\frac{1}{32}$d per lb

WHITE is steady on the spot, with business done in fair Singapore at 9¼d and Penang at 8¾d per lb.; quotations for arrival are rather lower, about 25 tons Singapore selling at 9$\frac{3}{32}$d to 9$\frac{1}{16}$d per lb., c.i.f., October-December (s.)

No supplies were brought to the hammer on the 16th instant.

The shipments of White Pepper for the first half of October compare as follows:—

	1901.		1900.	
U.K.—Singapore	300	300	220	340
„ Penang	*nil*		120	
Continent		50		40
U. S.		170		...
Total tons ...		520		380

GINGER.

COCHIN.—A firm market obtains and a fair amount of business has been done privately at 42s to 43s for fair medium and small washed rough 40s for medium and small, a little bold, rough Calicut, and 39s per cwt. for small ditto. Under the hammer cases 273 bags were presented, of which. however, only 10 ca sold—medium rather roughly cut and scraped, partly limed at to 72s 6d per cwt.

JAMAICA.—75 barrels sold at steady rates—fair bright wash 44s to 46s 6d, lean and dark 40s to 40s 6d per cwt.

QUININE.

Last week the second-hand market closed rather dearer wit fair business for December delivery at 1s 2d, and March 1s 2¼d, a these prices were manitained until Wednesday, when the announ ment of unexpectedly large bark shipments from Java caused easier feeling, and to-day sellers quote December at 1s 1½d, a March at 1s 1¾d, and spot 1s 1¼d, without any important busines

(AVERAGE FOR ALL INDIA 7·75d., OCTOBER 18TH.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Du and Various	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Pric
Neilgherry ...	**308**	**6·47**												
Davara-Shola ...	81 p	5¾	59 p	5¾ 6½		...	...	...	22	5	...	...	...	...
Mount Gordon ...	71 p	7	25½c	8¼	37	7	...	...	9	5½	...	...	...	...
New Hope ...	93 p	5½	37 p	7 8	29	4	...	...	21	5½	...	...	6½c	5¼
Prospect ..	63 p	8¼	23	8¼ 9½	20	7½	20½c	8	...	...	...	..	...	...
Travancore ...	**1116**	**6·20**												
Arnakal ...	187 p	6¼	17	6½	72	5¾ 6	61	7¼	18 p	5	...	...	19½c	3¾
Carady Goody ...	65	6	25	6¾	..	..	20	6	20	5	..	...	...	..
Colafalo ...	38	5¾	14	6¾	...	.	24	5¼	...	...	...	...	...	...
Merchiston ...	49 p	6	8	6½	19	5½ 5¾	11	7½	...	...	8	4½ 5¼	3½c	3¾
Penshurt ...	115 p	7¾	42½c	9¾	39	6½	..		...	..	...	...	34½c	5 10
Poonmudi T Co B ...	48 p	6¼	11	7	...	...	18	7	12	4¾	5	4¾	2½c	3¾
„ Bon Accord ..	20	6	...	...	20	6	...	...	...	...	...	...	...	...
„ Braemore ...	61 p	5¾	18	7 7¾	23	5½	...	...	12	5	5	5	3½c	4
„ Poonmudi ...	79 p	5¾	50 p	6½ 7	...	...	...	...	23	4¾		...	6½c	4½
„ „ ...	50	6	..	...	50	6	...	...	..	...	...	...	...	...
SthnInd T Co K K ...	163	6¼	47	6¼	...	...	66	6¾ 6¾	36	5 5	..	...	14	6¼
Stagbrook ...	134 p	5¾	111 p	6¼ 7½	...	...	23	5	...	...	...	...	...	..
S T T Co Venture...	107 p	6¼	...	...	46	6¼	30	6¾ 7¾	19	5	...	...	12½c	3½ 5
Wynaad ...														
Wynaad T Co Per...	83 p	5½	28	5½	...	...	25½c	7¾	26	4½	...	...	4½c	5

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A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 22nd instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad.

November 12th.—*Weather*—East wind, warm nights, sunny days. Temperature 62 to 76. *Works*—Gathering crop in full swing. *Crop prospects*—Planters are realizing sadly the shortness of the crop, now that it is being put into the baskets. Several estates are simply pounding the coffee out, and not pulping to avoid expense. *Health*—Good. *Labour*—Abundant. *Interesting item*—The eclipse of the sun was clearly visible here yesterday.

Coorg.

POLLI BETTA, *12th November.*—*Weather*—We are having a bit of a respite from the rain for the last few days. It was very heavy on some days last week. *Crop*—Everybody may be said to be picking now, but the quantities being got in on the Eastern side are still small. Besides picking, weeding and digging are being done. Leaf rust is becoming worse every day. Bright weather now might do a lot to check it. *Labour*—as usual, is always plentiful here. *General Health*—Fair.

BRAZIL'S FINANCE.

THE POLICY OF THE EMPIRE.

FOR the tea-planting community our present remarks will, we fear, have but little interest. Coffee-planters should, however, find in them food for thought. Whatever concerns the financial policy of the Brazilian Republic concerns also the price of coffee, for, while the relations of supply and demand are the chief factor in determining values, the upward or downward tendency of Brazilian exchange exercises a most important influence, and the currency policy of the Republic hinges upon the question of upholding the gold

value of the milreis. We have seen no better history, in brief, of the past and present currency polices of Brazil than that given in an introduction to the report of the Minister of Finance for the year 1900. Naturally, it reflects an official view; but whatever individual opinion may hold as to deductions, the statements of fact may be accepted as authoritative. According to DR. JOAQUIM MURTINHO, the young Republic adopted, in an evil hour, the currency of the Empire. This consisted in constant deficits on the Budget covered sometimes by loans, sometimes by issues of paper money,—which constituted promises to pay at some indefinite date. It was a policy of procrastination, of putting off the day of settlement. That that day must come, was a foregone conclusion; but the day came in the time of the Republic, after the Empire had come to an end. The continually increasing number of loans resulted in an increase in annual expenditure. Year by year the amount due for interest and sinking funds increased. Year by year the continual issue of paper money forced the rate of exchange down and increased the silver equivalent of the gold debts of the Government. Deficits, instead of being covered, were increased. Expenditure waxed larger as the intrinsic value of receipts grew smaller. The loans destined to productive and remunerative works were few. Brazil was in the hands of the money-lender, and its substance was shrinking while its indebtedness expanded. The more the need for credit developed, the smaller that credit became, until vanishing point was in sight. There was an appearance of wealth and credit, a certainty of ruin if the attempt to prolong this policy were continued.

In 1898, says DR. MURTINHO, the financial discredit of the Brazilian Treasury had reached its maximum, no means could be found to cover the enormous deficit; credit was so low that fresh loans could not be contracted, no further issue of paper money could be made without aggravating the position and causing a further fall in exchange—and thus a further increase in the current liabilities of the State. Differences in exchange absorbed nearly two-thirds of the revenue. Causes have been outlived above, effects are sketched thus:—"The rate of exchange had fallen to $5\frac{5}{8}$, the foreign bonds of 1889 were quotod at $42\frac{1}{2}$, discounts could with difficulty be effected, failures were on the increase, and business men, seeing the uselessness of further sacrifices, petitioned the Government to no longer delay the adoption of the only remedy, namely the suspension of payment of interest and of the sinking fund on the national debt." The main cause was low exchange; the chief desideratum, therefore, was to raise the value of the currency. One alternative was to redeem the paper currency. Various authorities had pointed out the necessity of this. A method justified only by emergency had crystallized into a custom. The time had arrived for changing this. The superfluity of paper money prevented an influx of gold, and even encouraged our efflux. The Government reviewed the situation and determined, in the face of some opposition, yet in accordance with the advice of experts, to adopt drastic measures of reform.

The situation in 1898 was as follows:—A programme to raise the value of the currency by means of the redemption of paper money, a programme warmly advocated by the most notable statesmen in matters of finance during the Empire, and which even at the time of the large amounts issued by the Provisional Government found defenders in that same Government and in the Press of that day as well as in the administration and in Congress which passed a law in support of it, a programme supported by the outgoing and by incoming Governments On the realisation of this p gramme depended the solution of Brazil's most pressing d culties, but the means to carry it out were not in sight. this juncture the foreign creditors of the State, convinced t its interests were intimately connected with the restoratio finances and therefore with the appreciation of Brazil currency, and also that the redemption of the paper was best means to attain that end, offered Government a loa 10 millions sterling on condition that paper money cor ponding to that amount at the exchange of 18d. should redeemed. The Government promptly accepted this p posal. The aim of the creditors was exactly the same that of all Brazilians: namely, the financial and econo recovery of Brazil, allowing not only for the payment of foreign debts but also for the development and progres the Republic An agreement was signed on June 15th, 18 came into force on July 15th, 1898, and ended on July 1901. Of DR. MURTINHO's account of what happened dur the greater part of its duration we propose to write i future issue.

THE FRENCH IMPORT TARIFF.

The French Tariff in force on Colonial produce, pri pally Coffee, which expired at the end of June, was exten to the 23rd February, 1902, for the following countri German, British, Danish, Spanish and Dutch Colon Dominions and Protectorates; United States of America, five Republics of Central America, Cuba, Porto Rico, Ecuad Perú, Chili, Liberia, the Congo State, Abyssinia, Co China, Siam, and the Philippines. If, after that date, no p visions are made by a new law, the Maximum Tariff will applied to Colonial produce of the aforementioned countri

The time is drawing unpleasantly near, and although are aware that the Secretary of State for India has taken subject in hand we feel sure that planters would like to kn what is being done, and whether there are indications o satisfactory result to the negotiations that are no doubt progress. The Colonial Office has moved in the matter, well as the India Office, and it is certain that every possi exertion will be made to prevent the imposition of duties t would stifle India's trade with France, at least so far Coffee is concerned.

THE AUSTRALIAN TARIFF.

The exact figures of the new Australian Tariff have n reached us, and we find that there must have been so error about the remarks attributed by an Australian c temporary to the Minister of Finance with respect to duty on Tea. The following are extracts from the Tar showing *ad valorem* imposts:—

Cigars	5s 6d per lb. and 15 %.		
Cocoa and chocolate	2d	„	„ „
Coffee and chicory, raw	3d	„	—
Do. kiln, dried, roasted and liquid ...	5d	„	—
Spices, not ground	2d	„	—
Do. ground	4d	„	—
Tea in bulk	2d	„	„ 20 %.
Do. packets	3d	„	„ „

In reckoning the value for purposes of duty, "10 per ce to be added to value, and value of outside and ins packages to be included. This applies also when th are two rates, specific and *ad valorem*, on same article."

NOTES.

he American Market. During the year ended June 30, 1900, the United States imported nchona bark to the value of 1,025,546 dols., vanilla beans, 75,229 dols.

Coffee" in New York. It was rumoured a short time ago that a leading firm of brokers in lew York intended to issue a coffee trade publication under ie title *Coffee*. We have not yet heard that effect has een given to this intention.

inchona at Amsterdam. The auction to be held at Amsterdam on November 7 would consist of ,601 bales and 319 cases, amounting to 6,920 packages, and eighing 605,609 kilos. A supplementary catalogue would lso be published.

aluable Book by Mr. Mann. Mr. Mann, Scientific officer of the Indian Tea Association, is bringing out an elaborate work on tea soils in Assam and manuring, including much valuable information n tea culture and manufacture.

he London Teapot. It has been calculated that something like 1,250,000,000 pints of tea re imbibed yearly by Londoners, and that the teapot ecessary to contain this amount, if properly shaped, would omfortably take in the whole of St. Paul's Cathedral.

Discovery at Darjeeling. *Indian Gardening and Planting* announces a discovery by Mr. C. R. Newton, of Kurseong, Darjeeling, of ferment on the tea leaf which produces the flavour of the ea. He has applied for a patent for its utilisation in tea manufacture.

rade with Persia. The Bengal Chamber of Commerce has received from Captain Webb Ware, the Political Assistant at Chagai, Quetta, an intimation hat the Persian Customs authorities now demand payment of lues, for all places in Persia, at the frontier station of Seistan. Merchants must produce their invoices at that place.

he Position of Coffee. Surprise has been felt at the way in which Coffee prices have held up n the face of enormous receipts. The fact appears to be hat stocks in retailers' hands have been allowed to fall very ow, and that speculators are confident of a rise, sooner or ater, no matter what statistics may point to.

Patti on Poisons. Thus Adelina Patti :—"Drink nothing but water or milk—especially drink lots of water. You never can drink too much of it. On the other hand, remember that alcohol is poison which does untold damage within you; that wine, beer, coffee, and tea are poisons, too. Shun all of them as you would diluted vitriol."

Ceylon Tea Cess. The General Committee of the Ceylon Planters' Association, at a meeting held at Kandy, on Saturday, passed the following Resolutions :—(1) The Committee is convinced that an increase in the cess is a pressing necessity. (2) That the Ceylon Association in London be urged to join the movement with a view to obtain the sanction of the Government to an increase in the cess from 20 to 30 cents per 100 lbs.

The Australian Tariff. Replying to the telegraphic despatch of the Governor of Ceylon, the Governor-General of the Commonwealth of Australia wrote on October 17 :—In acknowledging the receipt of Your Excellency's telegraphic despatch of the 16th instant, embodying the views of the Ceylon Chamber of Commerce on the proposed *ad valorem* duties on tea, within the Commonwealth of Australia, I have the honour to advise Your Excellency that I have submitted the purport of your message for the earnest consideration of my Responsible Advisers.

The Surma Valley Planters. The Surma Valley Branch of the Indian Tea Association, representing the tea planting communities of Cachar and Sylhet, welcoming the Viceroy in an address, on the 8th instant, dwelt on the progress of the tea industry since Lord Northbrook's visit in 1874. Owing to the difficulty of road construction through want of metal, the Association hoped for the construction of light feeder lines. The Assam-Bengal Railway was quoted as an instance of how cheap importation of rice by the Assam-Bengal Railway had saved a disaster in the early part of the year. The Association also hoped for the postponement of the recent settlement rates until the financial position of the industry was more satisfactory.

The Delicate Cocoa Tree. A traveller in Venezuela, where the cocoa tree is now largely cultivated, speaks of the great care with which the young plants have to be protected from the sun, which, if very strong, is fatal to them. To secure this protection the planters shield them by banana trees and plantain trees, the broad leaves of which give them the needed shade. And even when they are fully grown they need protection, which is given by trees known as "immortels," or, as the planters call them, "the mother of the cocoa." Thus, the whole cocoa plantation has a sort of canopy. The fruit of the cocoa is a pod, resembling a cucumber, which grows on the trunk or the large branches and looks as if it were stuck there by artificial means. The seeds, which are the "beans" of commerce, are like big lima beans, embedded in pulp.

Brazilian Exchange. The following figures will probably interest many of our readers :—

	Price of Coffee in New York.		Maximum Rate of Exchange.	
	Maximum.	Minimum.		Minimum.
January	7·25	7·00	$10\frac{1}{4}$	$9\frac{3}{4}$d
February	7·50	7·00	$11\frac{5}{16}$	$10\frac{1}{16}$
March	7·62	7·00	$11\frac{7}{8}$	$11\frac{1}{4}$
April	7·00	6·00	$13\frac{1}{4}$	$11\frac{3}{4}$
May	6·31	6·25	$13\frac{3}{8}$	$11\frac{3}{4}$
June	6·25	6·20	12	$10\frac{15}{16}$
July	6·00	5·62	$11\frac{3}{16}$	$9\frac{1}{2}$
August	5·75	5·62	$10\frac{3}{16}$	10
September	5·75	5·50	$11\frac{1}{8}$	$10\frac{7}{16}$

It will be seen that the oscillations of coffee prices in New York are by no means synchronous with those of exchange; nor are the prices of coffee (in currency) at Rio.

The "Science(?)" of Tea. Dr. Andrew Wilson, in "Science of the Day" in the *Daily Chronicle*, has the following astonishing statement under the heading,

"Tea and Theine." After pointing out that theine is best developed "in the skin or covering of the leaves in their young state" he says:—"I have always been given to understand that the young shoots thus amply provided with theine and representing the finest of the crop, are sent to Russia, where they fetch a high price. What we get in this country is presumedly the older leaf," etc. A generation ago, remarks the London correspondent of the *Times of Ceylon*, there might have been some truth in this, but this Rip Van Winkle of science should know that the tea now drunk in this country is practically all British-grown tea, and his statement that the young leaves do not come to this country is childish and absurd.

London Tea Market.

Weekly special telegram, dated 7th instant, from Messrs. Gow, Wilson & Stanton to Colombo reports that heavy supplies of Indian tea are depressing the market and that the market for medium liquoring Pekoes and Broken Pekoes as well as that for Common Pekoes and Broken Pekoes shows a slight decline. The price of fair liquoring Ceylon Pekoe Souchong is 6d (a farthing down), and the average price of Ceylon tea sold on Garden Account this week was 7⅞d (also a farthing down). The average of the corresponding week last year was 7d. Reuter reports that the tone of Ceylon tea generally is rather easier, common qualities showing no alteration. Fair Pekoe Souchongs are quoted at 5¾d (⅛d down) and the average for the week is 7⅞d (⅜d down). 13,000 packages of Ceylon tea were offered for sale and 10,000 were disposed of; while of the 55,000 packages of Indian tea offered, only 34,000 found purchasers, at an average of 8d per lb. (⅛d below last week).

The Calcutta Tea Sale.

The sale on the 8th instant comprised about 18,000 packages, against 16,000 at same date last year. The news wired out from London of 55,000 packages having been put up this week, close on half of which had to be withdrawn, had a somewhat disturbing effect on the market. Fortunately, the small size of the sale kept things fairly steady, with the result that a drop in price of only 3 pies on lower grade teas, and about 6 pies on the higher qualities was registered. The assortment on offer did not comprise any really fine tea, and the highest prices realised were: Maharanee Fine Orange Pekoe, As.15; Dehing Broken Orange Pekoe, As.12; Sungma Broken Orange Pekoe, As.11-9; Orange Pekoe, As.11-9; and Bullabarie Broken Orange Pekoe, As.11-6. It is to be regretted that the attempt to control the size of the sales in London has again broken down, as at the present time it would seem that sellers have a better opportunity of getting a voice in the sale of their produce than they have had for some years.

Associated Tea Estates of Ceylon.

Five years ago, says the *Critic*, the prospectus of this Company was dangled before the British public with a tempting bait of £9,000 profit per annum. On Thursday, at the sixth ordinary general meeting, the shareholders, stinging under the continued discrepancies between promises and performances, gave the Directors, whose cause was championed by Sir Alexander Wilson, a bad quarter of an hour. The balance-sheet presented showed, instead of a profit of £9,000, a debit to profit and loss of £963 11s. 3d., irrespective of liabilities to the extent of £10,000! Owing the distressing financial position the elaborate system recen augmented of manuring the estates has had to be discontinu Sir Alexander confessed that they were completely baffled their attempt to keep the tea up to its original quality. T announcement that a proposition had been received j before the commencement of the meeting, from certa quarters to relieve the acute financial situation, gave t Chairman an excellent opportunity of getting the rep adopted, but Mr. Densham, who was too quick for hi clamoured for its rejection, and afterwards the Board w severely criticised. Ultimately the meeting was adjourn for a fortnight to enable the Directors to consider the propos financial arrangement and report to the shareholders.

Coffee in the U. S.

The *American Grocer* of 9th Oc ber says:—The September deliver in the United States and Europe were very heavy, bei ahead of any month during the previous year. In the Unit States they were 550,111 bags, against 362,201 bags for sa month in 1900; in Europe, 848,290 bags, against 618,9 bags in 1900; total for both countries, 1,398,401 ba against 1,216,481 bags in August. A full review of t movement is reserved until our next issue. The market h ruled very steady in spite of heavy receipts. At Rio a Santos they amount to 5,555,000 bags for three months, more than the entire crop of 1895-96. The market closed 5¾c for No. 7 Rio, 7¼c for No. 3 Rio, 6½c for No. 5 Sant and 6¾@6⅞c for No. 4 Santos. There is a fair trade in m sorts, with prices steady. There is no stock of Bucaramang Angostura, Hayti, Porto Rico, or Liberian coffee, and the fore list quotations are nominal. Sales from September to October 4 include 22,568 bags Maracaibo, 9,426 ba Savanilla, 4,838 bags Central American, 1,379 bags Mexica and 1,324 bags Laguayra. We quote: Padang Interi 14@18c, with fancy at 24@28c, and very fancy higher; go Cucuta, 7½c, with choice at 10½c, best washed at 11c, a for extra fine lots, so far as color and style go, a premium 1@2c is asked; Central American, best marks, 9½@11c, a up to 13 for invoice lots—the latter choice Guatemal Mocha, 14@18c, and higher for extra fancy; best Mexica 9@11c.

Indian Tea in London.

The market is firmer, says the *P duce Markets' Review* of 19th ultim and in some cases prices have advanced, while most of t smaller quantity offered was sold. There is a tendency to further rise due to the reported appreciable shrinkage the season's production as compared with last year. Th coupled with the reduced exports from Ceylon, will make t available supply of the two growths materially less than 1900, and should the estimate of the crop prove corre which now appears probable, the prospects certainly poi to an improved market. The bidding at the public sales w more animated than last week, and the fall in values w practically recovered. The common grades met with goo competition, and advanced ¼d. per lb., and but little cle sweet tea can now be bought under 5d. The finest sor continue to be well bid for especially those showing appreciable depreciation in quality; on the other hand tho with appearance but inferior in cup meet with a compar tively slow inquiry, and have sold at lower prices. There h been a steady demand at hardening rates for the mediu

as giving a good infusion irrespective of leaf, but as is the se with the higher grades, those with appearance and fficient in liquor have met with only a moderate inquiry, nd prices generally have favoured buyers. The quantity talogued for public sale was 38,782 packages against 56,000 the previous week, 8,277 being withdrawn, a considerable ortion of which has since been sold privately.

overnment Cinchona-cultivation in British India.

A German scientist, Dr. Stuhlmann, who has recently returned from a journey to Java and British India, made for the purpose of studying e cinchona-cultivation, contributes an interesting article the *Tropenpflanzer* The cinchona-plantation in British ndia visited by the doctor is at Mungpo, about seventeen iles from Darjeeling. The cultivation was commenced in 862, when 40,000 acres were reserved for plantations ; a onsiderable part of this area is left in the natural state, as rest, whilst part is let for cultivation, at an annual rental of r. per acre, to the labourers, mostly Nepaulese, who number rom 300 to 400. Some 200 acres are planted every year, nd as the trees are allowed to grow for eight years there re about 1,500 acres continually covered with cinchona. fter eight years the trees are uprooted, and the ground is hen left lying fallow for a considerable time. One piece of round was said to have been in this condition for fifteen ears, after having produced one crop of Succirubra, and ven after this laps of time it will be necessary to manure with bone-dust before *Ledgeriana* can be successfully grown pon it. Wherever the character of the soil allows it *Calisaya edgeriana* is now chiefly grown. *Ledgeriana* thrives only a well-drained soil, and steep slopes are consequently dmirably suited for this variety. *Cinchona officinalis* does ot thrive here at all. Dr. Stuhlmann's article winds up ith a detailed description of the process of manufacturing uinine from cinchona. A fact which appears to have greatly truck Dr. Stuhlmann is that one of the labourers, who is onstantly working in a white cloud of quinine-dust, has ttended to this work for the last twenty-five years. This erson is no doubt perfectly malaria-proof, but one would xpect to find symptoms of quinine-poisoning where the dust f quinine is constantly being inhaled.

GENERAL ARTICLES.

THE INDIAN TEA INDUSTRY.

Messrs. Brooke, Bond & Co., Ld., of 17, Piccadilly, Manchester, rite as follows to the *Manchester Guardian* :—Many have wondered hat effect the increased duty has had upon the consumption of tea t home. It is now seen from returns issued by the Board of Trade that the additional tax of 2d. per lb. imposed last year has lightly checked consumption. In 1899 the consumption of tea as 5·98 lbs. per head ; it has fallen to 5·91 lbs. This has affected ndian and Ceylon planters, from whom we get our tea supplies. Already they were producing tea at a greater rate than the normal onsumption in the United Kingdom. This, together with an over-ountiful "flushing" season and the arbitrary fixing of the rupee alue, has brought heavy losses on the tea-planting industry. But uch losses have only served to stimulate the Indian Tea Growers' Association. With commendable zeal, they have turned their nergies to seek outlets in new markets, and they have found one, hey hope, in India itself. To Englishmen it may seem odd that he land which produces tea should know little of the stimulating ualities. Yet that is so. Many of the natives know tea only as a medicine, and not as a beverage. The tea they have used has not been the clean, pure, wholesome kind shipped to England, but decayed leaf mixed with mud and sweepings. It will be an excellent thing for the Indian people to acquire a taste for the health-giving properties of good tea. When they do so, and bring it regularly, instead of "the fiery juice of the palm and unboiled tank-water," there is reason to believe they will become a hardier and a healthier nation. The value of this outlet to the planters will be appreciated when it is remembered that if only one-fourth of the natives become tea-drinkers and drink 1 lb. per head per annum (one-sixth of the quantity consumed per head in the United Kingdom) more than one-half the tea grown in India would be required for native use alone. So vast a trade is worth securing. But the taste of the native has yet to be educated to accept a clean pure drink. Such an education will take time. Meanwhile the planters have decided to distribute one million pounds of tea in free samples among the natives for the purpose of stimulating this taste. The natives are not plutocrats, their income being in the region of 4d. per day and their outlay for food usually one farthing at time, so that the sale of tea to them in packets will have to be in very minute quantities. But it is not alone in India that new markets are being sought. Canada and the Northern States of America have hitherto drawn most of their supplies of green tea from China and Japan. British planters in India, however, are making efforts to capture a portion of this trade, and have begun to make a green tea specially for our kin in Canada and the States. One difficulty in developing this trade has been that many American people are indifferent to the flavour of tea and are satisfied if what is served is a warm beverage. It is only a few who appreciate fine-flavoured tea such as that which at least two milions of the British pople drink daily. In Persia, too, a new market has been found for Indian tea. A representative of the Indian Tea Association, who has been distributing samples in that countary, has been besieged by buyers. We may gain a footing in Persia with Indian teas for a time, but when the China tea industry becomes a Russian industry, as it may when Russia has devoloped her railway enterprises, we should have to retire.

A taste for tea is also fast increasing in Germany. At present it is confined to the wealthy classes of the communtity ; for tea that is in any way agreeable costs in the Fatherland from 3s. to 9s. per lb. The same duty is charged as in England—namely, 6d. per lb. France has developed a craze for five o'clock tea.

RUBBER IN AMAZONAS.

In the message of the Governor of Amazonas, Dr. Silverio José Nery, of the Congress of Representatives on the 10th July, 1901, we find the following remarks :—

In compliance with an old law a tax of 300 réis per kilo. is recovered on rubber and of 20 réis on other products to meet cost of the immigration service and for the construction of a *Bourse.* This special tax produced during the last 3 years 1.500:000$ which were paid into the Public Deposits Office, but were withdrawn and spent by previous administrations, the Government being debtor to the Deposits Office for the amount. With the object of relieving the Treasury as far as possible and putting its accounts into order, I venture to ask you to remit this debt and to suppress the tax altogether. By this tax exports are unnecessarily burdened whilst the debt of the State is augmented without any advantage. Later on when circumstances permit. Government can take steps to provide for those services by regular appropriations and without requiring to create special taxes.

It would, however, be a mistake to limit our efforts for restoration of financial prosperity and equilibrium to merely cutting down or fiscalising of expenditure.

The practical monopoly of rubber that we enjoy must not only be taken advantage of in every possible manner but obliges us to do all in our power to resist the encroachments of speculation.

With this object I beg to call your attention to two measures of the highest importance—the payment of export duties in kind and revision of the schedule. To the former I had occasion to refer in my message of 15th January when I pointed out the advantages of the measure. Experience has convinced me of the utility of the scheme by which new markets and consumers may be secured for

our rubber and conditions of our market be improved and the burden of duties themselves be perhaps relieved.

It will therefore be advisable to pass a law authorising the payment of a minimum of 25 or 33% of the exports duties in kind, with faculty on the part of Government to admit payment of the total duties in this form when convenient to the Treasury or circumstances of the market should demand it.

As the consequence of this resolution with which the financial measures of my programme will be complete, a special authorisation will be requisite for Government to dispose of the rubber or to borrow on security of same and thus safeguard the interests of the article and those of the Treasury. The difficulties caused to commerce by the scarcity of paper money are well known and the influence it must exercise on their profits. It is therefore, unnecessary to dwell further on a measure that will make the discharge of payments to the Treasury easy and put a check to the reckless speculation that does all in its power to monopolise them, in the absence of any intervention on the part of Government. The revision of the export duties on Rubber is also a matter for which I beg your attention.

The laws regulating the packing and preparing (*acondicionamento*) of rubber for export being in force, there is now no justification for the differential taxation of direct and transit (*cabotagem*) consignments.

I consider it indeed advisable to fix the duty at the mean of the two rates actually in existence. Considering the position, quality, and application of the article it can undoubtedly support an export duty of 20 % *ad valorem*, which is less than what had been charged for year in other parts and cannot injure anyone so long as the measure be generally adopted and put into practice.

Nor can it be alleged that this represents an increase of duties. Of the total quantity of Rubber, shipped from Amazonas one half at least went formerly by river boats to Pará and paid 21% duty. For this, the greater part exported, the new tax of 20% will therefore be lighter than before.

Leaving out of consideration the fact that at least for the present and until more definite steps can be taken it is absolutely necessary to counterbalance the recent loss of our frontier traffic, increased as it is by the smuggling from the Upper Purús, Acre, and Jurúa. This apparent increase of taxation will be compensated by the suppression of the special taxes which I have recommended, and the abolition of all dues on imports, that by raising the prices of the necessities of life raised the cost of living and production and to a certain extent neutralised the benefits derived from the preparation (*beneficiamento*) of the rubber at Manáos.

Although the increase of revenue at the cost of further taxation is not part of my general programme, the measure I have proposed is in my opinion indispensable for the work of financial restoration, which demands good will, harmony, and even sacrifice from all of us. I am certain that I shall not appeal in vain to my fellow-citizens, but whilst doing all that is possible for repairing the credit of the State, it is necessary to look always forward, and by careful measures prepare for future development.

It is true that as regards quality we may be said to possess the monopoly of rubber, the origin of our wealth. But we should not on that account let ourselves be blinded by indulgence in phantastic dreams, but rather remember that if it be true that the Amazon valley provides more than half of the total production, from 26·000 to 27·000 tons, Africa has become a formidable rival, producing some 24·000 tons, which with 3·500 tons yielded by other parts of Brazil, though of inferior quality, combine to depress the value of our own superior product, whilst the extensive and methodical plantation abroad of the Hevea Brazilensis contrasts so forcibly with our own neglect in this respect.

Certainly Amazonas is rich in native products, with many climates from that on the border of our great river to that of the Central and Northern Uplands; and rich, too, in most fertile lands. But for that very reason, now that we have to repair the errors of the past, all the more must we think of the future and make ready elements of resistance and production.

Such indeed is the objective of the measures I now propose: the repair of our finances and the laying of secure foundations for future prosperity, which cannot be far off, so long as we maintain our present line of conduct, in virtue of which, though beset by difficulties of all kinds, I am now able to present so relatively favourable a report. The rest will assuredly follow.

The decree of 8th October by which I disposed that all A zonas rubber should be prepared (*beneficiado*) at Manáos, foll by other dispositions respecting duties, is the starting point o my financial programme, by which Manáos will be raised to position corresponding to its great natural resources. As you aware, that measure raised great clamour and a regular camp of invectives of those who desired, even under the Federal reg to subject the State of Amazonas to others' tutelage. In noth however, could it affect the programme of the Government flexble to every suggestion.

The first argument on which claims were founded was that measure was a surprise. As you know, however, there was no surprise becauce ever since the decree of 25th December, account was kept of all the rubber shipped, the precaution being more rigorously enforced by the regulations of 24th August, In consequence of the abuses that the lax execution of this regula produced, it has been simply now revised and made effective decree 422 of 8th October, 1900.

To remove any appearance of surprise I fixed a period of 90 for the measure, establishing the forced preparation (*benef mento*) of Amazonas rubber at Manáos come into force.

In view of the state of this and neighbouring markets the fixed seemed perfectly reasonable, especially as there are n agencies of exporting houses established here to oversee cons ments received from the rivers of the State. Seeing, moreo that foreign shipping houses have not increased in numbers that all have agencies already in Manáos it is difficult to unders how there could be any surprise, especially with 90 days in w to take precautions, more than sufficient even to communicat necessary, with Europe itself with regard to operations that now executed with perfect regularity at Manáos.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Consumption of Coffee.—In the State Chamber of Deputies Paulo, a bill was introduced for granting a subsidy of 2,000:000 an Association to be organized by coffee-planters and merchant promote the increase of consumption of coffee. This subsidy be paid in maximum instalments of 200:000$, whenever the Asso tion proves having received from other sources in money or co a sum equal to the respective instalment.

Auxiliary Products.—From January 1st to July 31st of present year the Department of Agriculture distributed am 6,917 persons, 7,715 packages of seed weighing 21,992 kilos. August it distributed among 3,169 persons 3,568 packages weigh 15,327 kilos. Among the kinds of seed distributed were following:—Upland and Sea Island cotton, tobacco, flax, he jute, rice, wheat, maize, barley, clover, sorghum, manicoba, alfafa. In July and August the Department also distributed 29 cuttings of grape vine.

Exchange.—Extremes during the week ending Sept. 27 w $11\frac{1}{16}$d.—$11\frac{7}{16}$d. for 90 d/s Bank paper and $11\frac{1}{8}$d.—$11\frac{1}{2}$d for priv The average Bank 90 d/s counter-drawing rate for the week co out at $11\frac{17}{64}$d., the corresponding sight rate being $11\frac{13}{64}$d. aga $11\frac{1}{4}$d. the average sight rate of the *Camara Syndical.*

Coffee.—Entries at Rio and Santos during the week en 27thSeptember were 559,917 bags as against 566,837 for last w and 420,191 for the corresponding period last year. The aggreg entries for the crop up to same date amount to 5,444,174 b against 3,568,544 last year.

Shipments (embarques) for the same week were 488,697 bag compared with 479,680 last week and 294,330 bags same date year.

Declared sales were larger than last week's 231,000 aga 204,000, and 231,500 for the corresponding period last year.

Stocks are still increasing and are now 1,748,728 bags, or 95 bags more than on same date last year.

Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant appointment of "Purveyors to Her Majesty The Queen and Emp of India" from the year 1837 until the time of her death, have had the honour of being appointed by Royal Warrant "Purveyor The King."

MR. COTTON AND THE PLANTERS.

MEMORIAL TO THE GOVERNMENT.

Mr. M. Hadow, the Secretary of the Assam Branch of the Indian Tea Association, has addressed the Secretary to the Government of India in the Home Department as follows :—

SIR,—Under the instructions of my General Committee, and of the Cachar and Sylhet Branches of the Indian Tea Association, Calcutta, I have the honour to submit the following letter and enclosures for the consideration of His Excellency in Council.

1. Since the passing of Act VI of 1901 the relations between the planting community and the Executive of this Province have become considerably strained, in consequence, my Committee regret to have to submit, of the action of the Chief Commissioner of Assam, first of all in re-opening the wage question of Act coolies, which they had been led to believe was definitely settled by the Supreme Legislative Council in March last: and also advocating in strong terms the abolition of Act VI altogether.

2. Secondly, by issuing a resolution, reflecting on the character of an honourable body of men.

3. Thirdly, by issuing orders affecting the working of Tea Estates repugnant to the spirit of the Act, thereby causing confusion, and unnecessary disturbance on well managed Tea Estates.

4. Fourthly, by issuing orders that a new form of wage statement of Act coolies should be submitted monthly in lieu of every six months, which from the memorandum hereto annexed marked "B" leaves no doubt whatever that a wrong impression will be given as to the actual remuneration of Act coolies.

5. Fifthly, by issue of a resolution on the amendment of Act I in which an entirely new interpretation is laid down on the amendment of section 170, which, if strictly adhered to by District officers, it is contended would make it next to impossible to recover a defaulting sirdar (*see* extract from the Chief Commissioner's resolution No. 748/56 R., dated 4th April, 1901, forming part of correspondence in annexure "E").

6 . . . This was followed by the Chief Commissioner declining to attempt to enforce certain warrants issued in due course of law by his District officers against some sirdars and absconding coolies of the Makum Tea Estate (*see* annexed correspondence marked "C").

7. Lastly, by publishing in the Immigration Report for 1900 certain cases of friction between employers and employed, which, if in the interests of the administration of the Province, it was thought advisable to publish, it is contended should have been published and criticized by the Chief Commissioner with the strictest impartiality, and accuracy; instead of which it is impossible to conceal the fact, that the Report throughout shows a want of impartiality amounting to bias, in matters affecting the Tea Industry, and has naturally led to indignant protests from every part of Assam.

8. As to the first point at issue, my Committee would point out that in the Immigration Report for 1900, the Chief Commissioner loses no opportunity of re-opening the wage question, and in addition to this, His Honour now openly asserts (*see* para. 28 of the same Report) that "he is no longer prepared to advocate half measures and it is in his opinion a serious consideration, whether the Legislature ought not now. . . . to abolish a penal contract altogether."

9. My Committee contend, that a penal labour law, and Government protection to the labourer are correlative terms. Chief Commissioners have repeatedly stated that owing to the cost of labour some more effectual means of enforcing a contract than a Civil action affords, is demanded by justice; my Committee therefore view with alarm a declaration such as the above, emanating from one in such high authority; who could have hardly put forward such definite views unless under the authority of His Excellency's Government. It is submitted that the time has by no means arrived when it would be advisable, expedient or politic, to dispense with a penal contract; and after the assurance His Excellency gave in Council in respect of no further legislation on coolie matters, the above utterance of His Honour the Chief Commissioner causes not only unrest in the Province, but unsettles the relations between employers and employed.

10. As to the second point taken, it is submitted the resolution of the Chief Commissioner No. 1165-73 R., dated 10th May, is written in an unnecessarily suspicious and irritating manner and form; Inspectors are to proceed to gardens with a lurking suspicion of inaccuracies. It is submitted that it was never the intention that Inspecting officers should even make a point of questioning coolies and thus invite complaints, but rather, as a former Chief Commissioner said "he should state the results (of his inspection) by his own observation."

11. The third point at issue may be taken consequent on the above resolution, and my Committee submit that the cases of Executive interference with gardens, to this letter, resulted for the most part in harassing employers without being in the interests of the employed. The Executive in several instances not seeming to recognize or fully understand the internal economy of garden management, or the requirements necessary to ensure a contented labour force. The cases more particularly referred to are those of the Sukenbarrie Tea Estate in the Nowgong District, in which the Officiating Commissioner of the A. V. D. characterized the giving of a five null harder task to a coolie in his 4th year than given to new coolies as "an ingenious device for frustrating the intention of the law that long term coolies should get higher pay in the closing year of their agreements" and directed "that it should be stopped forthwith." The Borjan case in the Golaghat sub-division which resulted in completely upsetting the otherwise contented labour force of that garden, the Deckajulie case in Dibrugarh; and the Tingalibam case in the Sibsagar Sudder. With regard to the latter case, my Committee are confident that His Excellency will hold with them, that the Chief Commissioner's reference to this case in support of his arguments in Council was hardly jnstifiable.

12. On the fourth point my Committee would refer to memorandum in which are fully set forth the many objections to adopting such a form as that proposed by the Chief Commissioner to represent the average earnings of Act coolies. In the correspondence between the Government of India and the Chief Commissioner of Assam in 1891-92, the old form of wage was fully approved of, and accepted, but my Committee cannot trace any acceptance in the present instance by the Government of India of the new form "A," nor were the officers of the Assam Administration, or planters consulted as to its suitability, or even the expediency of its adoption.

13. On the fifth and sixth points, my Committee contend on the authority of Mr. Buckingham, who was in the Select Committee for the amendment of Act I, that the Chief Commissioner misinterprets the concluding para. of section 170. The Chief Commissioner on the 6th March. 1899, issued a Circular to all Deputy Commissioners in Assam, directing them to exercise discretion in the issue of warrants for defaulting sirdars, and the Planting Community loyally accepted such precaution, and intimated to their Agents in the recruiting Districts that the mere fact of sirdars staying over their time was not a sufficient reason that warrants should be issued; correspondence clearing up this point will be found in annexure "E."

14. Following the above the Chief Commissioner declined to enforce warrants issued in the Dibrugarh District against five sirdars who had long overstayed the period of their licenses, and of two absconding coolies all of the Makum Tea Estate, in consequence of which the services of these seven men have been lost to that Estate. In this case as will be seen from the correspondence marked "C" His Honour at first declined to communicate the nature of the orders passed by him on the serious complaint brought to his notice, and on repeated pressure being brought to bear, months after, merely informed the legal advisers of the Makum Tea Company "that the purport of the orders passed was that no further action should be taken in regard to the execution of the warrants."

15. With regard to the objection taken in para. 7 of this letter my Committee contend it will be sufficient to compare the form and manner of the Immigration Report for 1900 with previous Re-

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

ports issued by former Chief Commissioners, and by the Hon'ble Mr. Cotton himself, and submit, on such comparison, it is impossible to be blind to the fact of the marked want of impartiality amounting indeed to hostitility to planters and employers of labour, with which it is emphasized.

16. To instance the want of accuracy and impartiality shown by such Report, my Committee would refer to the chapter on Relations between Employers and Employed; and would draw special attention to the following cases of friction cited, *viz.*:—

Case No. 3, in which the Chief Commissioner states that "the case was originated by some violence on the part of the planter" (Mr. Calman) whereas my Committee are credibly informed that this was not the case!

In case No. 4, it is stated the coolie got three months for assaulting Mr. Mortimer, whereas my Committee are informed the sentence inflicted was for two years! So serious did the Magistrate consider the assault.

Again in case No. 7, the Chief Commissioner does not hesitate to state "that Mr. Greig struck one of the coolies some blows on the head with a stick. The coolie fell down and died on the spot." Whereas, as a matter of fact, the Jury found after unanimously acquitting Mr. Greig, "that there was no evidence produced before them to show that Mr. Greig struck deceased the blow under the ear" which was the only mark found on the head; and the Chief Commissioner's statement, therefore, appears to be utterly uncalled for, and amounts, it is submitted, to a grave libel on Mr. Greig.

In referring to case No. 9, the Chief Commissioner leads the public to believe that the incident was a trifling one, and that Mr. Begg had not given the coolies a holiday, and further infers that the riot arose from want of tact on his part. Though, as a matter of fact, the coolies had had a half holiday, and the excuse was merely seized upon as a culmination of considerable previous insubordination by the Sonthals who had for some time previously been terrorizing the other coolies, as pointed out by Mr. Begg in his letter to the Assistant Commissioner of Jorhat of the 25th October, 1900, when reporting the case.

It is submitted Mr. Begg showed the greatest tact and forbearance on the occasion, and it appears to my Committee to be a pity that the Chief Commissioner did not emphasize the fact that had the other coolies not interfered to protect Mr. Begg the riot would have terminated in bloodshed, if not in actual loss of life or limb.

In case No. 9, of which many details are given, and in which the Chief Commissioner holds the opinion, and expresses it, that "the orders passed were too severe" no mention is made of the important fact that the coolies implicated, wrecked the bungalow, or as stated on oath by the District Superintendent of Police in referring to this "practically every thing that could be broken, was broken."

While in case No. 12, it is stated "Mr. Jamieson used some force to a sirdar—His action was misunderstood, and a riot ensued, and Mr. Jamieson was assaulted. Whereas the sirdar in question, one Gunpot, in his sworn deposition, says, "The Assistant Manager did not ill-treat me, or use any force towards me." ... "He simply took me by the arm to show me the spot where to begin work." ... "The coolies were plucking leaves at random at their pleasure, but that could not be allowed. Hence they rose against the Sahib." Mr. Jamieson, in his evidence says, "I thought the sirdar could not understand me, and so took him by the arm to show the place where I wanted the work begun." It is submitted that the Chief Commissioner's reference to this case is both inaccurate and misleading, and that the more probable reason for the assault will be found in the sirdar's explanation, that the coolies who were plucking ticca, were not allowed to pluck at random wherever most leaf could be obtained.

These misstatements and omissions, together with the running comments, and opinions of the Chief Commissioner throughout the Report in question, taken in conjunction with the fact of the remission of the sentences on the coolies in cases Nos. 11 and 12 though the latter never appealed, and the reference to case No. 8 as a "trifling occurrence" "though serious notice was taken of it" it is submitted show a want impartiality, and indicate a distinct adverse bias against employers, and have caused a most unfavourable impression in the Tea Industry.

17. It is submitted that having regard to the vastness of the Tea Enterprise, and the sources from which the labour on Tea Estates are drawn, conflicts must occasionally occur between planters and coolies, however lenient the former may be, with their labour! and that the exercise of the utmost tact will not alwa avail, the most trivial circumstance and unlooked for imagina grievance, being alike seized on by the coolie as an opportunity riot; (*see* cases Nos. 8 and 12 referred to by the Chief Commission on pages 23 and 24 of the Immigration Report for 1900). My Co mittee have no hesitation in saying that this unfortunate tenden has received an impetus from the present attitude of the Executi of this Province and they have grave reasons for believing that will result in further undermining the prestige and control nece sary for the efficient management of Tea Estates.

18. My Committee believe that the punishment inflicted in t few instances where planters have been to blame, are in themselv sufficient to deter others (if such their be), from breaking the la but to gibbet all such cases of friction as has been done in Chapt VII of such Report is unnecessary, and uncalled for, stigmatizi as it does the whole industry, on account of the failings of t insignificant few.

19. My Committee have no desire to shield offenders, who rich deserve the punishment meted out to them for breaking the law an bring the Tea Industry into disrepute, but submit that it is le than fair or equitable to the overwhelming majority of Tea Planter who are among the most loyal and law abiding of His Majesty subjects, treating their labour force with the utmost leniency an consideration, that the industry should be held up to opprobiu not only throughout the vast Indian Empire, but also throughou the British Isles, where, needless to say, such sensational repor must cause the greatest anxiety and disquietude.

20. Having thus placed their case before the Government India my Committee trust that it may be considered in conjunctio with the grave representation already submitted by the India Tea Association on the 27th September last to the Secretary the Government of India in the Home Department. Leaving in confidence to His Excellency to decide, whether it would b advisable to appoint an Imperial Commission to enquire into, an settle once for all, whether the Act coolie is well treated, sufficientl paid for the amount of work he is called on to perform, and othe wise happy in his life and surroundings!

INDIAN TEA AT THE PARIS EXHIBITION.

Mr. Benjamin Rose, Honorary Secretary of the Indian Sectio of the Paris Exhibition, in his able and exhaustive report issue last night, says that the Indian Tea Courts were one of the mos pleasant popular features of the Indian Pavilion in the Trocader grounds. It is estimated, he tells us, that over 120,000 person patronised these courts during the seven months they were oper All through the Summer on fine days, between the hours of fou and six, every available seat was occupied and many visitors ha to be kept waiting for want of room. Some 30,000 decorate sample boxes of tea were given away. Each box contained a ounce of tea and a small booklet in English, French, and Germa giving particulars of Indian tea and how it should be prepared fo drinking. In a corner of the Private Exhibitor's Court, near th entrance to the Tea Courts, a small stall was constructed for th exhibition and sale of sample ¼, ½, and 1 lb. packets of tea and fo receiving orders for the delivery of tea from the permanent depô No. 3, Rue d'Alger. Over 8,000 lbs. of tea as well as a considerabl quantity of Madras coffee were sold in this manner. The appen dices to Mr. Rose's report conclude the final report of Mr. Edwar F. Langdale, the representative of the Indian Tea Association Mr. Langdale, writing on November 29th, 1900, says:—The likin for Indian tea had undeniably increased during the run of th Exhibition, but the increase of sales for the last few days is partl to be accounted for by the fact that purchasers had formed th idea that when the Exhibition closed the price of tea would b raised. This opinion was held by the trade, but that such will no be the case is now fast becoming evident to all, and our hopes therefore, are that we shall not lose much ground by reason of th Exhibition now being closed. That the low price can and will b maintained is, of course, in consequence of the support we hav received, and are to continue to receive, from the Association and which I venture to say is of far better form than that o subsidising grocers, with whom, however, we shall have t reckon later on when Indian tea is more generally enquired fo in France. Up to the present we have not been able to do ver much with the trade itself, for the reason that our price does no

rmit us to give a discount anything approaching the customary e in France—*viz.*, 25 per cent.,—but our hopes are that the pre- nt trade price may be modified if we can buy our tea through ore direct channels than we do now.

Infusion.—Owing, as I have already said, to their somewhat nexpected secluded situation the "Indian Tea Courts" were not sily found by many chance visitors, or by those who came pecially to visit them, but once they were found they became the sort of the best society, members of which have been known to y that the Indian Tea Courts were the most *chic* of any in the xhibition. Although in such "rushes" of business as occurred the Tea Courts, it was utterly impossible to give entire satisfac- on to every one, the complaints were very few indeed, and of ther a hypercritical kind. On the other hand, I am happy and ntent to mention that unstinted and warm praise was given by bitues of the Courts, notably the Princess Malakoff (who for ne days took her seat regularly at four o'clock), the Duchess of ecklenburg, Baron and Baroness Alphonse Rothschild, and the rench Commissary-General The Baron and Baroness were eased to say that the Grand Prix should have been awarded the ssociation for the manner in which the tea was served, as well for the goodness of the tea itself. The pretty boxes of samples ere much appreciated by all visitors, and happily by the French particular. About 30,000 sample boxes were given away during e Exhibition, and the balance of our stock will be distributed in nnection with the work to be continued at the Faubourg St. onoré and Rue d'Alger.

After some remarks about the demand for Indian coffee, Mr. ngdale proceeds :—

To revert to tea.—By a calculation of mine that on an average no e person ordered less than 75 centimes' worth of tea in the cup, e 69,500 francs' receipts represent 96,400 pots of tea (two cups each), but that number is considerably under-estimated, be- use so many people often ordered pots of tea for a smaller mber than their party consisted of, and also extra cups for the st.

Tea for two and cups for three, four, and five was an order equently executed. As also hot water in addition was served, fficient for another two cups; the quantity of tea drunk by each erson was, of course, much increased. I have not taken that into y calculations, but only the number of pots of tea served. Putting , however, at a reasonably low figure, I believe that not less than) to 60 people were every day served with extra cups without aving to pay anything except a penny for the accommodation. At is rate, in the 210 days of the Exhibition, 10,000 cups of tea can e added to the 96,400 pots accounted for.

The French do not always take their tea as the English do, but ey persevere in their attempt and evidently wish to like the everage.

Some more often than not dip their bread and butter and even ke into the cup of tea they are drinking, and some novices seemed consider the tea was a kind of grog to be mixed with the hot ater, which they poured into the cup first. Others poured the tea to the sugar basin, half the contents of which they had previously ten, and then into the hot water jug, and from that into the cup. r, for another change, they would partially empty the milk jug nd then pour tea into that. Our American visitors liked a glass iced water to drink either with their tea or after it. I do not ention these little parpeculiarities for the purposes of ridicule, ut rather to show that tea drinking in France is yet very much its infancy.

The expert was, of course, sometimes present in the Tea Courts, dging from the procedure of some of the visitors, who, to the reat wonderment of the foreign waitresses, would turn the leaves ut into the saucer or plate, examine them closely, and then turn em back into the teapot, and, having added more water, drink nother cup of tea.

I am aware that I am now about to tread upon delicate ground, ut as comparisons, sometimes unfortunately of an invidious nature, ave been drawn between India and Ceylon, I venture to do so, as cannot help thinking a totally wrong impression may have been iven to some garden proprietors and planters in India, who did ot visit Paris this year, that their interests were not always in the est keeping.

The circumstances under which the interests of India and Ceylon ot necessarily conflicting, but rather in friendly rivalry) were orked were very different. The Ceylon Commissioner, Mr. Renton, came over prepared to spend money lavishly in the interests of Ceylon tea. He did so, more particularly in the matter of advertisements—whether wisely or not it does not become me to say, but I do know that the Press were, so to speak, "nobbled" to the extent that, in their judgment, India was of secondary importance. I venture, however, to say that India with a less expenditure has, in comparison, done as well as Ceylon. An extensive free list, and many paid-for notices in the newspapers, of course, will always draw—for a time—as also do subsidies of another kind, and neither method adopted by Ceylon has injured India, but, on the contrary, has helped it. At this Exhibition, Ceylon had in their tea pavilion more than three times the accommodation India had in theirs—700 chairs against 200—and they worked under the direct auspices of the Ceylon Government. Between all the officials of the Ceylon Section, notably in that part relating to tea, and myself there has always existed the greatest friendliness, even to the extent of borrowing supplies of each other, and I do not impute to them any wish not to share some of their glory with India. Both have done good in France in the interests of tea.

Still, I cannot help thinking there were occasions when errors made by the Press might have been corrected by our friends, and wrong impressious thus prevented. To give only one instance: When the President of the Republic visited India and Ceylon, he was received in the former, at the entrance to which stood Indian Tea Court girls dressed in costume, from one of whom the President accepted in a most gracious manner one of the pretty little sample boxes of tea. So also did his retinue and many members of the Press, who at the same time made their notes concerning the Court. I was, as the Indian Tea Association's representative, personally introduced to many of the Press, notably the *Siècle*, which paper is particularly Anglophile. The President spent some time in the Indian Section, and then passed rapidly through Ceylon to Japan, so rapidly that there was no opportunity for the Ceylon Government delegate to present him, as he had intended to do, with a beautifully illustrated official catalogue of the Ceylon Court. The next day the Press gave all the honours to Ceylon, and the *Siècle*, to my particular surprise, reported, amongst other details, that the President visited the *Ceylon* Court, and that a charmingly-costumed girl belonging to that Court had presented him with a pretty little box containing a specimen of the island's tea! The other papers gave similar accounts, and in other ways misrepresented what had occurred. The representatives of two papers offered to give me small notices at the rate of about three or four hundred francs. I was unable to accept the offers, and their reports next day made no allusion at all to India!

Ceylon did not offer any explanation of the mistake I have mentioned, and which, perhaps, would not have been an unnatural one for the public to make, for at that period there was nothing except the exhibits to indicate which was the India Section.

The exhibit of tea in the Commercial Court attracted much attention, more particularly so as the tea sales stall was close to two of the show cases. The light, however, was not good, and although, with the object of showing up the tea better, I did not feel the globes more than three-quarters full, the exhibit at certain bones of the day was not so effective as could be desired. I may mention that the exhibit of very fine tip from some of the gardens, apart from all other merit, was most useful, in that many of the purchasers of our packets became disabused of the idea that tea with tip in it was not good, but contained some foreign matter.

I do not know if it is within my province to allude to the "judging;" for, of course, the reputation of the gentlemen appointed by the British Commissioners as jurors is undisputed; but I may, I hope, without presumption, ask to be permitted to say that no one could have taken more pains than Mr. Wilson did to have the tea properly judged and the awards fairly given.

All the samples, more than 400, which were in the show cases, were carefully examined in the leaf by all the jurors of Class 59, who, however, not being experts in tea, often deferred their opinion to Mr. Wilson, and that of Mr. Derode, the French expert on the Jury, and I would particularly mention how hard Mr. Wilson fought to have awards given to individual gardens independently of the Grand Prix which was to be awarded to the Indian Tea Association for the collective exhibit, and how, too he won his point in spite of very great opposition offered seemingly only on technical grounds.

The Gold Medal for coffee was, by a clerical error, first of all awarded to Ceylon, but was ultimately given to the United Planters'

Association of Southern India, after repeated and strenuous representations on my part.

SUMMARY OF QUANTITY AND VALUE OF TEA IN PACKETS SOLD AT THE EXHIBITION AND AT DEPÔT, 3, RUE D'ALGER, PARIS.

	K.	Frs.
From 17th to 30th April. At Depôt ...	... 13·125	90·40
For May. At Depôt	... 114·890	737·60
For June. At Exhibition and Depôt ...	... 388·010	2704·60
For July. At Exhibition and Depôt ...	... 483·600	3354·10
For August. At Exhibition and Depôt ...	... 492·375	3208·60
For September. At Exhibition and Depôt	... 673·750	4642·85
For October. At Exhibition and Depôt ...	... 1021·575	7117·25
For November (approximately). At Exhibition and Depôt	...1000·000	6600·00
	4187·325	28455·40

(Equals 8,364 English lbs.)

COFFEE IN LONDON.

A broker's circular issued on the evening of the 17th ultimo makes the following statement: "If later on further confirmation of moderate or poor prospects comes to hand, present values being very low will prove attractive to traders as well as speculators. This, no doubt, is true, says the *Produce Markets' Review*, but it is well to notice the last word in the quotation. It is the speculators who have brought about the recent rise amounting to 5s 6d during the last 3 months, and the trade generally do not see the warrant for it. There are two arguments used in favour of the rise, the first being that values are low. This, no doubt, is true, and is admitted by all. The same can be said of almost all articles of Colonial produce, and, with the enormous increase in the area of production, such is likely to be the case until consumption has evertaken production. Judging by the steady addition to the world's stock during the last five years it cannot yet be said to have done so, and speculators overlook the fact that every advance in values must tend to check consumption, and so operate against themselves. The second argument is that the coming Brazil crop is to be short; this can be nothing but pure speculation, based upon the statement that the trees are flowering badly. It has been proved on many occasions that estimates based on this the first flowering are most fallacious, and that it is far wiser to wait until the middle of December, or early in January, for reliable figures The fact is that sentiment has turned in favour of higher prices, and it remains to be seen whether the trade, who do not want an advance, or the speculators will prove correct. At this time of year the Brazilians generally manage to start some rumours that will enhance values, and enable them to sell the crop which they have in hand. Last year it was stated that the crop had been much over-estimated, and arrivals from the interior were judiciously curtailed to make such a statement seem plausible, but only to be contradicted by the largest out-turn ever received. This year a new scare is developed in another form, and time alone can show whether it is correct or not. Attention having been almost entirely taken up with Santos news, very little has been done in actual coffee, and prices are strong without being much dearer.

PRODUCE AND PLANTING.

The trade between China and Russia over the Kiakhta route is being superseded by the Vladivostock and Nicolaievsk route. It consists chiefly of tea which had been bought in Hankow, and was forwarded by camel caravans *viâ* Tientsin and Kiakhta for the Central Asian and Russian markets. The following are the most recent figures supplied by Messrs. J. Welch & Co., of Mincing Lane, of this year's trade, being dated Shanghai, September 4, and are compared with the figures for the corresponding periods of the two previous years, showing at a glance the change which has taken place in the past two years. May 1 commences a season. Export of tea *viâ* Port Arthur, Newchwang, and Tientsin (old route): From May 1 to September 4, 1901, 1,398,961 lbs.; from May 1 to September 4, 1900, 2,715,488 lbs.; from May 1 to September 4, 1899, 20,391,931 lbs. Export of tea to Vladivostock and Nicolaievsk (new route): From May 1 to September 4, 1901, 21,787,556 lbs.; from May 1 to September 4, 1900, 8,908,130 lbs.; from May 1 to September 4, 1899, 7,285,485 lbs. The same change has taken place betw Bombay and Batoum. Teas which formerly found their way Central Asia *viâ* Bombay now go in increasing quantities Batoum.

* * *

Several letters have recently appeared in the provincial P about the weighing of paper with tea, and now a correspondent the *Times* calls attention to an anomaly in our laws whereby punish for false, but not for short weight. He instances bread tea, and says, with regard to the latter, the grocer used to bl his own tea. Now he buys it quite as cheaply, much be blended, made up into packets, ready to hand across the coun The packet in many cases does not contain a pound of tea. little printed notice on the wrapper to the effect that the pac weighs a pound with the paper means nothing to the ordin purchaser. How many even of the intelligent middle-class r what is printed on the wrappers of the goods delivered to the Neither of the two classes is aware that that notice me thousands of pounds extra profit every year to the big packet firms who use it.

* * *

A writer in the "Tea and Coffee Journal," of New York, ferring to the tea market there, says: "Ceylon and India teas m increase in popularity, so far as black teas are concerned; and fr some experiments made this season in 'Ceylon Greens' it is unlikely that before many years more they may occupy an imp tant place in our tea distribution, and the jobber and retailer fosters the trade in both of the tea products from India and Cey will not be the loser."

* * *

It is mentioned by Mr. Robert Mitchell Floyd, of the "Tr Press List," published in Boston, U. S. A., that tea culture in southern part of the United States was attempted as far back century since, the produce costing about £15 per lb to grow. Ag an attempt was made in 1848. In 1881 Congress made an app priation for an experiment in tea culture, but when Mr. Will Saunders, of the Department of Agriculture, made an examinat of the work done under it, he found that owing to the illness of expert and other causes, he had to report that there was little p pect of anything of value being accomplished. Mr. Floyd, in April number of the "Trade Press List," published an interest account of a visit paid to the South Carolina tea gardens of Shepard.—*The Home and Colonial Mail.*

THE COLOMBO TEA TRADERS' ASSOCIATION

EXTRAORDINARY GENERAL MEETING.

An extraordinary general meeting of the Colombo Tea Trad Association was held in the Chamber of Commerce room, Colom on 4th instant. Mr. Stanley Bois presided and the others pres were:—The Hon. Mr. W. H. Figg, Messrs. D. W. H. Skrine, F Street, J. A. Henderson, G. Thomson, A. Lampard, W. Somerv W. Seale, E. Benham, J. A. Adams, G. H. Alston, W. E. Drury, Bartleet, C. M. Wright, W. E. Mitchell, A. G. G. Hyde, H. Waldock, R. Davidson, Hercules J. Scott, E. R. Waldock, G. Ginn, A. R. A. Heath, J. G. Melrose, R. John, S. P. Jeffery, W. Barber, L. O. Leefe, W. B. Cooke, J. Lochore, F. M. Mackwood W. Booty, and F. W. Waldock (*Secretary*).

THE AUSTRALIAN TARIFF ON TEA.

Mr. G. H. Alston, on behalf of Messrs. Whittall & C moved the following:—

"That this Association cordially approves of the action taken the Chamber of Commerce in approaching the Federal Parliam of Australia with a view to a re-adjustment of the duty proposed tea in bulk and endorses the arguments brought forward by t body that the imposition of an *ad valorem* duty is seriously de mental to the interests of capital employed in the tea industry Ceylon and India, placing, as it does, a premium upon cheap Ch teas. That this Association is of opinion that the 1d. per additional duty on teas packeted in other countries than Austr will be a great hardship to those in Ceylon and elsewhere in British Empire who have invested capital in developing that tr and is not in the interests of the consumer generally in Austr as it prevents him, except at an increased cost, from obtaining packeted in the country of production which must be regarded

guarantee from any admixture with growths of foreign countries. That the Tea Traders' Association of Ceylon respectfully direct the attention of the Federal Parliament to these facts and ask for the adjustment of the Tariff on tea so as to make it less damaging to this large industry of Ceylon and other British countries."

He briefly explained how the question of the exemption of the *ad valorem* duty had been taken up by the local Chamber of Commerce whose resolution had been forwarded by wire to Australia asking them to consult the wishes of the Tea Trade in the Island before any final resolution was come to. He also referred to the letter in last night's *Times of Ceylon* from Messrs. Finlay, Muir & Co. setting forth the views of the tea trade of Victoria on the *ad valorem* duty and stating that an *ad valorem* duty would be very difficult to work and would upset the whole of the usual course of trade. He also read an account of an interview with some members of the trade in Sydney, setting out the objections to a 1d. a lb. duty from the producers' point of view.

Mr. J. A Henderson briefly seconded.

Mr. G. Thomson proposed as an amendment the following :—

(1) That this Association approves of the action taken by the Ceylon Chamber of Commerce in approaching the Federal Parliament of Australia with a view to the re-adjustment of the proposed duty on tea.

(2) That this Association fully endorses the resolutions passed at a meeting of the members of the Tea Trade of Victoria, held in Melbourne on the 10th October last, which were embodied in a letter to the Right Hon. Sir George Turner, *Kt.*, Treasurer of the Australian Commonwealth, as being in the best interests of this important industry.

(3) That this meeting requests the Ceylon Chamber of Commerce to place these views before the Treasurer of the Commonwealth of Australia and the Melbourne Chamber of Commerce.

Mr. S. J. Jeffery seconded the amendment.

He said that the chief reason and strongest argument in favour of the omission of the clause was that they were entirely supported and seconded in the meeting which was held in Melbourne. He felt sure if that resolution was passed it would tend to show that they were anxious about the 1d. per lb. on tea, and that would be against the interests of the trade. Therefore he thought it better to leave out any mention of the 1d. duty on tea.

Mr. Thomson referred at length to the feeling in Australia against the employment of black labour and said the latter part of the motion would do harm. He thought the firms who brought the motion forward were ill-advised to do so. The first part of the motion he agreed with but the question of packet teas was such an infinitesimally small matter that it should not have been brought up at all.

Mr. Lampard also spoke in favour of the amendment.

The Hon. Mr. W. H. Figg thought that they should thresh out the whole question that day rather than seek refuge in a resolution passed outside the Colony.

Mr. J. A. Henderson said he thought part of Mr. Thomson's amendment might possibly be judicious, but his remarks certainly were injudicious.

Mr. R. Davidson proposed as a second amendment that that part of the original resolution from the words "That this Association is of opinion that the 1d. per lb. additional duty" to the end of the clause "this large industry of Ceylon and other British countries" should be deleted.

Mr. W. E. Mitchell seconded.

Mr. S. P. Jeffery suggested that the words "in bulk" which occurred in the body of the resolution be deleted.

The Chairman said he understood that the proposer and seconder had no objection to the withdrawal of the words "in bulk."

The amendment of Mr. Davidson was then put and declared carried, two only, Mr. G. H. Alston and Mr. Hercules Scott, voting against it.

The Chairman then said that with the passing of that amendment the previous amendment and the original resolution fell to the ground.

RAISING THE LIMIT FOR BIG BREAKS.

Mr. Lampard (on behalf of Messrs. Crosfield, Lampard & Co.) moved the following resolution :—

"That in view of the increased number of lots offered for local sale the limit for big breaks should be raised from 700 lbs. to 1,000 lbs."

Mr. Lampard said the limit for large breaks at home and in Calcutta was 18 chests and 24 half-chests, while in Colombo the present limit was 700 lbs. He believed he was correct in saying that the buyers in Colombo were unanimous in believing that the time had come for raising the limits for large breaks in the Colombo market. He had only heard of one firm which opposed the proposed alteration. In Colombo no such system of sub-division of the work of tea-tasting prevailed as in London, the only division being between large breaks and small ones. He did not believe any of them could go on continuously tasting and correctly valuing the number of so-called breaks which were now offered in the local market. The man who tasted the large breaks had more than he could do, and the man who tasted the small ones not enough. It was in the interests of sellers and buyers alike that an opportunity should be given for the sub-division of the labour of valuing the sales in order to ensure a correct valuation of each lot offered. Although local offerings since 1895 had increased from 24,000,000, to over 50,000,000 he did not at all believe the limit in the expansion of the market had nearly reached high water mark. A large and free local market was essential to maintaining on a proper basis the cutivation of tea in that island, and the present proposal was a step in the right direction to be followed later on by raising the limit of that now existing in London.

Mr. Adams (Messrs Odell & Co.) seconded, and the resolution, after being supported by Mr. J. A. Henderson was carried *nem. con.*

On the suggestion of Mr. G. H. Alston, Mr. Lampard added to his resolution that the new rule come into force from the first sale of the New Year.

THE LONDON COFFEE MARKET.

A Week of Excitement.

Not for a long time, says the *London Commercial Record* of the 25th ultimo, have the Sale Rooms witnessed such excitement as happened in the Coffee Ring during the week under review. Brisk selling and buying have been proceeding the whole week, and, if the terminal markets close a shade "off," we may regard this event more as a natural reaction following a sharp rise than as a sign of weakness in the position of coffee. Not very long ago the feeling in the terminal market was a decidedly bearish one, heavy stocks, bad trade, and the expectation of another big crop in the Brazils all led operators to believe in lower values, and few were the bulls who were hoping that by some unforeseen means prices would be raised. But it is the unexpected that generally happens. At first private wires came through speaking of a probable crop failure owing to bad weather, but little heed was paid to them, as they are no strangers in our market. As time proceeded, these rumours attained mere tangible form, and there being no want of confirmation of the report of an exceptionally bad flowering, operators began to pay more attention to these communications, and prices began to harden. Ever since telegram upon telegram has been received, one more alarming than the other, speaking of a poor crop, insufficient yield, and even of a total crop failure. Our sensitive market could not possibly remain indifferent to these alarming reports; buyers rushed in, and prices rose rapidly until Wednesday last, when after paying 40s for May next, bulls retired and the boom experienced a sudden check. No doubt this break in the upward movement has caused some consternation among a certain class of bulls, outside operators, put in by benevolent friends, and their selling somewhat weakened the market; but the bulk of bulls still believing in the soundness of the position stuck to their holdings, giving thereby a certain amount of stability to the market which otherwise might have experienced a bigger drop than actually has been the case. The market closed thus in a feverish condition, bulls maintaining that in the face of the exceptionally poor flowering, prices have not risen sufficiently, whereas the more timid fear that the second flowering may be a great extent counteract the harm done by the first. All other coffee holders are of course in sympathy with the Brazil sorts, and try their utmost to instil further strength into the market by asking absurd prices. For the present, however, buyers appear to be determined to await further developments, and unless a strong bull appears we are likely to see for some little time to come a nervous uncertain market.

THE PROPOSED COFFEE CESS.

(By a Coffee Planter.)

As the U. P. A S. I. Chairman's proposal is one of great moment to the whole planting community, perhaps you will allow me space in your columns to express my views concerning it at some length. There are two distinct points to consider:—(1) The manner in which it is proposed to raise the cess. (2) The manner in which it is proposed to deal with it. As regards the first, it appears to me to be quite the best proposal that has been made, both with respect to the principle on which it would be levied and to the manner in which it would be collected. There certainly would be some trouble involved on curers, but as regards planters, the method of payment would be simple, and would not be felt to the same extent as if we were called on to pay hard cash, though, after all, the amount of the cess is very trifling. Moreover, from the point of view of the "Fund" it would be excellent, as there would be no opportunity for arrears. There are no doubt minor objections—for instance, a considerable quality of cherry coffee does not reach the curer's hands direct from the producer, and so would escape the cess, but, as Mr. Gompertz says, it is impossible to get perfection, and I think this proposal is as near to it as any likely to be evolved.

As regards the second point, it was decided at the last U. P. A. Meeting that such funds as can be raised shall *at first* be devoted to trying to capture Indian retail markets, and I take it that planters are for the most part prepared to accept the policy adopted by the parent Association, and for the moment lay aside the idea of establishing new markets elsewhere. But it should be noticed that the policy of the U. P. A. is "*at first* to devote funds to capturing Indian markets," not permanently, and I protest against the apparent finality of Mr. Gompertz' proposal. In no case should we agree to any such scheme save for a fixed period of trial. I hope some day we may endeavour to catch the Australian market, in which I am confident there is great scope.

If, then, our policy be to raise funds and to devote them to capturing Indian markets, the question that naturally arises is, What means have we at our disposal for so doing? As far as I am aware, there is no other organisation at present existing in South India that would, in any measure, be likely to accomplish our purpose save the U. C. G. Company. Let us thus examine the proposal. It is that planters should pay Re.1 for each ton of coffee they send to be cured, that curers should pay 4 annas for each ton they receive for curing, that the whole should be made over to the U. C. G. Company, and that subscribers should be allotted shares, or proportion of shares, *pro rata* to the amount they pay each year. It may appear to some that the proposal is more to the advantage of the Company than to planters, but I think a little consideration will convince them that it is a fair and square one. The Company practically says:—"We want capital, you want the sale of your coffee pushed, we have the organisation ready at hand to do this, invest your money with us, whereby you will run the ordinary risks of profit and loss attendant on such undertakings as ours, but with the ulterior advantage that such success as we may meet with will promote the demand for your product." There are some matters of detail that require clearing up. For instance, the proposal to add the aggregate of the cess annually *ad infinitum* to the capital of the Company strikes me as somewhat extraordinary, and would probably require special provision which the existing shareholders might not view with equanimity. Such details, however, are no doubt open to satisfactory settlement.

If we admit, then, that the proposal is sound and that the Company's organisation is at present the only existing one at all capable of promoting our ends, we must ask ourselves if we have sufficient confidence in it to entrust it with the work. I know very little about the Company, and though my ignorance may be a fault, I believe it is not an uncommon one. The only information that has reached us, as far as I am aware, is contained in the Chairman's Annual Report, which appeared in one of your recent issues. Briefly put, what I gathered as the gist of that Report is:—

1. That the Company has worked at a loss.
2. That the Directors not only do not see their way to restricting their sales to pure coffee, but cannot undertake to state on their tins the proportion of chicory.
3. That in the interests of the Company they deem it inadvisable to state the amount of their exact sales.

Now, there may be satisfactory explanations of one or all the above points (Mr. Hodgson at the Meeting did explain how N arose), but I ask any impartial critic whether the Report a stands is such as will induce planters to go "*all together* for U. C. G. Company." I wish the Company every success, as I beli the projects it has in view are on the whole excellent, but I ma tain emphatically that it is incumbent on the backers of t scheme to place as full information as possible before the planti community regarding the constitution of the Company, its *mo operandi*, and the extent of its business. Otherwise, I fail to how it can expect the ready acquiescence which Mr. Gompe seems to hope for.

The policy of the Company as regards chicory is disappointi and it will be difficult to bring it and the consistent opposition adulteration in any form which planters have maintained into li The Secretary, in his letter dated the 31st ultimo, however, sta that there is an increasing demand for pure coffee, while that "French coffees" is gradually declining. A re-considerati therefore, of the question would seem possible.

There are other objections which might be urged against t U. P. A. Chairman's proposal, the chief of which appears to me be that the operations of the Company are carried on, I believe, one centre, and that it naturally makes its purchases from t nearest sellers, consequently, those who are the most adjac would receive more direct benefit than more distant ones. T success of a scheme of this description must depend in a gr measure on the impartiality of the lines on which it is conduct and it would appear that unless some such plan, as was suggest in one of your recent leaders, of placing low grade coffees with Company for sale, or the establishment of branches in the ch coffee centres, were contemplated, a general approval is not p bable. I have no wish to throw cold water on Mr. Gomper proposal, but it is of too important a nature to admit of our bei rushed, and I would suggest that, if he wishes to give early eff to it, he should lose no time in putting us in possession of as f information as he can regarding the doings of the Company a its proposed extensions, should the increment to capital be ma also in endeavouring to effect some modification of its adulterati policy. He urges us to agree at once so that we may not lose t cess this year. By all means let us agree to the cess, but let t disposal of it be deferred till we are in a better position to jud of the best method. The coffee industry at present is staggeri under the weight of various adverse circumstances, and I rega the establishment of new markets as one of the resuscitati measures available. With it and others in view, *spero melio* —*Madras Mail.*

THE VICEROY AND THE PLANTER.

At Silchar on the 8th instant H. E. the Viceroy received address from the Surma Valley Tea Association, as follows:

We, the members of the Surma Valley Branch of the Indian T Association, as representing the tea planting community in t districts of Cachar and Sylhet, desire to express our deep se of gratification that Your Excellency has found it possible, notwi standing the claims which press upon you from other parts of t Empire, to visit the Surma Valley, and we desire to offer you c most cordial and respectful welcome to this portion of the Province Assam. We are not able, as was the case with our fellow-plant in the Brahmaputra Valley, to welcome you as the first Viceroy a Governor-General of India who has visited this portion of t Province, as your distinguished predecessor, Lord Northbro visited the Surma Valley some five-and-twenty years ago, wh the industry was more or less in its infancy, the total exports of from the whole Province at that time being only about 20 milli of pounds, or about one-sixth of the present outturn. We can o express the hope that so long a period as a quarter of a centu may not again intervene before we have the pleasure of welcomi a Viceroy of India.

We do not desire to weary Your Excellency with a lengt address, or to dwell in detail on our local requirements, but o propose to touch briefly on the position and prospects of the industry in the Surma Valley, and on the undertakings which consider necessary for the proper development of these distri of the Province of Assam. The relative importance of the Sur Valley, as a tea-producing district, as compared with the Brahm

utra Valley, may be estimated by the fact that while the outturn of ne crop of 1900 in the Brahmaputra Valley amounted to 68 millons f pounds, the outturn in the Surma Valley amounted to 61 millions.

In the address which was presented to Your Excellency at Tezpur, n the early part of last year, by the Assam planters, the question f defective communications occupied a very prominent position. Ve desire to draw Your Excellency's attention to the fact that the tate of matters as regards road communications in these districts s worse than in Assam Proper. The almost apparent hopelessness f ever being able to construct permanent and durable roads on ccount of the absence of road metal and the prohibitive cost of nporting it weighs heavily upon us. For a portion of the year our oads are practically impassable, and such repairs as the Local Boards are able to execute from inadequate grants made to them or the up-keep of roads are of the most transient nature. With his fact in view, we look to the construction of light feeder lines of which there are none in either of the districts) to connect our gardens both with the main line of the Assam-Bengal Railway and he river, and also to serve as a means of transit for the large mount of native traffic which would probably use them. Proposals ave, as Your Excellency is aware, been made for the construction of uch lines, but so far without any practical result. We feel little loubt that capital would be attracted to the districts for this purpose if the Government of India could see their way to offer avourable terms, and also a minimum rate of interest. Such assistnce would be of immense benefit, not only to the tea industry, ut also to the general development of these districts of the Province.

While touching on the subject of the great need for improved communications both by road and railway, it would perhaps be appropriate for us to remark on the great benefit which the construction of the Assam-Bengal Railway has already conferred on these districts of the Province. No less than 1,160,000 maunds of rice have been transported since January, and this at a time when, owing to the failure of the crops, we were reduced to famine conditions. We can safely say that, had it not been for the existence of the railway and the cheap rates at which grain was carried, disaster would have stared us in the face, and numbers of the raiyats would probably have been reduced to starvation. Even under existing circumstances heavy loss has been sustained by many gardens. In saying this, we do not reflect in any way upon the River Carrying Companies, who could not possibly have carried the whole of the traffic, and whose efforts were also handicapped by drought and the low state of the rivers.

We here desire to tender to Your Excellency our grateful aknowledgments for the appointment of Mr. R. H. Henderson as an Extra Member of the Legislative Council of India during its last session in Calcutta, when the Bill to consolidate and amend the Law relating to emigration to Assam was under consideration. We recognised in this appointment Your Excellency's earnest desire that the Tea industry should be fully represented when important questions in which it is interested are under the consideration of Government. Our views on the Labour Question were fully represented by Mr. Henderson in Council and on the Select Committee, and we do not propose to refer further to the matter in this address, more especially as sufficient time has not elapsed to enable the amendment of the law to be fairly tested in the labour districts. At the same time we would draw Your Excellency's attention to the satisfactory working of Act XIII of 1859, with the provisions of which both employers and laborers in these districts are contented.

Your Excellency is well aware that the tea industry is at present passing through a very critical period and a time of great depression. The increase in taxation at home concurrently with the severe fall in prices has been the means of causing great anxiety to all whose capital is invested in tea, and to agents, planters and all who are engaged in the management of this important industry. We feel quite sure, from Your Excellency's sympathetic references on more than one occasion to the difficulties with which we are beset, that the Government of India do not desire to increase those difficulties, or to make our position more trying. In this connection we would desire respectfully to refer to the recent resettlements both of Cachar and Sylhet. The planters of Cachar submitted a memorial to Your Excellency last year, representing what they considered the injustice of assessing all the tea lands throughout the district at one uniform rate and on the basis of the highest rate assessed on rice land. As this memorial went into full details with regard to what we felt to be undoubted grievances, we do not intend to refer further to the matter here, except to express our regret that the prayer of the memorial has not been conceded. The resettlement of Sylhet has recently formed the subject of correspondence, both with the Government of India and the Assam Administration. We acknowledge with thankfulness the concession made by the Assam Administration, by which, in the case of any ilam estates in Sylhet held for tea cultivation, the assessment of which, at the sanctioned rates, would produce an enhancement of over 25 per cent, the enhancement shall be limited to 25 per cent. for the first four years of the term of the new settlement, after which the full assessment shall be imposed during the remainder of the assessment. We note that this concession has the approval of the Government of India, and we fully believe that it was the intention of Government to lighten our burdens in connection with land. We feel, however, that the Government of India have hardly realized what the consequences will be of the recent heavy increase in the assessment, coming, as it does, at a time when the financial position of the industry is so unsatisfactory. We respectfully submit, for Your Excellency's consideration, the desirability, if it is impossible to reconsider the recent settlement rules, of, at any rate, postponing their operation until the difficulties which beset us at the present are successfully surmounted.

There is one more point we should like to bring to Your Excellency's notice, and that is the frequent changes in Executive Officers. We believe that this important matter has already engaged Your Excellency's attention in other parts of India; we trust, therefore, it may please Your Excellency's Government to pass orders that the Chief Executive Officers in these districts be changed as seldom as possible.

In conclussion, we desire to express our regret that Lady Curzon has not been able to accompany Your Excellency, and we wish you a pleasant and prosperous journey to Burma.

His Excellency the Viceroy, in replying to this address, spoke as follows:—Gentlemen,—Your very temperate and well composed address opens with a reference to the circumstance in which the only one of my predecessors who ever visited the Surma Valley came here as far back as 27 years ago. It may interest you to learn that among the ex-Viceroys of India, of whom there are now five living at home, there is none who takes a keener or more constant interest in the welfare of the country which he once administered so conscientiously and so well than Lord Northbrook and that he still follows with the closest vigilance everything that passes here, though it has taken his successors a quarter of a century to follow his example in visiting Silchar. I hope that the tradition may now become fixed, and that my successors will not be so unwise as to deny themselves the pleasure which I am enjoying to-day of meeting the inhabitants of this interesting and prosperous neighbourhood. Had I not been able to supplement my visit to the Brahmaputra Valley last year by a similar visit to the Surma Valley before the end of my term of office, the condition of climate, of communications, and of labour differ so materially in the two cases that a man would no more understand Assam who had seen one and not the other than he would be able to judge of London had he only seen Bloomsbury and not Belgravia, or, *vice versâ*. Which is Bloomsbury and which Belgravia in the presnt case I will not undertake to say (loud laughter), perhaps neither is either (renewed laughther).

A prominent place has been given in your address to the subject of communications in this part of Assam and to the desirability of connecting the tea gardens by light feeder lines with the railway or the river; and you add that you entertain little doubt that capital would be attracted to the district for this purpose if the Government of India could see its way to offer favourble terms and a minimum rate of interest. You are right in one respect, but if you will allow me to say so, you are wrong in the other. The question is not one of favourable terms at all. We have never boggled about terms, or if this has ever been done in the past we certainly should not do so now. We are prepared to make the conditions as favourable as is necessary. I might almost say as favourable as is desired. But that is not the question. The confidence of every promoter that I have come across, great as it is, falls short of being willing to undertake the risk without a Government guarantee. He always declares that the prospects are assured, but he prefers that this should be assured by the bond of Government rather than by his own. Now I do not in the least complan of this business. Men are right to be cautious, and if they want to attract capital they know that it is better to have Gov-

ernment behind them than to step into the market alone; but as I explained last year at Gauhati, the moment a Government guarantee is asked the scheme passes at once into another category. It falls within the Government programme. It has to be correlated with every other railway demand that is based upon a Government guarantee or that involves the expenditure of Government money in every Province of India. You may say why not, and why should not Assam have its turn? To this the answer is very simple. Assam is already having a good deal more than its turn. The allotment of funds that we make annually to the Assam-Bengal Railway is greater than that to any other railway in India with three exceptions, and two of these are main trunk lines not running through, what have been described to-day as backward districts, but through the most populous Provinces of the Empire. Now we have to observe a certain proportion all round, and we cannot out of the limited funds at our disposal both provide large sums for the completion of the Assam-Bengal Railway (the great benefits of which to this district you have frankly admitted in your address) and at the same time risk it in the shape of guarantees upon smaller local enterprises. If we did so every other Province would clamour and scream, and my tours would be punctuated not so much by polite petitions as by angry protests (laughter). As soon as we have completed the Assam-Bengal Railway, then I hope that we may have the means to help you elsewhere. Meanwhile, as I said last year, there is not the least objection to the Local Boards undertaking the matter on their own account. I should like to see an expansion given to the financing of small railways by Local Governments and their subordinate agencies, and if I were an Assam planter or a person interested in the exploitation of the country, I would sit down and address myself to the problem from this point of view.

You have spoken in your address of the period of depression through which the tea industry has been passing. I am glad to see from a careful study of the declared dividends of the various tea companies in Assam that this is not universal, but in some cases it is undoubtedly severe, and generally speaking it is widespread. Into the causes of this state of affairs it is not necessary for me now to enter. We discussed the whole matter at great length in our debates in Council at Calcutta last Spring, and let me here say that I look back upon those proceedings with the most agreeable recollection. The case of the planters was stated with much ability by Mr. Buckingham and by Mr. Henderson, the latter of whom hailed from this immediate neighbourhood, and the substantial agreement at which we ultimately arrived was, I think, a proof of the advantage of frank and friendly debate. It certainly gave me a knowledge of tea which is incapable of being acquired from the inside of a tea-cup (laughter) and which I think enables me to understand, more intelligently, the vicissitudes and troubles of the industry in which so many of you are engaged. There is one respect in which I gather from your address that you think those troubles have been augmented, namely by the recent revision of the land settlement in these districts. I have looked into the matter, and I hardly think that the grievance is one of which much can be made. I remarked in reply to the preceding address that rates here are much lower than those in force in the As Valley, and, find that the total enhancement upon the tea l in Sylhet was only Rs.10,000, which can scarcely involve appreciable addition to the cost of output. Moreover it been in a large measure due to the assessment of lands which h been brought under cultivation since the last settlement, which could not of course escape paying their due share. In ca where the enhancement might have involved a substantial incre in the cost of working we have made the concession by postpo ment to which you have referred.

Gentlemen, having come twice to Assam in the course of months, I do not suppose that it will ever be my good fortune visit this Province again. Let me say therefore that I shall alw regard it as among the happiest features of my Viceroyalty tha have made the acquaintance of this most picturesque and p gressive corner of His Majesty's dominions and that if Ass ever wants a good word said for it, which I do not suppose is l ly seeing that it has very well equipped lungs of its own (l laughter), I shall always be glad to place myself at its dispo (loud and prolonged applause).

DISTRICT ASSOCIATIONS

WYNAAD.

Proceedings of a General Meeting held at Meppadi Cl 6th November, 1901. PRESENT:—Messrs. Abbott, D Guard, Lance, Macrae, D. Mackenzie, T. S. Malcolm, Nicc Powell, Trollope, Waddington, Winterbotham, and Romilly, *Honorary Secretary*.

Mr. C. E. Abbott *in the chair*.

1. Proceedings of last Meeting were taken as read.

2. **Tea cess.**—The Honorary Secretary notified that the Arap Tea Co., the Panora Co., and Mr. E. H. F. Day had paid their s scriptions to the I. T. A. foreign market fund.

3. **Coffee cess.**—Read Circulars Nos. 86, 90 from the U. P. A. S A lengthy discussion ensued on the best way of raising funds. following resolution was eventually carried "that this Associa is strongly in favour of pushing the local sales of East Indian co by advertisement, and in favour of the collection of funds the purpose; but it considers that the scheme proposed by Mr. Ba and modified by the Chairman, U. P. A. S. I., is, as it sta too indefinite, to express a final opinion on. The Association wo like to know in the first place if the curers have been consulted, what they and the U. C. G. Co. are prepared to do in the matter.'

4. **Tea theft.**—Mr. Waddington reported a case of theft of from a chest, which had been packed at his factory and despatc to Calicut, consigned to London. The theft was discovered at Cali and the matter reported at once to the District Superintenden

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[w. 1-10-98—t.f.o.]

Police, but that no notice had been taken. The Honorary Secretary was instructed to address the Inspector-General on the subject.

5. **French duties.**—Read U. P. A. S. I. Circulars Nos. 83, 85, 87 recording that the Ceylon Association had addressed the Secretary of State for the Colonies and the U. P. A. S. I. had addressed the Secretary of State for India on the subject. "The Government of India have reason to believe that the matter is receiving the careful attention of His Majesty's foreign office"—letter dated Simla, 11th September from the Under Secretary, Finance and Commerce department, to the Government of Madras.

6. **Mr. de Niceville's visit.**—Read correspondence with the Secretary, U. P. A. S. I. Read letter from Mr. de Niceville to Mr. H. B. Winterbotham about a pest attacking pepper vines, stating that from the specimens sent him he believed it to be a mite, but would be glad to investigate it further on his visit in January next. The Honorary Secretary was instructed to find out from the Secretary, U. P. A. S. I., what arrangements had been made about Mr. de Niceville's visit and how much time he could spare to Malabar Wynaad.

7. The following U. P. A. S. I. circulars were read and recorded:—
   - No. 81. On Adulteration of Coffee.
   - ,, 84. Coffee Railway Freights.
   - ,, 89. St. Petersburg Exhibition.
   - ,, 88. Assam Labour Troubles.

8. The following papers were laid on the table:—
   - Sale Notice of Neminaad Estate.
   - Indian Tea Association Circulars.
   - Indian Planting and Gardening.
   - Planting Opinion.

A vote of thanks to the chair terminated the proceedings.

(Signed) C. E. ABBOTT,
Chairman.

(,,) G. ROMILLY,
Honorary Secretary.

The next meeting will be held on Wednesday, 4th December.

PLANTERS' ASSOCIATION OF CEYLON.

GENERAL COMMITTEE.

Extracts from minutes of proceedings of a meeting of the Committee of the Planters' Association of Ceylon, held at the Victoria Commemoration Buildings, Kandy, on Friday, the 8th November, at 3 p.m.

GREEN TEAS.

Read letter from Mr. H. Drummond Deane regarding the circulation of the printed card of instructions as to the process of the manufacture of green teas, and sending a set of samples of green tea, plain, glazed, and glossed, all the same tea.

Resolved:—"That the thanks of the Committee of the Planters' Association of Ceylon be conveyed to Mr. H. Drummond Deane and that the letter be brought under the notice of the 'Thirty Committee'."

RUSSIAN TEA TRADE: BRITISH EXHIBITION IN ST. PETERSBURG, 1902-3.

Submitted copy of cablegram received from Paris stating that the St. Petersburg Exhibition opens in June.

Submitted letter to the United Planters' Association of Southern India in reference to the sale of tea at St Petersburg Exhibition, 1902.

DUTY ON TEA IN AUSTRALIA.

Read correspondence with the Ceylon Chamber of Commerce on the subject of the proposal to levy a duty of 2d. per lb. *plus* 20 per cent. *ad valorem* duty on tea in Australia.

Resolved:—"That the Committee of the Planters' Association cordially approves of the action taken by the Chamber of Commerce in approaching the Federal Parliament of Australia with a view to re-adjustment of the duty proposed on tea, and endorses the arguments brought forward by that body that the imposition of an *ad valorem* duty is seriously detrimental to the interests of capital employed in the tea industry of Ceylon and India, placing as it does a premium upon cheap China teas."

OFFICIAL ESTIMATE OF TEA CROP FOR 1902.

Considered the question of the official estimate of the tea crop for 1902.

Resolved:—"That an official estimate of the tea crop of Ceylon be comipiled by the Planters' Association from the Ist January to 31st December, 1902. (2) That District Associations be asked to compile such estimates for their district, and furnish them to the Secretary, Planters' Association of Ceylon, by the 30th November, or as soon thereafter as possible. (3) That district estimators be requested to obtain their estimates from acreages as far as possible, the statistics received to be considered confidential and not to be published by the estimators, and the total district acreages only to be given. Such returns shauld, in the opinion of the Committee, be (*a*) total acreage in tea; (*b*) acreage in bearing; (*c*) total crop. (4) That forms be issued separately to each Superintendent to be returned by him in a closed cover. That the foregoing resolutions be forwarded to the Honorary Secretaries of the various District Associations, with a request that they will kindly take immediate steps to furnish the Committee with the desired data. (5) That a special Committee be appointed to consider the returns received in due course from District Associations, and to report to the Committee before the 17th February, 1902. (6) That the following members be asked to serve:—Hon. Mr. J. N. Campbel, Mr. T. C. Huxley, Mr. W. D. Gibbon, Mr. James Ryan, the Chirman, Planters' Association of Ceylon, and the Secretary, Planters' Association of Ceylon, and that the Ceylon Chamber of Commerce be invited to nominate two members of the Chamber to confer with the special Committee of the Planters' Association, especially as regards the probable distribution of the crop."

Read letter from the Secretary, Ceylon Association in London, stating that the feeling of the members of the Tea and Produce Committee, after hearing Mr. Larkin, of Toronto, Canada, on the subject of Ceylon Green Tea and the future prospects of that branch of the Tea Trade, is in favour of the application of a much larger proportion to the encouragement of the manufacture of green teas.

PROPOSED INCREASE OF THE TEA CESS.

Read the following memorandum for the Planters' Association of Ceylon received from the Thirty Committee:—"The following minute and resolution having been passed at a meeting of the 'Thirty Committee' held on the 14th September, 1901, are submitted for the consideration of the Planters' Association of Ceylon. [Minute and resolution—Read report of the Colomo members of the 'Thirty Committee' in conference with others interested in the American and Continental tea trade. After discussion, the following resolutions were possed:—(1) "That in the opinion of the Committee the cess should be increased; (2) That the Planters' Association be requested to ascertain the opinion of tea producers as to increasing the cess, with a view to give further assistance to the green tea industry."]

Resolved:—"That the Committee of the Planters' Association are convinced that an increase in the cess is a pressing necessity; (2) That the Ceylon Association in London be urged to join in the movement with a view to obtain the sanction of the Government to an increase of the cess from 20 to 30 cents per 100 lbs."

THE INDIAN TEA ASSOCIATION (LONDON).

COMMITTEE MEETINGS.

The following are extracts from minutes of a meeting of the General Committee, held on October 14, 1901:—

PRESENT:—Messrs. A. Bryans (*in the chair*), J. N. Stuart, G. W. Christison, J. S. Hulbert, G. Henderson, R. Lyall, F. A. Roberts, A. G. Stanton, and C. W. Wallace.

Correspondence with Calcutta, and a telegram from Calcutta, dated 12th instant, reporting that the outturn to the end of September was 111,000,000 lbs., against 125,000,000 last year, were read, and copies of the latter were to be circulated.

Regulation of Sales.—This question was discussed at some length, and it was resolved to resume the regulation of sales until January 31, 1902, on the lines of the regulation of 1898-99.

The Secretary was instructed to inform the Chairman of the Brokers' Association (Mr. F. S. Long) of the resolution, and it was decided to send a circular to all importers and public companies.

To prevent next week's offerings from being excessive the im-

porters present agreed to reduce their offerings by about one-third of the usual quantity.

New Levy (1901).—The Secretary was desired to ask Calcutta by the next mail to wire on receipt of the letter the total amount promised to the levy, and to give the names of any companies or proprietors not subscribing who could be approached on this side by the Committee.

The following are extracts from proceedings of a meeting of the General Committee, held on October 21, 1901 :—

PRESENT :—Messrs. A. Bryans (*in the chair*), J. N. Stuart, J. S. Hulbert, G. Henderson, Robert Lyell, C. C. McLeod, F. A. Roberts, and C. W. Wallace. A deputation from the Tea Brokers' Association, consisting of Messrs. F. S. Long (*Chairman*) and G. W. Lloyd, attended by invitation.

Correspondence with Calcutta, copies of which had been previously circulated, was laid on the table.

Regulation of Sales.—The Secretary read a letter, dated the 18th instant, from the Tea Brokers' Association, proposing an addition of a sub-section to clause 6 of the rules, *viz.* :—

That all teas passed by the Regulating Committee should be printed as arranged without any deduction.

And after discussing the matter with the deputation from the Tea Brokers' Association the sub-section was agreed to unanimously, and the Secretary was instructed to write officially to the Tea Brokers' Association informing them of the decision.

Mr. Long stated that the Brokers' Association would issue a copy of the amended rules of the Regulating Committee containing the abovementioned sub-section, and 100 copies were to be sent to the Secretary for distribution to members.

A letter, dated the 17th instant, from the Chairman of the Tea Buyers' Association to Mr. J. N. Stuart was read, asking for a Sub-Committee of the Indian Tea Association to meet them to discuss—

1. The present position of the Indian industry and of the home trade

2. To consider whether some central and permanent meeting place on neutral ground would or would not be useful in bringing together the various interests connected with tea.

3. To talk over any difficulties that may exist on the part of the growers, importers, brokers, dealers, or blenders.

And a Sub-Committee was appointed for the purpose, consisting of Messrs. J. N. Stuart, C. C. McLeod, and G. Henderson.

MARKET REPORT.

[*Per Mail advices of 25th October* 1901.]

COFFEE.

The London Commercial Record says:—We have again to report very limited supplies at auction, consisting for the most part of East India and Brazil, both of which met an active demand at an advance of 2s to 3s per cwt., extreme prices being paid for bold colory of the former growth. Small lots of plantation Ceylon realised very high figures. Under the influence of further unfavourable crop reports, the market for "futures" showed a considerable advance, but with realizations and rumours that the injury has been exaggerated, there was a decline of 2s 3d to 2s 6d per cwt. from the extreme highest point, but this has been partly recovered and the closing prices show a marked appreciation upon those current at the date of our last. October delivery has touched 36s 3d, December 36s 6d, March 37s 4½d, and May 37s 10½d, whilst yesterday business was done in December 34s 3d to 35s 3d, March at 35s 6d to 36s 6d, May at 36s 3d to 37s 1½d, and September at 37s to 38s 1½d per cwt. To-day's auctions offered—24 casks 2 tierces 4 barrels 1 bag Plantation Ceylon, 21 bags Ceylon Liberian, 489 bags East India, 253 bags Java Liberian, 1,094 bags Nyassaland, 308 bags Vera Paz, 39 barrels 1 half-barrel 30 bags Jamaica, 32 half-frazils Mocha, 242 bags Mexican, 85 bags Guatemala, 829 bags Costa Rica, 126 bags Columbian, 130 bags washed Rio, 251 bags Santos, 23 bags Ecuador, and 135 bags New Grenada. The sales went off well, and mostly all offered sold at full prices.

London ...	... Santos ...	Dec. delivery	... 35s 3d.
New York	... No. 7 Rio...	,,	... 6·45 cents.
Hamburg...	... Santos ...	,,	... 35¼ pf.
Havre ...	... Santos ...	,,	... 44 francs.

Imports, Deliveries and Stock of Coffee in London are as follows :—

	Stock.		Imports.	
	1901.	1900.	1901.	190
Tons ...	14,308	17,009	40,921	32,1
	Home Consumption.		Export.	
	1901.	1900	1901.	190
Tons ...	16,377	13,307	24,782	16,4

The preceding figures exhibit—	Ton
In the Imports an increase this year of ...	8,7
Home Consumption an increase of ...	3,0
Export an increase of	8,3
Stock a decrease of	2,7

The details of the auction sales are as under :—

CEYLON.—*Plantation.*—4 casks 2 tierces 2 barrels sold, smalls 4 middling 92s, bold 100s to 107s, peaberry 85s.

EAST INDIA cured in Ceylon.—24 casks 6 tierces 2 barrels 2 ba sold, smalls 41s to 44s 6d, low middling to middling 49s to 5 common bold 57s, good colory bold 83s 6d, peaberry 51s to 79s.

EAST INDIA.—843 bags sold, *Coorg*, smalls 40s to 49s, low mi dling to middling 46s 6d to 55s 6d, good middling blue 69s 6 common bold 55s 6d to 60s, fair bold 64s 6d to 68s 6d, fine bl bold 95s 6d, peaberry 53s to 86s.

EAST INDIAN.—Officinalis, good stem chips aud shavings, 6⅝ ordinary to fair, 3⅛d to 4½d; good rich renewed ditto, 8⅛d per lb Succirubra, ordinary stem chips, 3½d; bold quill, 5½d to 5¾d per

MOCHA.—26½-bales bought in.

SALVADOR.—18 bags withdrawn.

VERA PAZ.—39 bags sold, good ordinary brownish 43s, peaberry 4

BRAZIL.—1,070 bags washed Dumont Santos sold, smalls 37s 40s 6d, medium greenish 39s to 39s 6d, fine medium brownish 5 6d to 54s, good bold 46s to 48s, fine brownish colory bold 66s, pe berry 30s to 66s 6d. 2,000 bags unwashed Dumont Santos, qua terms, sold, smalls foxy 36s to 37s, medium 37s 6d to 40s 6d, bo 39s 6d to 43s 6d, peaberry 40s to 46s 6d.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-9 Bags.
Rio ...	2,453,000	1,150,000	1,506,000	1,331,0
Santos ...	4,843,000	3,779,000	3,494,000	2,807,0
Total ...	7,296,000	4,929,000	5,000,000	4,138,0
Crop ...	—	10,900,000	8,971,000	8,772,0

Rio Exchange 11¾d, previous day 11 19/32d.

HAVRE, *October* 24.—Good average Santos October opened stead at 41¾f. and closed steady at 43½f., December opened at 42¼f. a closed at 44f., March opened at 43f. and closed at 44¾f., Ma opened at 43¾f. and closed at 45½f., September opened at 44¾f. a closed at 46½f.

HAMBURG, *October* 24.—Good average Santos October opene steady at 33¾pf. and closed steady at 34½pf., December opened 34½pf. and closed at 35¼pf., March opened at 35¼pf. and closed 36½pf., May opened at 35½pf. and closed at 36¾pf., September opene at 36¾pf. and closed at 37¾pf.

NEW YORK, *October* 24.—Closing prices of No. 7 Rio were follow :—

	Oct.	Nov.	Dec.	Jan.	Fe
October 24...	5·95	5·95	6·05	6·10	6
October 23...	6·20	6·20	6·30	6·40	6

East India sold in Public Sale since 17*th October*, 1901.

October.	Mark.	District.	Size 1.		Size 2.		P.B	
18	Shola Rock... ...	Neilgherry	9	75/6	24	54/	4	60/
22	I.M. Bala Kadoo ...	Coorg	13	56/6	37	46/6	9	53/
	I.M. Netley ...	,,	8	60/6	12	51/	4	57/6
	Matheson's Ghatted Hulla	,,	124	64/665	97	51/	51	68/
	,, A.F.	,,	171	67/68/6	122	55/6	29	70/
	G.M.M. Abial Mountain	,,	36	95	31	69/6	6	86/

TEA.

INDIAN.—Sales were again light for the time of year, the total brought forward being 34,100 packages against 38,400 packages last week, and 52,400 packages in the corresponding period of 1900. Quality has, on the whole, been of a useful character, with a diminishing supply of really high grade tea The temporary weakness already reported has given place to a strong and well sustained demand, and the finer descriptions have steadied up to nearer their former value. The feature of the week's business, however, was the increasingly brisk competition for lines costing under 6½d per lb., which at the close marked an advance of about ½d per lb. compared with rates ruling a fortnight since, the smaller offerings and the firmer attitude assumed by sellers, owing to the growing probability of moderate shipments, contributing to this result.

On and after the 4th proximo the size of the auctions will be regulated by a Committee appointed for the purpose.

For 28,700 packages on Garden Account 8¼d per lb. was obtained, contrasted with 8d per lb. for 43,800 packages, and 8⅜d per lb. for 6,300 packages in the two preceding seasons.

CEYLON.—The amount submitted to the trade was 19,500 packages, *versus* 16,200 packages on the 15th instant, and 24,100 packages twelve months since.

Common and ordinary kinds, both leafy and broken, met an active enquiry, quotations showing a rise of ¼d per lb., while Pekoe Souchongs and Pekoes with desirable cup were occasionally ½d per lb. dearer. Shippers took a fair quantity of medium Pekoes and Orange Pekoes, but these classes scarcely received so much support from home purchasers, and went irregularly. Broken Pekoes over 7½d per lb. also appeared in rather less request, but, as a rule, choice Broken Orange Pekoes sold well.

JAVA.—Only 340 packages of direct import were printed, which passed the hammer with an upward tendency.

For the 31st instant 1,363 packages have been declared.

Deliveries.—Clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 22nd October,	1901	14,128,918 lbs.
Do. do.	1900	13,033,235 ,,

During the week the following have been printed for sale by public auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offered. Pkgs.
India	31,055	3,042	34,097
Ceylon ...	17,413	2,114	19,527
Java	340	—	340
Total .	48,808	5,156	53,964

Also 970 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated October 25th, 1901, says :—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian. Pkgs.	Ceylon. Pkgs.	Java. Pkgs.
1901-1902	504,446	505,724	27,925
1900-1901	523,896	538,559	22,280

55,339 *pkgs.* INDIAN
9,660 ,, CEYLON
340 ,, JAVA
} Total 55,339 packages were offered in public auction this week.

Duty payments to the end of September appear to indicate steady progress in home consumption, after giving due consideration to the heavy clearances in anticipation of the budget in the early months of this and last year.

The use of Indian and Ceylon tea, both as regards Home Trade and re-export, shows expansion.

Taking the above remarks in conjunction with the decreased shipments from India and Ceylon as well as China, there is abundant reason for the steadier tone recently noticed in the market; and if supplies are judiciously brought forward, there appears strong ground for the continuance of better prices with improved prospects for the tea producing industry. The auction of the Indian Tea Association in regulating supplies will doubtless commend itself to all interested in the welfare of the industry.

INDIAN.—With a marked diminution in the quantity brought forward, and the knowledge that supplies will be regulated, buyers evinced decidedly more confidence, resulting in a general advance of fully ¼d. per lb. in all grades, while common teas showed a rise of as much as ½d. per lb. Quality from Assam and Darjeeling has not been quite up to arrivals of a few weeks back, although that from the Dooars is now showing improvement.

Week's average of New Season's tea sold on Garden Account 1901, 28,892 pkgs., av. 8·21d. 1900, 43,744 pkgs., av. 7·89d.

New Season's tea sold on Garden Account 1st June to date 1901, 364,150 pkgs.. av. 8·28d. 1900. 420,859 pkgs., av. 8·07d.

CEYLON.—With moderate offerings prices showed a further advance, the lower grades being fully ½d. per lb. dearer than last week, medium kinds selling at steadier rates, although teas over about 9d. per lb. were irregular and occasionally easier.

Average for week 8·02d , against 7·45d. same week 1900.

Ceylon tea sold on Garden Account 1st January to date, 958,714 pkgs., av. 6·74d. 1900, 1,032,103 pkgs., av. 7·19d.

JAVA.—The few teas brought forward consisted of common and medium teas, which sold with strong competition at prices showing an advance of over ½d per lb. on last week's rates.

Bank Rate 3 per cent. Exchange on London three months' sight:—Calcutta 1/4 3/16. Colombo 1/4 7/32.

COCOA.

No auctions were held on Tuesday last, importers not being desirous of offering on a market so quiet and unsatisfactory as this one has been for some time. Privately, during the week, only about 300 bags have changed hands. Trinidad at 70s to 72s 6d, and greyish Caraquez Guayaquil at 65s per cwt.

PEPPER.

BLACK.—The market is quiet. On the spot small sales have been made at 6d to 5 31/32d for fair Singapore, and for near at hand parcels 6 1/32d to 6d paid.

At public sale on Wednesday 312 bags Singapore were bought in at 6d, and 17 bags Estate Penang at 6⅛d per lb.

WHITE is steady with sales of 300 bags on the spot—at 9¼d for fair Singapore, and at 8¾d for Penang.

At auction on the 23rd instant 79 bags fair Singapore sold at 9¼d average re-weights. 112 bags Penang retired at 8¾d per lb.

Pepper steady; of white 30 tons Singapore January-March shipment sold at 9¼d.

GINGER.

COCHIN.—A fairly satisfactory business—some 1,500 bags—has been concluded during the week at a further slight improvement in values—fair medium and small washed rough at 43s to 44s, dark and wormy ditto at 42s to 43s, rough Calicut Sorts at 40s 6d to 41s, and small brown rough Calicut at 40s per cwt. The catalogues comprised 147 cases 97 bags, the whole of which retired unsold—medium, some small, cut limed at 65s, cut small and ends at 50s, small to bold branchy rough, part limed, at 52s, and leanish Calicut Sorts at 42s per cwt.

For arrival importers ask 51s per cwt., c.i.f., for rough washed.

JAPAN.—100 bags limed medium and small plump bought in at 42s 6d per cwt.

JAMAICA.—79 barrels sold at very full rates—middling washed 52s, dull 41s 6d to 44s per cwt.

CINCHONA.

There was a good demand in auction on Tuesday, and the bulk of the offerings, which were small, sold at an advance of fully 10 per cent. on the last London auctions, the average unit being 1 5/8d to 1¾d per lb, against 1⅜d to 1½d unit last sale. High-testing barks met with strong competition, and there was a brisk demand at 2d to 3d per lb. higher prices for the Calisaya-bark, which comprised the greater part of the auctions.

The following were the quantities of bark offered and sold by the various brokers:—

	Packages offered.	Packages sold.
South American (Calisaya) ...	943	943
Ceylon Cinchona	240	197
Java Cinchona	282	209
East Indian Cinchona	142	133
African Cinchona	140	140
	1,747	1,622

The following are the approximate quantities of bark purchased by the principal buyers:—

	Lbs.
The American and Italian factories	70,450
The Mannheim and Amsterdam factories ...	34,858
The Imperial factory	29,482
The Brunswick factory ...	25,418
Messrs. Howards & Sons	13,516
The Frankfort and Stuttgart factories ...	10,661
The Paris factory	3,215
Druggists, etc.	16,005
Total quantity sold ...	203,635
Bought in or withdrawn ...	23,536
Total quantity offered ...	227,171

The prices paid were as under:—

SOUTH AMERICAN.—Bolivian cultivated Calisaya, ordinary to good quill, from 4¾d to 9⅞d per lb.

WEST COAST AFRICAN.—Fair quill, 6½d to 7½d; broken quill chips, 7⅓d per lb.

JAVA. Ledgeriana, original stem, 4½d to 1s 6½d; branch, 7¾d; root, 4¾d; red, original stem, 3½d, and root, 4⅜d to 8d per

CEYLON.—Ordinary to good red stem chips, 2¾d to 5½d; ordi renewed ditto, 2½d to 3½d; twigs, 1⅝d to 1¾d per lb.

QUININE.

After closing easier again last week, the second-hand ma assumed a firmer tone on Tuesday, there being few sel Business has been done at 1s 1¾d for December, and at from 1 to 1s 1¼d for March, but to-day the market is again firmer, buyers at 1s 2¼d for December, and 1s 2½d for March. The price is 1s 2d to 1s 2¼d for good German brands in bulk. makers of B. & S. quinine advanced their quotation ½d per o 1s 2½d on Wednesday, and the other German makers followed to-day. Whiffens have also advanced to 1s 2½d, but Howards n no alteration. P. &. G. (French) is also quoted at this figure.

(AVERAGE FOR ALL INDIA 8·21d., OCTOBER 25TH.)

GARDEN.	Total.		Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, D and Variou	
	Quantity		Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Pri
Neilgherry ...															
Davara-Shola ...	65½c		7¾	47½c	7½ 11¼	...	....	...	...	18½c	6½	.	...	...	..
Travancore ...	**463**		**6·78**												
Atchencoil ...	57		5	...	..	4	5½	12	6¼	8	5¼	8	4	15	3½
Carady Goody ...	65		7¼	25	8	20	6½	20	7	...	...	...	...	...	..
Fairfield ...	110		7	18	7½	65	6¼	21	9	...	...	...	...	6	5
Isfield T Co. Isfi ...	43		5¾	...	...	13	6	9	7	21	5 5¼	...	...	...	..
Penshurt ...	77	p	8¼	20	10¾	39	6¾	..	...	...	...	..	...	18 p	5
T T E Co. M Mal ...	54		7¼	29	6¾ 9¼	25	6¼	...	...	...	...	.	...	...	.
„ „ „	57		6¼	23	6¼ 7	34	6	...	...	...	...	...	...	...	..

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A WEEKLY JOURNAL.

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 29th instant. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad. *November 19th.*—*Weather*—Heavy North-East showers with a good deal of wash. Wind very unsettled. *Works*—Principally gathering and weeding. The rain causes the crop to drop very quickly. *Health*—Good. *Labour*—Abundant. *Interesting item*—The Maharajah and Resident are expected at Saklaspur on Friday, this week.

Coorg. POLLI BETTA, *20th November.*—*Weather*—We are still having rain from the North-East. This weather is most unusual for the time of year. Coffee looking very fine, but leaf disease is getting a hold of the bushes. *Crop*—Picking in full swing—not much to gather however. *Labour*—Plentiful. *Health*—Good. *Interesting item*—Visit of Inspector-General of Volunteers to Mercara on 25th instant.

BRAZILIAN FINANCES.

THE POLICY OF THE REPUBLIC.

IN a former article on the Policy of the Empire we traced the causes, as officially stated, of the crisis reached in 1898, when the Brazilian Government found itself forced to adopt heroic measures for its financial safety. The chief aim was the appreciation of the Currency. This was to be attained by the redemption of paper money and the founding of a guarantee fund in gold. The redemption was to be carried out by

(1) The funding loan.
(2) The product of the leasing of the railways.
(3) Instalments paid by the Banks in satisfaction of their debts to the Treasury.
(4) Any surplus on the Budget.

The guarantee fund was to be formed with the product of the gold duty and with any surpluses in gold. To these measures

were added, later: collection in gold of a proportion of the customs house duties, to meet payments in gold; creation of a fund to redeem the internal paper debt; increase in the taxes on consumption, improvement of the method of collecting import duties; increase and improvement in the stamp duties; severe economy; the leasing out of railways; payment by mutual arrangement of heavy amounts due on account of civil wars and concessions made by the first Government of the Republic; inclusion of foreign guaranteed railways in the property of the State; and, finally, the creation of the Commercial Statistical Department to furnish Government with the necessary data to enable it to form and carry out its financial and economic plans and to judge safely of the effects produced by them. The space at our disposal will not admit of our detailing, or even summarising, what has been achieved in regard to each branch of this comprehensive programme. We must content ourselves with giving a rough account of general results, as described by the Minister of Finance.

The Government has redeemed one hundred thousand contos of paper money, handed over a million and a half sterling to the guarantee fund, and raised the rate of exchange to 10½, thus raising the value of the national currency from 19 to 30 millions sterling. It has raised the quotation of Brazilian foreign bonds, organized gradually and without disturbance the collection of part of the export duties in gold, and, with the product thereof, paid one million and a half to the guarantee fund, accumulated in London its resources, which amounted to over two millions sterling at the time when agency specie payments were renewed, and, what is still more important, by organizing the collection of gold duties has insured the continuance of payments against the foreign debt. The rest of the programme has been carried out with equal fidelity. The Treasury has not increased its liabilities, for the appreciation of the currency has accompanied the rise that has taken place in the price of Brazil's bonds, so that the price of them has suffered no appreciable difference in Brazilian money. On the other hand, however, the quotation of the bonds is the test of credit abroad and the rise in their value shows plainly an improvement in this respect and renders it an easier matter for the Government to obtain loans. And as the influx of foreign capital is an essential element for the development of new countries, the rise in Brazilian's bonds and improvement of credit represent the first step towards the economic rehabilitation of the country. This is DR. MURTINHO'S view, and it appears to be a sound one. Where, however, the Government has undoubtedly fallen short of its expectations is in respect to the raising of Exchange. The 18d. level is still very far away. The Finance Minister reckons mathematically that 12d. may be taken as the normal rate; but it has never yet been so in reality. Speculation is probably not the least among the causes that keep the milreis down below the standard at which, according to theoretical demonstration, it ought to stand.

Critics have condemned the burning of money in Brazil on various grounds. It has been stigmatised as wasteful, useless, ineffectual. As a matter of fact, however, there has been no burning of money. The Brazilian Government has, in commercial parlance, withdrawn its acceptances from the market, thus reducing its liabilities. When urged to do this by means of loans rather than by increased taxation DR. MURTINHO replies shrewdly that a loan is simply an advance on taxes that must be raised to pay interest and sinking fund. This may be termed a typical remark. It indicates that t policy of the Government is to avoid speciousness, and to s and show things in their right light. As far as an artific currency can be healthy, the Brazilian appears to be a fair way to convalescence after a very serious attack disease. It is receiving constant and skilful nursing. E even after it recovers tone much will remain to be done. will be necessary for the nursing to continue until t financial stability is not only restored but permanent assured. It may be that when the right time comes t Brazilians will try to secure their position by "fixing Exchange, as the Indian Government have done. At t present time not the least interesting aspect of the Brazili currency problem is that which enables a comparison to drawn between Brazilian and Indian methods. The o Government has aimed at raising Exchange gradually withdrawing paper; the other has fixed it at a higher lev by withdrawing rupees, introducing a gold standard, a decreeing a standard rate of exchange between the t metals. The time has not yet arrived for a decision as which policy is the better for the country.

EXPERIMENTAL CULTIVATION IN ZANZIBAR

Mr. Consul Carr makes some interesting remarks abo experiments with various products, under the direction Mr. R. N. Lyne, by the Agricultural Department of t Sultan's Government in Zanzibar. He observes that t experiment made with

ARABIAN COFFEE

grown from seed obtained from British Central Africa h not been altogether successful, owing to a leaf disease whi has attacked and destroyed the majority of the young tree the remnant that survives gives excellent promise. The

LIBERIAN COFFEE

planted in 1899 is healthy and vigorous, and, like th raised from seed imported from Sierra Leone, almost com pletely free from parasitical attack.

TEA

does not appear to thrive in Zanzibar, where the soil is po sibly too stiff for it; 6,414 young trees were planted out April, 1899, and 7,385 more a year later, and of these on 2,874 now survive. The leaves have recently been attacke by a disease known as "blister blight," which is said to ha done considerable damage to the plantations in Assam, b its results have not hitherto been serious.

COCOA AND KOLA

are both doing well, the latter being especially hardy an free from disease.

VANILLA

has given most satisfactory results, and there is no reason wh it should not be remuneratively cultivated, some sample po which were sent Home last Spring having been favourab reported on; the plant does not require very much labo and there is plenty of shade. Various

FIBRE PLANTS

have been successfully tried, but would have to be spread ov wide areas to make the industry profitable. Good resul could probably be obtained with cinnamon and cocaine.

COFFEE DURING OCTOBER.

Bad reports regarding the Santos crop caused excitement in the market, notwithstanding continuous receipts far in excess of requirements. Drought and the exhaustion of trees after two years of heavy bearing counted far more than the influx of stock, and speculation was hard at work. A reaction set in, but prices were at the close of the month rather better than at the end of September, though they had dropped slightly from the highest point touched. Mild coffees scarcely followed the movement, values having advanced during the last few months. Closing values were in sellers' favour. In Amsterdam there was no Trading Company's sale during the month, the next one advertised being for November 5th, when 19,700 bags were to be offered. In their report dated 31st ultimo Messrs. Duuring & Zoon remark that the position looks altogether less complicated than for some years past. The present Brazil crop is very large, and it seems equally true that the next one will be very small. The present one may be taken at 13 million bags, against $10\frac{3}{4}$, $9\frac{1}{4}$, and $8\frac{3}{4}$ million bags in the three years perceding. It would appear as if the whole surplus were already worked off, so that receipts ought now to decrease. It would look both probable and wise to retain coffee in Brazil. It is specially noted, however, that the trade has been buying very freely of late, beyond actual requirements, and that at the latest advances it is speculation, not general trade, that has operated.

Stocks in Europe did not show any alteration last month, but visible supply was again 48,750 tons more. We may soon see a record broken, and a new one established.

NOTES.

"Golden Tips" in Melbourne. A sale of a box of Ceylon "golden tips" in Melbourne at 6s 9d per lb. is reported.

India Tea Exports. The exports to the United Kingdom to the 12th instant amount to 103,512,605 lbs., showing a deficit of 9,424,332 lbs. to date.

Dutch India Coffee. The Government crop is estimated at 110,000 piculs. Exports to Holland and the U. S. A. during October amounted to 43,400 piculs, against 46,000 piculs in September.

The Indian Tea Association. The Proceedings we publish to-day deserve careful perusal. The references, to green tea, the proposed tea cess and the Russian market are all of the deepest interest.

American Tea. At a meeting of the United States Cabinet on the 18th October last the Secretary of Agriculture discussed the growing of tea in America, and said that the green tea grown in South Carolina was as good as any in the world.

Coffee Warehouses in New York. Licenses for ten new warehouses have been issued by the Coffee Exchange to the New York Dock Company, and twenty-two to the Bush Company. This increases storage capacity for coffee to over 500,000 bags.

A Record Coffee Cargo. The steamer *Granada* left the port of Santos for Europe on the 30th September with a cargo of 113,084 bags of coffee. This is the largest coffee cargo ever carried by one ship to Europe, but not yet enough to beat the record of a cargo of 125,918 bags shipped last year to the United States.

Cinchona Bark from Jamaica. It is officially reported that in June last 290 bags of Cinchona Bark from the Government Plantations in Jamaica were sold in the London market, realising the sum of £594 12s 1d. The total weight of bark was 25,613 lbs., so that the average price per lb. is about $5\frac{5}{8}$d. The insurance, wharf charges, printing, advertising, and brokerage amounted to £32 0s 3d; the freight and charges to £32 1s 2d; and cost of bags and carriage in Jamaica to £20 11s 6d.

Supply of Japan and China Teas. The following shows the estimated supply of China and Japan teas for this season, with comparisons:—

	1901-1902.	1900-1901.	1899-1900.
	lbs.	lbs.	lbs.
Green	13,000,000	14,684,487	15,614,392
Japan	36,000,000	37,813,737	40.803,686
Formosa	14,000,000	16,424,143	14,024,378
Foochow	3,000,000	3,867,746	4,040,371
Congou	10,000,000	19,150,653	11,392,643
Total ...	76,000,000	91,940,766	85,907,177

Tea and Coffee at Bussorah. The British Consul at the Turkish Port of Bussorah gives the following statistics of imports:—

		1899.	1900.
Coffee	bags ...	9,635	8,984
Tea	cases ...	8,901	7,044

The decline in both instances is remarkable, as the general import trade of the port between 1899 and 1900 shows an increase. The following statement shows values of imports for comparison with the above list of quantities:—

	1899.	1900.
Coffee	£57,810	£35,880
Tea	£11,126	£ 8,805

Brazilian Coffee in Porto Rico. The treasury department has decided, says the *Chicago Grocer*, to deny the contention of the Porto Rico coffee-planters, who have demanded that a duty of 5 cents a pound be collected on all of the product brought to the island. Solicitor F. A. Reeve of the department has handed Secretary Gage an opinion in which he says that it will be illegal, under the law making free trade between American ports and the ports of the island, to charge any duty on coffee. While the much-abused Foraker law was in force there was a duty of 5 cents a pound on all coffee imported into Porto Rico. That gave the home-grown article full protection. But when absolute free trade between the United States and Porto Rico was proclaimed, to the great joy of the Porto Ricans, the coffee duty came to an end, for that article is on the United States tariff free list.

London Tea Market. The weekly special telegram dated 14th instant from Messrs. Gow, Wilson & Stanton to Colombo reports that buyers are operating very cautiously and that the market for medium liquoring Pekoes and Broken Pekoes as well as that for Common Pekoes

and Broken Pekoes is steady. The price of fair liquoring Ceylon Pekoe Souchong is 6d (same as last week), and the average price of Ceylon tea sold on garden account this week was 7¾d (one-eighth of a penny down). The average of the corresponding week last year was 7½d. Reuter reports that good medium Ceylon teas are irregular, and others steady. Fair Pekoe Souchongs are quoted at 5¾d (same as last week) but the average for the week is 7¾d (⅛d down). 19,000 packages of Ceylon tea were offered for sale and 18,000 were disposed of; while of the 49,000 packages of Indian tea offered, only 30,000 found purchasers, at an average of 7⅞d per lb. (⅛d below last week).

The Supply of Tea.

Messrs. Wm. Jas. and Hy. Thompson say that the information published respecting the decrease in the total quantity of tea supplied this season to the various markets of the world has drawn attention to the position, and the decision of importers to act upon it has had a beneficial effect. The first result is an advance in the value of the kinds most needing it, the ultimate result should be to place the majority of producers in a better position than they were last season. It is needful to emphasise the fact that the altered prospect is not due to increased use of tea or to the opening of new markets, but solely to the concurrence of shorter supply with improved quality. This was the way back to prosperity to which we pointed in our annual review in June, and as it is now plainly shown to be the right way planters are urged to adhere to it and not to revert to heavy crops of inferior quality—at any rate, not until fresh outlets have been found for them.

Pepper.

This article is gaining in statistical strength every year. At the end of last month stocks in Europe were again 6,900 bags less, although deliveries were unusually small, thus for this year 30,000 bags less than in the two previous years. Arrivals, on the other hand, were 20,000 and 15,000 bags smaller, fully confirming all that has been predicted. It may be of some interest to compare stocks:

	1901.	1899.	1895.
	Bags.	Bags.	Bags.
Stocks Europe	280,800	395,200	508,000
Do. States	18,100	32,900	82,900
Total ...	298,900	428,100	590,900

Stocks of Lampong in Holland in 1895 were 159,000 bags, against 58,000 bags on 31st October, 1901. Crops still being on the same moderate scale, stocks are bound gradually to decrease in the same proportion. Under these circumstances a turn for the better may occur at any moment, in fact the present dulness looks rather astonishing and cannot be accounted for by facts.

Calcutta Tea Sales.

The tea sales on Friday the 15th totalled about 18,000 packages, and practically the whole quantity was quitted in the auction room under a generally strong demand; this is somewhat of a contrast to the London market, in which anything between ten and twenty thousand packages have been withdrawn from each of the sales held there during the last fortnight. The offerings call for no special comment in regard to quality; all districts supplied fully average teas. It was generally expected that the comparatively indifferent market at home would be reflected to some extent in Calcutta, but the sales passed off briskly with spirited bidding for all grades a qualities from start to finish. Outside markets genera were busy, and to this may be attributed the steady to fi tone, and is yet again another indication of the growing dependence of the Calcutta market. It is encouraging to also a very marked improvement in the demand fr Bombay and kindred outlets.

Indian Tea in London.

The *Produce Markets' Review* October 26, 1901, says the dema is active, and prices for tea up to 7d have further risen. considerable business has been transacted in the latter gra at an advance of ¼d to ½d, and the market closes stro Although a much larger quantity is catalogued for public s next week, it is expected that prices for the lower grades w continue very firm, as the proportion of the supply of th is comparatively moderate and by no means in excess requirements. In the medium descriptions a good busin has been done, the demand being principally for those ki giving a good infusion, and prices for these are steady firm, while for the less attractive teas in cup the tendency in favour of buyers. The inquiry for the fine and fin grades is not so active, no doubt attributable to the difficu in following previous purchases owing to the depreciation the teas, especially those from some of the more popu gardens. Of the 35,020 packages offered at the public sa 32,070 passed the hammer, and the balance has since be practically disposed of privately.

Coffee.

The speculation which commenc last week became rampant at t early part of this, says the *Produce Markets' Review* October 26, and all kinds of rumours were disseminated those desirous to push prices up, and accepted by oth temporarily interested in the advance. In the termi market the movements were rapid, and on Tuesday quotati were 4s dearer than on Saturday. When, however, a ca was received which stated that the trees had been so affec by drought that the crop for two years was imperilled, it w felt that the excitement was being overdone, and many of most interested commenced at once to secure their prof with the result that prices fell away, closing 3s from the t though still 1s above last week. Even those who talked Santos reaching 50s now think that 34s or 35s is a price shall get accustomed to. Possibly, if the coming crop estimated in January by reliable houses, who can then obt better information, at, say, 7,000,000 or even 8,000,000 ba such a price may be warranted, but any amount over t must lead to a further reduction when the weight of t present crop is realised, and the surplus, which will by Ju probably amount to 4,000,000 or 5,000,000 bags, has to carried. Little has been done in actual coffee, inter being entirely centred in the terminal market, but pres values have naturally brought out many old parcels th holders would be glad to clear.

The Rothamsted Experiments.

There is very little new in t report of the Rothamsted experime for 1901, bringing the records those still in continuance up to 1900, the fifty-seventh ye of some of them. The principal deductions derivable fr them have long been as household morals among ag culturists who take an interest in science with practice. Wh

the continuance of the old trials is desirable for scientific reasons, it seems a pity that new ones, calculated to throw light upon unsolved problems in the treatment of crops and animals, are not introduced. With respect to the continuous growth of wheat, which reached its fifty-eighth experiment in 1901, attention may be called to Dr. Dyer's exhaustive study of the phosphoric acid potash contents of the soils of the several plots, the results of which have been contributed to the Philosophical Transactions of the Royal Society, and published separately for the Society by Messrs. Dulau & Co., of Soho-square. The details may be commended to the careful consideration of agricultural students. For one thing, Dr. Dyer has found that potash, which has been commonly supposed to be pretty firmly retained in the surface soil where the land contains a fair proportion of clay, is far more migratory than phosphoric acid. It may be added that Dr. Dyer's investigations have strongly confirmed his view as to the value of his comparative method of estimating available soil fertility by the solubility of its constituents in dilute citric acid.

GENERAL ARTICLES.

COCOA IN TRINIDAD.

SHADE TREES.

Can any planter tell us the botanical name of what is known in Trinidad as the "Immortel?" It is largely used as shade for Cocoa, and in the Trinidad Bulletin of Miscellaneous Information we read :—

Any discussion on the advantages of the wellknown "Immortel" as a shade for Cacao would be incomplete without reference to the possible advantages of other trees which may alternatively be used in certain places. One of these is the wellknown "Saman," Pithecolobium Saman. In Trinidad this tree has not been proposed as a shade tree until recent years, but in neighbouring islands it has long been used, especially in the Jamaica Guinea grass fields, for it is known that the grass flourishes better when covered by its branches, than if grown in the open, and the same has been found to apply in Trinidad. The Saman is a deciduous tree and loses its leaves in the dry season as well as the "Immortel," though not so completely at once. It is, however, known that, at times when the leaves have not fallen, they are so choked in their action so as to be unable to evaporate moisture from their surfaces, and therefore, evaporation being stopped, it is quite on a par with the "Immortel." Many people suppose that trees with no leaves, or trees with leaves in a dormant state, do not take up moisture; but it is known that they do, and this same moisture gradually accumulates in plants until the stem, roots, and branches are distended with fluid, and have actually more water in them when the leaves are absent, than in full leaf, as can be seen by cutting the roots. This fact is one which gives rise to the idea that the tree itself stores water for the use of the Cacao tree, as on a root being cut, the sap flows readily, and not a few believe that a portion of the water supply to the Cacao is obtained from this source. To describe how water is transferred in accordance with the popular belief, I am inclined to think, would puzzle not a few. As well say a thirsty man could drink out of a tightly sealed bottle. The roots may contain water, but they are tightly sealed against the Cacao tree. The fall of the leaf in dry weather is a feature which generally accompanies the resting season of plants, whether the rest is occasioned by cold, by heat, or by drought. The manurial value of leaves, fruits, seeds, and flowers, the amount of evaporation and the amount of material left behind in the tissues by the moisture evaporated are wellknown points, illustrated regularly in the St. Clair lectures for the past two years. Another point in the question of the utility of the fall of the leaf is the fact that the trees require annual stripping for the purpose of what is known to the cultivator as "ripening the wood." Unless this ripening takes place the planter knows that flowers will not appear in so great a quantity, for sterility can often be traced to want of sunlight, in which figuratively it is necessary to bathe the branches to give them an opportunity to prepare the material to be used for the production of flowers in the following season. In estimating the manurial value of any shade tree, there must be taken into account the various elements which enter into the question, which is a wider one by far than is commonly believed. If we take the Immortel, Enthrina umbrosa, we have the flowers, the leaves, and the seeds. If we take the Saman we have in the same manner flowers, leaves, and seeds. The flowers contain nitrogen, also the leaves, seeds, and seed pods. When we compare the manurial value of the flowers, pods, seeds, and leaves of the "Immortel," with the flowers, pods and seeds and leaves of the "Saman," it is estimated that the advantage will be with the latter, on the ground of the total quantity of nitrogen which is contained in the sugary pods and the enormous quantity of leaves and flowers; but this has yet to be shown. Some of our common Legumes contain nitrogen as follows:—And it is probable the "Immortel" will be somewhere near the average.

Bonavist Seeds, Sample 1	2·77	per cent. nitrogen.
Do. do. do. 2	3·22	„ „
Yam Bean	3 35	„ „
Mungo Pea	3·06	„ „
Cow Itch. Mucuna	5·56	„ „
Lima Bean	3·22	„ „
Sugar Bean	3 38	„ „
Average ...	3·36	

The bean of the Saman dried at 130 degrees Fahrenheit, contains :—

Nitrogen	2·31
Glucose	21·45
Gums, Pectins, etc.	17·58
Albumenoids	14·44
Oils, Fats	1·51
Starch, etc.	27 07
Indigestible Fibre	5·85
Mineral matters	2·84
Water	9 26
	100·00

ANALYSIS BY PROFESSOR HARRISON.

It is not necessary to attempt to calculate how many tons per acre will be the weight of the crop of beans of the Saman, or how much manure may be brought to the land by animals and insects seeking them as food, as at the best it could only be estimated, except at an expense quite unlikely to be incurred. It has been recorded that the decrease in nitrogen of the flowers of the Immortel is very rapid, so rapid in fact, that in 15 days of dry weather (which, as a rule, prevails during the period of flowering) the nitrogen will all have disappeared before it can enter the ground and become available for the plant; for it is quite certain that the dews of night are insufficient to secure it for the use of the plant. It has been recorded to lose as much as 33 per cent. in five days, and at the same rate it would lose all in fifteen days. Another point to be remembered is, that the quantity of nitrogen thrown down or afforded by shade trees of any kind will not all be available for the Cacao beneath it, for it should not be forgotten that the Immortel itself will require a large quantity, besides what it may secure by means of the nitrogen nodules of its own roots, now known to be capable of supplying a large quantity; exactly how much, is another of the "Incidental Increments" yet to be worked out. It is quite possible, however, that the nitrogen collected by the nodules

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Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant the appointment of "Purveyors to Her Majesty The Queen and Empress of India" from the year 1837 until the time of her death, have now had the honour of being appointed by Royal Warrant "Purveyors to The King."

on the roots of the Saman and the Immortel, and made immediately available for the Cacao tree, is quite equal to the "Incidental Increment" supplied by the flowers, leaves, and fruit. Any estimate of the actual amount of nitrogen returned to the ground must rest on much uncertainty, for some is carried away by water, and an unknown quantity is taken up by weeds, so that the actual amount available as food for any special plant is largely a matter of speculation. It is estimated that 4·5 per cent. may be available from the flowers, some 2·5 per cent. from the leaves, and some 3·3 per cent. from the seeds or 10 3 of nitrogen given once a year to the ground during the dry season. If we compare this with the available amount of nitrogen carried down in several forms by rain water, and the amount supplied by root nodules, it will probably be found that the incidental increment from this source is favourably to be compared with that obtained from the sources of nitrogen afforded by flowers, leaves, and fruits.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange.—Rio, *October 7th.*—Extremes during the week ending October 4 were 11 5/16d.—11 5/8d. for 90 d/s Bank paper and 11 3/8d.—11 21/32d. for private.

The average Bank 90d/s counter-drawing rate for the week comes out at 11 29/64d., the corresponding sight rate being 11 25/64d. against 11 29/64d. the average sight rate of the *Camara Syndical.*

Coffee.—Entries at Rio and Santos continue large, 551,079 bags against 559,917 bags last week and 382,744 for the week ending 5th October, 1900. Aggregate entries since 15th January at Rio and Santos total 9,890,483 bags as compared with 6,323,870 for the same period last year.

Shipments (embarques) were also very large, 525,737 against 488,697 for the preceding week and 378,115 same date last year, whilst declared sales for the same dates amounted to 214,000, 231,000, and 219,000 respectively.

Stocks on the 4th instant were 1,721,110 bags, or 27,613 bags less than the week before and 1,182,696 for the corresponding date last year.

SEPTEMBER COFFEE MOVEMENT IN THE U. S.

Last month's deliveries were heavy, both in the United States and Europe. They were greater in the United States than for any month since last March, and in Europe since July, 1900. The total deliveries in both countries in September were 1,398,401 bags—the largest for any month since January, 1900, and 204,241 bags above the monthly average for last year—or an increase of over 17 per cent. It is evident that stocks in second hands are increasing, for such a gain in consumption is improbable.

And notwithstanding the great distribution, the visible supply gains, reaching on October 1 the unparalleled quantity of 9,821,196 bags, or more than the entire crop of Brazil in 1899-1900 and 1898-99.

The receipts at Rio and Santos for the first quarter of the present crop year were 5,555,000 bags, or more than the entire Brazil crop of 1895-96. These figures indicate the great expansion of coffee-planting which has doubled within six years, with vast areas of undeveloped coffee land all over the coffee-growing belt.

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

Evidently any return to high cost cannot be expected unless the is a crop failure of great magnitude.

The following statement shows the September movement a general position of the article:

	Bags.	Bags.
Stocks, September 1, 1901—		
United States	1,471,686	
Europe	3,991,115 —	5,462,801
Receipts during September—		
United States	690,010	
Europe	842,786—	1,532,796
Total supply, October 1		6,995,597
Less Stocks, October 1, 1901—		
United States	1,611,585	
Europe	3,985,611—	5,597,196
Deliveries, September—		
United States	550,111	
Europe	848,290—	1,398,401
Deliveries, September, 1900—		
United States	362,201	
Europe	618,997—	981,198
Increase as compared with September, 1900 ...		417,203

The September deliveries in the United States consisted 437,672 bags of Brazil; 112,439 bags of all other sorts.

The visible supply of the world, October 1, 1901, was 9,821,1 bags, against 8,654,801 bags on September 1—an increase 1,166,395 bags; visible supply on October 1, 1900, was 7,426,3 bags, or 2,394,837 bags increase in one year.

Receipts at Rio and Santos during the first three months of t crop year were 5,555,000 bags, exceeding the previous seaso receipts for same time by 1,913,000 bags, and 1899 by 1,455,0 bags.

Since the above was written an active speculative movement h begun, based on reports that the flowering of the growing Sant crop is poor. Possibly a "bull" movement may be successful carried forward when the present season's crops, added to t visible supply, will furnish nearly 24,000,000 bags to meet t world's requirements of not to exceed 15,000,000 bags. It will ta a pronounced crop failure to place and keep the price of coffee a much higher basis.—*American Grocer.*

THE ART OF TEA-TASTING.

IN WHICH WOMEN HAVE NO PLACE.

Woman has stormed and conquered trade after trade, professi after profession, but one of the very best-paid lines of industry s has not yet turned her attention to at all. At the tea warehous men are employed to taste the teas and decide on the differe samples, and for this work all the capital needed is a trained pala It is an occupation fairly within a woman's capacity, yet not one engaged in it.

"I don't know why they shouldn't be," said a prominent deal "Of course, every tea-taster has a standard to go by; otherwi as everyone's taste is different, no classification could be mad But it takes experience—familiarity with these standards."

A SIMPLE OUTFIT.

The tea-taster's outfit is very simple; a number of porcela cups, a pair of scales, and a half-ounce weight. For whereas t housewife measures tea into her teapot by spoonsful, or careless gauges the quantity with her eye, the professional maker of t proceeds upon an exact method. He differs from the housewi also in using only distilled or filtered water. Then, having put t kettle on to boil, he does not neglect it until part of the conten have boiled away, but pours the water on the tea-leaves the insta it reaches boiling point. Water boiled for several minutes becom insipid, and will not make a good tea. For this reason also, there is water left in the kettle, he is careful to rinse it out befo re-filling. After making the tea he only allows it from three five minutes to draw, this being just sufficient to develop fullest flavour. To the correct palate the bitterness consequent over-drawing tea is very disagreeable.

THE PERFECT INFUSION.

Given the perfect infusion the taster notes its colour; a ric clear golden hue almost always denotes good tea. He also inhal its odour, a significant indication of quality, and then his train

palate decides on the whole matter. He does not swallow the tea taken into his mouth, because to do so would temporarily destroy the acuteness of taste. It has been asserted, says the *Philadelphia Record*, that those who make a business of tea-tasting find it injurious to health, but this the dealer denied. Teas of all kinds have two values—intrinsic or real, commercial or market value. So that in their selection for commercial purposes four leading features are to be considered—leaf, style, liquor, and flavour. Choice of all kinds is handsomely made and stylish; if not artistically curled, twisted or rolled according to its make. Thus, green tea, of the imperial gunpowder order, is hand rolled and shotty, regular in make and of a bright natural green. Hyson leaf is well and evenly curled and twisted. Black or Oolong leaf is firmly silky and creepy. Old and inferior teas are large, rough and loosely rolled, and, being partially or entirely devoid of sap or succulence, are correspondingly coarse and flavourless in the infused state. —*Morning Leader*, October 22.

PRODUCE AND PLANTING.

BRICK TEA.

In his report of the caravan trade of Northern Siam, Mr. Beckett, the British Consul at Chieng-mai (Zimme), the chief town in Northern Siam, refers to the Keng-hung tea, which is an important item in this caravan trade. This tea is in circular bricks for the convenience of pack transport. The leaves are steamed in copper pots, a cloth being placed over the mouth of the latter; when sufficiently steamed the tea is turned out and squeezed in the cloth till it is fairly dry, when it is ready for sale. The price increases two to three fold between Keng-hung and Chieng-mai, and four to five fold by the time it reaches Moulmein. It is strong for European palates, but is liked by Burmese and Shans, who steep it in water before using. The best grade of this tea never goes south, but finds a better market on the Yangtsze. There is also a large local consumption in Keng-hung, where the leaf is used as a quid for chewing. The Consul thinks there is an opening for an enterprising trader in Moulmein to establish relations with these Chinese muleteers, provide them with the goods required for their return journeys, and receive their tea. With a little encouragement the trade, especially in tea, might be increased along the caravan routes.

LOW GRADE TEAS.

On the subject of "Teas of Low Grade" the *Grocer* says:—"'Keep your tea customers together,' an old grocer used to say, 'and other goods will virtually sell themselves. People who come to buy good tea,' he would add brightly, 'stop to buy other things, and the net all-round profit is satisfactory.' Many grocers are now acting on that advice, and are working energetically to keep their tea customers together. Moral suasion, taking the form perhaps of a little personal homily, is not a neglected method. It tickles the ears of consumers, so to speak; whilst in numerous cases printer's ink is largely employed. During the Winter season a number of persons drink more tea; consequently they become, in a sense, more important to their grocer, and, like a wise man, he is handling them accordingly. He keeps in touch with them, telling them what is good, giving small samples and excellent advice. One of our subscribers, addressing his tea patrons, states that 'recent exhaustive experiments by an eminent physician have demonstrated the value of pure, high-class tea as a stimulant and dietetic. . . Many low-class and adulterated mixtures of so-called teas are placed on the market by large advertising firms, and it behoves every householder to view with considerable suspicion brands retailed at prices which, with the cost entailed in advertising them, render it impossible to give anything like value for money.' It is also pointed out that teas of low grade 'contain an excess of tannin and other ingredients injurious to the nerves and irritating to the alimentary canal.' Harping on the same theme, whilst eager to keep their tea customers together and attract fresh buyers, another firm of grocers describe how they have established a reputation for the sale of good tea. 'We watch,' they write, 'what other people are doing; we personally sample all the advertised and unadvertised teas in the town, and do not rest until we have beaten or at least equalled them; thus our blends are the concentration of years of study and skill.' It will be perceived that, so for as tea is concerned, the education of consumers is now taken in hand with some degree of confidence; and we are glad to notice that they are being warned off low-grade stuff. That article does not give much satisfaction to the buyer; it is not really economical in use, since it does not 'go far,' whilst retailers get little profit or credit from the sale of an inferior commodity. Their present action, by way of pushing finer qualities, is worthy of hearty commendation. It is pretty sure to be successful in the long run."

NATAL TEA.

While efforts have lately been made, and with success, to improve the condition of the tea market by restricting production in India and Ceylon, there is apparently the prospect that tea cultivation in Natal will tend to expand. In the latest report of the Commissioner for Agriculture in Natal it is estimated that the yield for the year ended June 30 last was 1,600,000 lbs., in contrast with 1,300,000 lbs. in the preceding twelve months and 1,000,000 lbs. in 1899. Something like 500 acres more land have been planted in tea in the Colony since 1899, and it is expected that within two years the yield will reach 2,000,000 lbs., while the hope is expressed that it will shortly be increased so much as to supply the whole requirements of South Africa.

COFFEE PROSPECTS.

Messrs. C. J. Leech & Co., in their last weekly coffee market report, state that the markets in both hemispheres have been excited to a degree not witnessed for many years, and the enormous transactions and rapid fluctuations experienced bring back memories of 1886, when the great rise started on predictions of an impending crop failure, which were eventually confirmed to the very letter in season 1887-1888. Then, as now, it was thought that the pace was too fast at first, and set-backs occurred, but simply proved healthy reactions. History repeats itself once more, and early last week sensational advances caused by the daily, and sometimes several times a day, arrival of adverse crop reports, mostly of the same character as in the previous week, could only culminate in a reaction, which has since occurred, and the position is the sounder therefor. Past experience suggests caution in giving ear to Brazilian advices, but the information of the last few weeks, is so emphatic and so persistently confirmed by serious houses that there would appear to be no question about the poor outlook for the next Brazil crop. As showing the magnitude of the existing speculation it may be mentioned that the transactions in New York on Monday to Thursday last week inclusive amounted to the huge total of 554,500 bags. On the same four days London registered transactions of 192,200 bags.

THE CEYLON TEA CESS.

The Chairman of the Planters' Association of Ceylon has addressed the Secretary, Ceylon Association in London, on the subject of the proposed increase of the Tea cess as follows:—

THE CASE FOR THE INCREASE.

The "Secret Subsidies" Red-Herring.

MR. ROSLING'S LETTER TO THE CEYLON ASSOCIATION IN LONDON.

The Secretary, Ceylon Association in London, London.

Sir,—I now enclose a copy of a resolution passed by the Committee of the Planters' Association at a meeting held in Kandy on Friday, the 8th instant, and I would ask your good offices in calling a meeting of your Association to consider, and, I trust, support it.

Finances.—The position of the fund administered by the "Thirty Committee," made up to the 31st October, is as follows:—

Balance due on Mr. Renton's vote for current year	...	£4,500
Mr. Renton, however, hopes to show a saving of...	...	£1,500
So that the estimated debit balance is £3,000 or	...	Rs.45,000
Balance due account Mr. Renton's salary £500, or	...	7,500
Balance due account Mr. Mackenzie's vote £2,000, or	...	30,000
Balance due on account the Green Tea bonus already voted at 5 cents a lb.	...	19,500
Balance of Russian vote per Messrs. Crosfield, Lampard & Co.	...	3,700
Total liabilities account 1901	...	Rs.105,700

To meet this we have Rs.54,419 in hand, and may reasonably expect about Rs.60,000 from the Cess collections for October, November, and December, so that in the event of Mr. Renton effecting the

anticipated saving, there may be a balance of about Rs.10,000 to carry to the credit of next year.

ESTIMATION FOR 1902.—VOTES TAKEN IN SEPTEMBER.

Voted Mr. Renton, including salary £2,500	Rs.37,500
Voted Mr. Mackenzie, including salary £4,000	60,000
Voted bonus of 5 cents a lb. on 2,000,000 lbs. of Green Teas	100,000
Voted to countries other those worked by our Commissioners per Mr. Webster, vote brought forward from 1901 ...	7,500
Total ..	Rs.205,000
Voted in November a further £1,000 to Mr. Renton ...	15,000
Further aid to the first million lbs. of Green Teas in the form of a sliding scale over and above the existing 5 cts., say ...	18,000
Reserved for St. Petersburg Exhibition, say £3,000 ...	45,000
Balanced unalloted	17,000
Estimated income for 1902 ...	Rs.300,000

It is true that there may be a further Rs.10,000 to be carried forward from this year, but we cannot take this into consideration until we see the saving actually effected.

The vote of £4,000 to Mr. Mackenzie is chiefly for pushing green tea in the States and Canada, but when it costs no more to advertise black as well as green teas, such would be done.

The vote to Mr. Renton is miserably inadequate, more especially in view of the fact that the money spent during the last two years has been more or less used for paving the way to greater efforts by getting trade channels interested and into working order, and unless we can give further support, I fear much of the good work done in the past will be thrown away.

The vote of Rs.100,000 as a bonus of 5 cents a lb. on green teas has already proved inadequate, in that the difference in value between low-grown green and black teas is at least 7 or 8 cents in favour of the latter; this has necessitated a sliding scale to bring the value of green tea to the grower up to the parity of black.

Again the original vote only allowed for 2,000,000 lbs., or little more than we shall make this year, and unless it is possible to support this young enterprise to a much greater extent than this, it would hardly appear to be of much service to the Black tea industry to continue to foster green teas.

The work must be looked on as largely a work for future benefits, still one looks to a certain extent for some immediate results and, to do so, it is necessary to make a greater effort.

The course of competition with the Japan trade is likely to be a repetition of the history of our contest with China black tea. Our entering the market of the States and Canda with a first-class green tea, will first cause a fall in the price of the Japan article which will eventually be refleced in shorter shipments from that country. Our endeavour should be to work for an output of from 4 to 5,000,000 lbs. during the coming season, as with that amount we should make our competition really felt in the markets that we are endeavouring to capture.

The altering of the date of the St. Petersburg Exhibition from November to June, necessitated the setting aside of £3,000 which we had hoped would have been available for assisting green teas.

If the cess is increased from 20 to 30 cents per 100 lbs. it would give us an additional Rs.150,000, or say £10,000; part of this I would like to see devoted to the Continent and the balance to furthering the green tea business, either by increased advertising, or, should the bonus prove insufficient, by continuing or increasing the sliding scale.

I append figures showing the number of lbs. of green teas on which the bonus has been paid to the end of October:—

	1900	1901	Previous to 1900
January	3,560	252,582	
February	3,600	116,592	1898—13,302 lbs.
March	16,175	105,644	1899—86,327 ,,
April	10,378	70,614	
May	30,863	24,438	
June	16,939	108,017	
July	34,168	163,896	
August	45,180	177,079	
September	20,223	112,244	
October	48,384	105,137	
November	143,734		
December	99,090		
	472,294		

With the small balance at our disposal we may have to pra cally abandon the campaign long before the trade can be said to on a satisfactory footing. It is fully recognised that the bo cannot be continued indefinitely, which strengthens the desire do as much as possible in the immediate future.

So much for the present and the future, and I would now l to say a few words on the past.

In 1895 when Mr. Mackenzie first went to report on the posit of the tea trade in U. S. A. and Canada, our shipments were co partively trifling, probably not amounting to 3,000,000 lbs. annum. Last year we sent over 9,000,000 lbs. of Ceylon tea; a this year these markets will probably absorb from 11 to 12,000,0 lbs. in addition to a large amount from India.

It is very hard to get any accurate figures for comparison, prior to the war duty being imposed, all tea imported into States was treated as entering into consumption, and when t duty of 5d per lb. was imposed, it was estimated that there w between 20 and 30,000,000 lbs of very low grade teas in stock, a it was probably owing to this large amount of duty free sto going into consumption after the imposition of the duty that ga the appearance of a falling off in the consumption per head of t

Again last year's official returns give an import of Ceylon into the States and Canada of over 9,000,000 lbs., whereas c export figures from Colombo to London, including transhipmen only total some 7,000,000 lbs. This is explained by the fact tha lot of tea shipped to America is shipped on a London B/Ladi which is exchanged for one for the balance of the voyage, but t tea appears as a London shipment in the Customs returns; also certain amount is shipped *viâ* China, and is entered as such. mention this to show how misleading many of the returns are.

In regard to the methods employed by our Commissioner, it to be regretted that the expression "secret subsidies" has be imported into criticisms and discussions; I would rather use t term "assisted or grant-in-aid advertising" as more correc describing the methods employed.

When our Commissioner first went to America, he was told advertising authorities that if he had £100,000 per annum, might safely approach the consumer direct, but with only one-ten of that sum at his disposal, he could only afford to work throu the trade, and it was on these lines that he went to work, offeri those firms who would interest themselves in pushing Ceylon t one-third of their advertising expenses, and thereby securing us £30,000 worth of advertising for every £10,000 we supplied.

It is true that this advertised somebody's Ceylon tea, but it h always been found that a specific advertisement, such as Smit Ceylon tea or Brown's Australian butter, appeals far more to t consumer than merely Ceylon tea or Australian butter.

Looking generally at the Ceylon tea trade and its present po tion for the year ending 31st May, London imported nea 4,000,000 lbs. more than in the previous year and delivered m than 8,000,000 lbs. more. India imported * 13,000,000 lbs. more a delivered 4,000,000 lbs. less.

On the 31st October Ceylon stocks were 5,500,000 lbs. less th on the same date last year, and the Indian stock nearly 8,000,0 lbs. more and the price of the two countries' products practica the same.

The largest factor in the above result is that though our to shipments from Ceylon are equal to those of last year, yet o shipments to the U. K. are 5.000,000 lbs. less, the balance havi gone to other countries, and further out of our shipments to U. K., re-exports to the end of September have risen from million lbs. in the previous year to over 13¼ million lbs. this ye The year's estimates of the total amount of Ceylon tea taken outs the U. K. is about 58,000,000 lbs.

It is, therefore, very evident that the prosperity of the Ceyl tea industry depends on its outside markets, and when you member that there are still 100,000 acres of tea in Ceylon a India under five years old, I would beg of you to urge on yo Association to do its utmost to convince proprietors at home of t necessity of still further efforts to expand our markets.

No further action will be taken on this side until we hear fr you, and then, if we have your support, a general meeting of t Planters' Association will be held, and the Chamber of Comme asked for an expression of their opinion.

* London imported of Indian tea.—ED. *Times of Ceylon.*

The Planters' Association would not feel justified in approaching Government in the matter unless it was shown that a substantial majority was in favour of the increase.

It might assist members in coming to a decision if Messrs. Mackenzie and Renton were invited to attend.

Enclosing letters from Messrs. Renton, de Peyster, Pollen and Crosfield Lampard.

I am, Sir, yours faithfully,
(Singed). Edward Rosling,
Chairman, Planters' Association of Ceylon.

Dessford, Nanu-oya, *November 12th, 1901.*

MINUTE AND RESOLUTION REFERRED TO IN LETTER FROM CHAIRMAN, PLANTERS' ASSOCIATION OF CEYLON TO SECRETARY, CEYLON ASSOCIATION IN LONDON, DATED 12TH NOVEMBER, 1901, ON THE SUBJECT OF THE PROPOSED INCREASE OF THE TEA CESS.

Read the following memorandum for the Planters' Association of Ceylon received from the Thirty Committee:—"The following minute and resolution having been passed at a meeting of the Thirty Committee held on the 14th September, 1901, are submitted for the consideration of the Planters' Association of Ceylon. (Minute and resolution—read report of the Colombo members of the Thirty Committee in conference with others interested in the American and Continental tea trade. After discussion, the following resolutions were passed:—"(1) That in the opinion of the Committee the cess should be increased; (2) that the Planters' Association be requested to ascertain the opinion of tea producers as to increasing the cess, with a view to give further assistance to the green tea industry.")

Resolved:—"That the Committee of the Planters' Association are convinced that an increase in the cess is a pressing necessity; (2) that the Ceylon Association in London be urged to join in the movement with a view to obtain the sanction of the Government to an increase of the cess from 20 to 30 cents per 100 lbs."

THE STATE OF THE TEA TRADE.

The recent rise in the market value of tea, which in some cases is very considerable, has, says the *Produce Markets' Review* of October 26th, lightened the previous deep depression, it might almost be said the despair, which has for some months existed among the growers and importers. No one will grudge this piece of comfort, coming at a time when there seemed so small a chance of improvement. But a bad crop in some or all of the Indian districts is, after all, only a matter of one season. It remains to be seen, even this year, how much of the deficiency in the older gardens will be filled from new land now coming into bearing, and which it has been said will yield many millions of extra lbs. for several years to come. We are certain that the home trade cordially wish for renewed and continuous prosperity in the Indian and Ceylon industry. Better times, however, if they happily come, will afford an excellent opportunity for considering how far the recent extraordinary depression (due, of course, mainly to the production outstripping the consumption) may have been added to by the obsolete and costly organisation of the tea trade.

We are called on by every hoarding to remember the delicious teas of thirty years ago, but it is not added that the average price in bond at that time was 1s 9d per lb., while at the present time it probably only averages something like a third of that amount. Yet, notwithstanding this fall to something like one-third of the old price, the expenses connected with the import, sale, and distribution of a chest of tea are, if anything, higher than they were a generation ago. In the interval, every other article of consumption sold through grocers has had the expenses connected with it reduced to a minimum, and the organisation of the trade has been modernised, so much so, indeed, that our predecessors, if they could come to life again, would hardly recognise their businesses. In tea they would be quite at home, for as it was in the days of the East India Company, so it is now, and many are so conservative as to believe that so it will ever be. That it costs ten or more times to sell a chest of tea than to sell a hundredweight of sugar is in the minds of such people a perfectly natural and inevitable state of things. Dock charges four times what they are in coffee and immensely greater than in any other grocery, intricate weight notes and warrants of an aggravatingly useless and costly character—are some of the marks of antiquity which hallow the trade in the minds of some of its members. Unnecessarily long prompts, coupled with a system of deposits abandoned in all other commodities in Mincing Lane make matters worse. Then we have a system of public sales, well suited for potatoes or onions, but one main effect of which is to depress the price of medium and fine teas. These points mainly affect the growers and importers of tea, but they appear to accept the disastrous position as desirable, unavoidable, and inevitable. It is true that we knew one respected member of the home trade, who so far agreed with them, that he said that he would as soon join attacking the four Gospels as the organisation of the tea trade, hallowed as it was by long antiquity. We contend, on the other hand, that this obsolete system has materially aggravated the depression caused by the over-production of tea, and that it will continue to be most injurious, whatever the price may be. Tea at 1s 9d could stand expenses, that tea at 7d, 8d. or 9d cannot do.

While the growers and importers have had such terrible prices to contend with, it might be thought that the home trade would have found the sufferings of their suppliers higly beneficial, and it is likely enough that many of the less informed planters think so. As a matter of fact, the home trade, whether wholesale or retail, have never done so badly in tea as they have done during the last few years. House after house with names honoured and familiar in the trade for generations, have given up their wholesale businesses. Others go on with their profits reduced to something like the funds would yield them without any trouble. The facts are quite notorious and familiar to every one connected with the trade. An immense sum of capital has been withdrawn, which incidentally used to steady prices, and to foster and create a demand for fine teas. If things were to go on as they are doing now, far larger sums will yet be withdrawn, and businesses will perforce be so altered as to bring all teas to an even deader level of price, than even the very unsatisfactory one now existing. Nor is the position of the retail trader any better. Taste and care in tea, in which the older generation of grocers used to pride themselves, no longer pay, and cheapness is the aim of all distributors. The public, no doubt, are the greatest offenders in this respect, for, as *Punch* humorously remarked, the male giver of a dinner party boasts how much his Port costs, while his wife in the drawing-room tells her guests how little she gave for her tea at the Stores. No doubt this feeling exists to a considerable extent, but there are yet left connoisseurs who appreciate fine tea and would gladly pay a reasonable price for it. If any effort were made to meet such a demand such buyers would rapidly increase, but it is worth no one's while to foster it. More fine tea is grown than ever, but it is so blended and muddled up that it is practically lost to the consumer. If the planters still further lose the support of the wholesale houses, who practically finance the 100,000 retail grocers of the kingdom, and if the public is allowed to continue to believe that the finest tea the world produces can be sold wholesale at something like 1s per lb., when unpacked and unadvertised—things must go from bad to worse. Teas are already not sold on their value, but according to their cost, and of course the lowest cost secures the order, so that depression simply leads to more depression.

Things, indeed, have got into such a position that to find the remedy appears to be almost impossible. Here we have the grower on the one hand and the distributor on the other complaining, while some, at any rate, of the depression can be alleviated by concerted action. Such action is difficult, for between these two sections of the trade there is a great gulf fixed, imperfectly bridged by the brokers, who, quite unintentionally, keep the two sufferers from knowing each other's names or entering into each other's grievances. Yet if they would only come together they would find that to a large degree they were suffering from the same causes, and that they could do much to help each other and to bring about better conditions. We believe frankly that the interests of all parties are at the present time absolutely identical, and that by meeting together and openly talking things over they would find this to be the case. Separated, the branches of the trade are quite powerles, but jointly they can effect much. In the question of Dock charges, weight notes, and so on, the aid of the trade is essential, and would be readily given. There are many other matters in which the distributors can help the growers, and any mutual attitude of suspicion can only arise from absolute ignorance of the feelings and desires of the other side. Had there been free and constant communication between the various sections, for instance, the late difficulty as to drafts could never have arisen. In almost every other Mincing Lane product, joint interests are looked after by a body represent-

ing them all, and fairly and carefully considering what each section has to say Tea has been poetically described as the cup that cheers but not inebriates, but those who trade in it, or grow it, have all found it very bitter and anything but exhilarating of late years. To sit at tea is the proverbial acme of domestic bliss. Why should not the importing and home tea trade meet round a table, restore internal peace and talk over how things can be bettered? If no remedy can be found and nothing is done, at any rate they would get to know each other and would find that there were no Machiavellis on either side, but simply plain, honest people, who find the position intolerable and wish to alter it.

If such an organisation existed at present one of its first acts would be to protest against the new Federal Australian tariff. A fixed duty of so much per lb coupled with an *ad valorem* addition to it according to quality, must have a most disastrous effect upon the consumption of the finer teas in Australia. Assuming, for instance, that the range in tea should be from 6d to 1s 6d per lb., an *ad valorem* duty of 20 per cent would raise the cost of the first to, say, 7¼d and of the finest to 1s 9½d—that is, the intrinsic difference in value being 1s, the difference in cost would be raised to 1s 2¼d. All experience has shown that this extra 2¼d would simply be deducted from the bonded price given for the finer tea, thus seriously handicapping the grower. Again, how will it be possible for Customs officers to accurately value tea? The Australian tariff is a point in which the home tea trade are not particularly interested, but with the aid of a joint body very effectual representations could be made to the India and Colonial Offices, to the Australian Agents General, and to the Federal Cabinet itself.

THE COMMONWEALTH STANDARD FOR TEA.

UNDER THE NEW CUSTOMS REGULATIONS.

Section 54 of the Customs Act, clause *e*, states :—

"Any tea not complying with the prescribed standard of strength and purity shall be deemed unfit for human use." Clause 15 of the regulations, which have been issued only a few days provides that "Tea which does not comply with the following standard of strength and purity shall be deemed unfit for human use :—

"The analysis to be made on the tea dried at a temperature of 212°F, and then powdered and totally exhausted with boiling distilled water. Total aqueous tea extract, not less than 30 per cent.; total ash, not more than 8 per cent.; soluble ash, not less than 3 per cent."—*Australian Grocer.*

THE LONDON MARKET.

The *London Commercial Record* of 14th instant says :—

Several Mincing Lane markets have this week been the scene of brisk business and in some cases even of excitement, although an upward tendency of prices was not in every instance the cause of the change. For instance in Coffee bears have been victorious in the Terminal market, whereas in Ginger bulls have carried the day. The slight reaction of last week attained further dimensions during the last few days and the advance in values has experienced in consequenc a considerable diminution, yet the tone in the market generally is hopeful of an early reaction favouring bulls. Reports reaching our market from Santos do not speak any longer with the recent tone of conviction about a crop failure, but hesitate no longer in confirming that the damage done will not exceed 20 per cent., and even this moderate figure is seriously doubted by a good many shippers who apparently believe in a total recovery of the crop through the third flowering. Stocks of Coffee in the whole world are besides so enormous that even if the Brazil crop should fail altogether nobody need go short of his usual cup of Coffee, although he would probably have to pay double the price for it. Under the circumstances it seems difficult to see the justification for a renewal of the recent spurt. In all probability there will be no scarcity nor a reduced supply of Coffee, nor will the heavy stocks experience a sudden relief by a new kind of consumer. What is therefore the main moving power in Coffee at the moment? We are afraid nothing but speculation. Prices had been allowed to decline to such a low level that the slightest outside help could not fail to immediately evoke the sympathy of the entire trade and through it every possible support. When therefore alarming crop reports reached our market from Santos, everybody was only too ready to assist in producin a strong speculative demand. Even the cooler headed operato were induced to come in, and everything went merrily until a advance of about 10s per cwt. had been established. Then the pan came, and, with the appearance of larger receipts, prices steadi broke away until a decline of 2s 6d to 3s per cwt. had bee established, and everybody, although convinced of an early reactio felt somewhat loth to arrest the market by purchasing. In th meantime the strong Santos market in Europe has inspired oth Coffee-producing countries with fresh hope for a lasting boom, a most of them have withdrawn from the market altogether or a asking exorbitant prices. India makes no exception. Whereas few days ago good Neilgherry crop changed hands at 58s c.i f., less than 66s c.i.f. is now demanded, of course without findi buyers. Fine Coorgs have been wanted, but, as a rule, plante spoilt their chance by asking too high a figure. A good Coorg w disposed of at 67s c.i.f. at a time when others asked 69s c.i.f. T near future is looked forward to by all engaged in the Coffee tra with the greatest curiosity and anxiety, and as the bulk of operato stand in need of higher values it is to be hoped that the next tu will favour them.

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION.

MEETING OF THE GENERAL COMMITTEE.

Extracts from an Abstract of the Proceedings of a Meeti of the General Commtttee held on the 5th instant.

PRESENT :—Mr. H. S. Ashton (*Chairman*), Mr. A. Toch (*Vice-Chairman*), Messrs. H. W. Boyd, W. Brown, D. Campbell, A. C. Lawrie, R. Magor, and R. R. Toynbee.

Letters dated 4th, 11th, and 18th October, from the Secreta Indian Tea Association, London, were brought up for final co sideration after previous circulation. The principal matters de with these letters were :—

(*a*) *Green teas.*—The London Committee had considered t circular issued in Calcutta on the 9th September, in which p posals for bulking green teas in Calcutta were advanced. They we in general agreement with the scheme outlined in the circular. formation was also contained in the letters regarding an offer ma by the Baraoora (Sylhet) Tea Co., Ld., to manufacture 200,000 l of "faced" green tea for 1902 in consideration of the bounty. Th offer had been accepted by the London Committee conditionally (*a*) funds being available; (*b*) the tea made by the Company in 19 being suitable; and (*c*) the teas being sent to the firms in Ameri selected by the Calcutta Committee to deal with green teas.

The General Committee observed that the offer of the Baraoo Co. had reference to "faced" green teas, which, they understoo were in demand in the United States. The scheme set forth their recent circular dealt with the unfermented or Ceylon type green tea, which they believed was preferred in Canada Th regretted to find that, in response to the circular, only two Co panies had offered to manufacture green teas on the lines sugge ed. It was to be added, in writing to London, that the Committ here intended to approach one or two of the larger agency hous with a request that they should take up the matter of manufactu and bulking.

(*b*) *Proposed Tea Cess.*—It was stated in the letter that a mem rial to H. E. The Viceroy upon this question had been prepare and was being signed in London. Subsequently, it would be fo warded to Calcutta for additional signatures and presentation.

(*c*) *Crop Estimates.*—In the letter dated 4th October, the opini of the General Committee was invited upon the following resoluti which had been adopted at a recent meeting of the London Co mittee, *viz.* :—

"That in the opinion of this meeting it is advisable that month figures of production with comparative figures for the two previo years should be published at the end of each month commenci from the 31st July, 1902, to the end of the season, so as to enab people to form their own opinions as to the probable size of t coming crop, and that the Calcutta Committee be asked for th opinion on this subject. And also (as a separate matter) whet

the forecast based on the tea manufactured to the 31st August (in lieu of the 15th August) should or should not be issued in future years."

The General Committee, after thoroughly discussing the whole question, came to the conclusion that the most satisfactory method of procedure would be to restrict the information published by the Association to the fortnightly statements of exports. In other words to abolish entirely all estimates and returns of the crop because of the difficulty of procuring complete and correct figures. They thought it would not be practicable to obtain the particulars required for the monthly statements proposed by the London Committee. Moreover they recognised that the Director-General of Statistics was giving special attention to that aspect of the question which was dealt with in the statements of actual crop hitherto annually issued by the Association. And they were of opinion that the returns which the Statistical Department was in a position to procure, were generally speaking, much more likely to be comprehensive and reliable than those obtainable by the Association. For these reasons they considered that, at the next Annual General Meeting of the Association, a resolution to discontinue the existing system of preparing and publishing crop statements should be proposed These views were to be conveyed to the London Committee.

(*d*) *Regulation of Sales.*—In the letter dated 18th October, it was stated that the London Committee had resolved to resume the regulating of sales until the 31st January, 1902, on the lines of the regulation of 1898-99. A circular had accordingly been issued to all Companies and Proprietors, explaining the importance of the matter and inviting support. The Ceylon Association had also been asked to co-operate.

The General Committee noted this announcement with satisfaction, and hoped that the regulation would be successfully carried out.

Considered a letter dated 19th October, from Captain F. Webb Ware, I.S.C., Political Assistant, Chagai, forwarding copies of a series of questions and answers regarding the Quetta-Meshed trade route *viâ* Nushki and Seistan. These papers contained information regarding the route, which would be useful to those interested. The Committee accordingly decided to inform members that the papers could be seen at the office of the Association

In the proceedings of the meeting held on the 20th September, reference was made to correspondence with Messrs. Aitken Spence & Co., of Colombo, regarding the shipment of teas from Calcutta to Black Sea ports. The letter which it was then decided to write to Messrs. Aitken Spence & Co. had been forwarded in due course; and the Committee now had before them a further communication, dated 18th October, from that firm. In this it was stated that the owners of a line of Russian steamers were willing to establish a regular service between the East and Odessa, provided sufficient inducement were offered. Calcutta might possibly be included in the itinerary, although it was feared that the stringency of the Russian quarantine regulations would be a serious obstacle. But even if this proved to be the case, shipments might be arranged on special terms *viâ* Colombo. And in order that the owners might have some idea of the probable extent of the trade, Messrs. Aitken Spence & Co. asked for information as to the quantity of tea which would be likely to go forward to Odessa. They also enquire whether in the event of special terms being arranged, Calcutta shippers would be prepared to enter into an agreement to ship by the line, which was run under the Russian flag.

The Committee noted this letter with interest. They were not, however, quite clear as to whether the reduced tariff on Russian railways applied to all steamers flying the Russian flag, or whether it was restricted to the vessels of the Volunteer Fleet. Messrs. Aitken Spence & Co. were accordingly to be asked to furnish information upon this point. If the reduced tariff did apply, the Committee were inclined to think that the Russian line in question might, by offering sufficient inducement, secure the bulk of the trade between Calcutta and Odessa. It was difficult to estimate the quantity of Indian tea which would be likely to go forward; but they noticed that the shipments to Odessa from 1st January, 1901 to 30th September amounted to 560,000 lbs. They were not at present prepared to enter into the question of an agreement, but they thought that if ample notice of the arrival of a steamer were given and if the rates of freight quoted were favourable, practically all the cargo available would be secured. A reply in these terms was to be sent to Messrs. Aitken Spence & Co.

In the proceedings of the meeteng held on the 13th August, reference was made to certain cases in which the District Magistrate of Ganjam had refused to execute warrants against a number of absconding coolies The coolies had been engaged in Ganjam for the Makum (Assam) Tea Co., Ld., upon contracts under Act I of 1882. The majority of them after working on the garden for a certain period had revisited the recruiting districts as garden sardars. They had subsequently declined to return to the garden; and warrants were then issued in Assam—under Section 151 of the Act—for their arrest. These warrants the District Magistrate in Ganjam had refused to execute; and the Chief Commissioner of Assam had declined to intervene.

Messrs. Sanderson & Co., who had been consulted, were unable to advise that any legal remedy should be adopted This had been communicated to the Committee of the Assam Branch who had decided to represent the matter to the Government of India.

Considered a letter dated 29th October from the Director-General of Statistics, enquiring as to whether there is a recognised tare for tea chests. In the case of most of the tea imported into Calcutta by rail, the gross weight of the packages was registered, and a deduction of 23½ per cent. was made as representing the average weight of the chests. The opinion of the Association was asked whether this rate—which had been adopted twenty years ago—was still correct.

The Committee were of opinion that the principal changes during the last twenty years were (*a*) a reduction in the number of half chests, and (*b*) the introduction—since 1896—of patent chests of metal and veneer. These weighed from about 20 lbs. to 22 lbs.

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

CROSSE & BLACKWELL'S, LTD.

By Special Warrant Purveyors to His Majesty The King.

CELEBRATED OILMAN'S STORES.

[w. 1-10-98 -t.f.o.]

each, as against wooden chests at about 28 lbs.; and the average weight of tea per chest might be taken as 90 lbs. The use of patent chest had fluctuated; but the Committee thought that by referring to the statistics of the imports of such chests, the Director-General would be able to form a fairly accurate idea of the extent to which they were used. With the information thus obtained it would be possible to determine what correction, if any, in the deduction of 23½ per cent. from the gross weight, was needed A reply in these terms was to be sent to the Director-General.

UNITED PLANTERS' ASSOCIATION,
FEDERATED MALAY STATES.

These Minutes to be confirmed at the next General Meeting.

Extracts from Minutes of a General Meeting, held at the Selangor Club, Kuala Lumpur, on Saturday, 7th September, 1901, at 2-15 P.M.

PRESENT :—Messrs. E. V. Carey (*Chairman*), T. H. Hill, W. W. Bailey, C. Meikle, A. B. Lake, H. N. Parkinson, J. G. Glassford, C. S. Baxendale, T. S. Dumbreck, R. Meikle, D. C. P. Kindersley, Tamboosamy Pillai; E. B. Skinner (*Honorary Secretary*). Represented by proxy: Messrs. C. M. Cumming, G. E. Bagnell.

1. The notice calling the Meeting having been taken as read, the Minutes of the last General Meeting were also taken as read and duly confirmed.

2. *Experimental Gardens.*—As a great deal of correspondence had passed between the Govenment and the Association on this subject, Mr. Bailey proposed and Mr. C. Meikle seconded that the Chairman should give an outline of what had taken place. The motion having been passed, the Chairman gave a short account o proceedings. Mr. Baxendale then said that he considered Mr. Arden should be asked to study the commercial interests of ramie industry, as the present state of this was anything satisfactory. He also read a letter from Sir F. A. Abel to Col Secretary, Singapore, on the subject, which he said had published some time previously in the *Selangor Government Ga* and proposed that the Association should point out to the Go ment that this letter was inaccurate and misleading. The C man requested Mr. Baxendale to supply the Honorary Secr with a copy of Sir F. A. Abel's letter and a written statement o own views. This Mr. Baxendale agreed to do. Mr. Skinner he thought the subject of commercial interests of ramie was for the *Agricultural Bulletin* to take up and discuss. Mr. Baxe said that the paper was an individual one and probably not cient to deal with the subject. Mr. Bailey said that he unders Mr. Arden was brought out here to make experiments as to would grow and how to grow things in this country, and n make a study of markets. Messrs. Hill and Lake agreed Mr. Bailey's remarks. It was therefore resolved that Mr Baxe should send in his letter and remarks to the Honorary Secre who would send it on, with a covering letter, to the Resi General, asking the Government to give the matter their sideration.

Mr. R. Meikle made some remarks on copra and cocoanut oil said that the quality of oil obtained depended greatly on treatment, and that usually more oil was produced from the s nuts than from the large ones. He also suggested that Association should move for the abolition of export duty produce was consigned from one State to another, and it decided that this question should be gone into on a future occa

3. *Indian Immigration Correspondence.*—As the whole co pondence had been thoroughly gone into that morning by Committee, it was decided that instead of reading all the pa

A METHODIST MINISTER

OF

40 YEARS' STANDING, SAYS:

"For years I was troubled with Indigestion and Constipation, and suffered greatly from Giddiness, Nervous Debility and sleeplessness.

SEIGEL'S SYRUP

"The best medical skill seemed of no avail, and I quite thought my ministerial work was coming to a close. However, a friend urged me to try Seigel's Syrup, and 4 bottles sufficed to make my cure complete."

(Rev.) J. SPENSLEY,
Winterton, Doncaster.

6th January, 1901.

through, the most important letters only should be read and an outline of the whole question given by the Chairman.

The following twelve papers were read and approved:—

(*a*) Importers of "free" labour inducing coolies to sign in India promissory notes in their favour for advances.

(*b*) Medical examination of kangani-recruited and professional-recruited coolies; the examination of the former being optional and the latter compulsory.

(*c*) Straits Settlements paper No. 30: "Correspondence regarding the housing and shipping of coolies at Negapatam prior to their embarkation to the Straits."

(*d*) Further correspondence with the Indian Immigration Agent, Penang, and the Chairman *re* notice of termination of agreement between free coolies and their employers.

(*e*) Letter from Shunmuga Mudelliar offering his services as a Chief Agent for recruiting coolies for the Straits in Madras.

(*f*) Corresponpence with Government *re* one Kangani Rajappan obtaining State-aided tickets for coolies not of the agricultural class.

Mr. C. Meikle said these coolies were on Hawthornden and were working very well. He promised to send a letter to the Honorary Secretary covering this statement, which would be forwarded to the Resident-General.

(*g*) Correspondence *re* Mahratta coolies. The result arrived at was that they are more expensive to recruit, cannot speak Tamil, and do not appear to be regarded as better labourers than Tamils.

(*h*) Letter from Government enclosing a copy of a letter from the Colonial Secretary, Straits Settlements, on the subject of recruiting "free" Indian labour, together with copy of a letter from the Chief Secretary to the Government of Madras, relating to the Report on Indian Immigration, Straits Settlements, for the year 1899.

(*i*) Letter from Resident-General enclosing Dr. Haviland's report *re* the feeding of Tamil coolies on estates. Mr. Lake said he was feeding his coolies now.

Resolved that the Honorary Secretary should write to the Resident-General and say that planters would individually undertake the feeding of coolies under circumstances rendering it desirable, and that there were one or two cases at present in the Native States of estates feeding their coolies.

(*j*) Letter from Resident-General referring to a letter from Dr. Foston on the subject of recruiters' licenses.

(*k*) Letter from Resident-General *re* the appointment of a local agent in Penang Harbour to receive coolies shipped to that port.

Resolved that Honorary Secretary write to say that the Association does not consider such an agent necessary as the present existing arrangements are satisfactory.

(*l*) Letter from Secretary to Resident *re* depositing sums of money with Dr. Foston for disbursement to kanganies. The mistake in addressing the United Planters' Association on this subject was explained by the Chairman.

4. *Public Auction.*—As all the correpondence referring to this subject had been printed and circulated amongst members, it was taken as read.

The following motion was passed:—

"That this Association approves of the sale of coffee by auction as suggested by Messrs. Barlow & Co. and endorsed by the Committee in certain correspondence, and it is hoped that every individual member will make an effort to make the experiment a success. Also that Messrs. Barlow & Co. be henceforth recognised as the 'Brokers to the United Planters' Association' in the terms of paragraph (*a*) of their letter of 15th August, 1901."

The Honorary Secretary was instructed to write to Barlow & Co. and inform them of the resolution which had been passed and to say that none of the objections raised by the Committee in the printed correspondence were pressed on discussion.

5. "*Agricultural Bulletin.*"—The Chairman explained that the result of the correspondence on this subject was that the *Bulletin* had been sanctioned by Government and that the Straits Settlements Government had agreed to make a definite grant of $300 per annum, independent of any profits on the sale of the publication, which sum would be devoted to the purpose of generally improving the *Bulletin*, and that the Federated Malay States Government would do likewise.

The Honorary Secretary stated that he had received 33 subscribers for the *Bulletin* and expected to get more.

The annual subscription had been fixed at $3 and each copy to be 50 cents. The prospectus for the new *Bulletin* was read and Mr. Bailey suggested that the "Collection of Consular Reports from the Foreign Office" should be added to the list. It was resolved that the Honorary Secrettary write and suggest to the Resident-General that this be added to the prospectus.

6. *Improved Mail Service.*—Members' attention was drawn to the printed papers lying on the table of the agreement made between the British India Company and the Government for an increase in the number and size of steamers to run between Negapatam and Penang and the passage rates for coolies.

7. The State Engineer's report on the comparative values of casuarina, bakau, and ordinary firewood was put on the table.

Result of Experiments made with Firewood, consumed on Steam Roller 3,890.

Firewood.	Hours worked.	Consumption in lbs. per hour.	Consumption in cubic feet per hour.	Average time taken to get 50 lbs. steam.	Average steam pressure.	Average weight per cubic foot of firewood.
		lbs.	c. ft.	hours.	lbs	lbs.
Casuarina	105¾	56·44	1·22	2	81·7	46
Bakau	57¼	78·25	1·21	2	81·6	64½
Ordinary	62	75·8	1·36	1·68	87·5	55½

8. *Europe and Aden Coffee.*—The Honorary Secretary reported that the account sales had been received from Messrs. Frame, Alston & Company for the 84 pikuls of coffee sent to England which had been collected from five estates. Mr. Bailey had sent each contributor a cheque for the full amount realised—*viz.*, $17·78 per pikul. A sum of $2·62 per pikul was now due to the Association for charges incurred for storing and shipping the coffee to England, so that the experiment had not proved by any means a success.

The Honorary Secretary also reported that the 7 pikuls of coffee (belonging to the 12 pikul lot) which had been kept at Port Dickson, had been sent to England in July and consigned to Messrs. Frame, Alston & Company.

It was decided that the Honorary Secretary should write to the Manager, Port Dickson Coffee Curing Company, and enquire *re* the sale of the 12 pikuls.

9. *Dalwis & Sons:*—The Chairman said a letter and samples of coffee extracts had been received from this firm and that he and the Honorary Secretary had tried the samples, but found them not sufficiently palatable for any encouragement to be held out to the firm in question.

MARKET REPORT.

[*Per Mail advices of* 1*st November* 1901.]

COFFEE.

The London Commercial Record says:—There is very little of interest to report in the spot market as the supplies on offer are still limited in extent, and the assortment does not present much attraction to the trade generally. Coorg met with a good demand and sold at full prices to a further advance, and Nyassaland was also well competed for, selling extremely well. The transactions in Central American descriptions are too small to be of interest. Dumont Santos did not bring the top prices of last week. The market for futures has been a fluctuating one, but with realisations and somewhat conflicting crop reports the tone has favored buyers, and closing prices show a decline for the week of 9d per cwt. Yesterday Santos December delivery sold at 35s to 34s 6d, March at 36s to 35s 6d, May at 36s 6d to 36s, and September at 37s 6d to 37s per cwt. Catalogues to-day presented:—457 bags East India, 24 bags Peruvian, 49 bags Mexican, 95 bags Columbian, 311 bags Guatemela, 70 bags Salvador, 174 bags Guayaquil, 27 bags Costa Rica, 143 bags washed Rio, 519 bags washed Santos, 500 bags Rio (quay terms), and 500 bags Bahia (quay terms). The sales went off with good demand and full prices were paid, but some quantity was bought in.

The American opening cable came 5 to 10 points lower.

We quote:—

London ...	Santos ...	Dec. delivery	... 34s 6d.
New York	... No. 7 Rio...	,,	... 6·10 cents.
Hamburg...	... Santos ...	,,	... 34½ pf.
Havre ...	... Santos ...	,,	... 43¼ francs.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	13,782	16,932	41,371	32,458
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	16,678	13,578	25,459	16,590

The preceding figures exhibit— Tons.

In the Imports an increase this year of .. 8,913
Home Consumption an increase of 3,100
Export an increase of 8,869
Stock a decrease of 3,150

Tuesday's auctions passed off as follows:—

EAST INDIA.—1,080 bags partly sold—*Coorg*, smalls 44s, low middling to middling 52s to 58s, fair to bold 74s to 77s, peaberry 72s.

NYASSALAND.—134 bags sold, fine smalls 51s, good middling 61s, fine bold 72s to 72s 6d, peaberry 46s.

JAMAICA.—18 barrels sold, low middling grayish 45s, bold dull brownish colory 74s, peaberry 54s.

NICARAGUA.—73 bags mostly sold, smalls 35s, good ordinary bold dull pale 41s, low middling dull greenish 43s to 44s 6d, peaberry 53s.

SALVADOR.—23 bags partly sold, smalls 37s 6d.

COLOMBIAN.—267 bags partly damaged sold, smalls 32s 6d to 40s 6d, low middling to middling 47s 6d to 54s 6d, common bold 50s, fair to good bold 60s 6d to 68s 6d, peaberry 42s 6d to 52s.

BRAZIL.—Of 1,116 bags washed Dumont Santos 450 bags sold, fair to good medium colory 39s to 41s 6d, good bold ditto 48s; of 2,505 bags unwashed about 1,200 bags sold, small brownish green foxy 35s, medium 35s 6d, bold 38s 6d to 42s 6d. 100 bags Santos bold mottled greenish realised 37 *ex* quay. 250 bags washed Santos were bought in.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99. Bags.
Rio ...	2,625,000	1,229,000	1,583,000	1,382,000
Santos ...	5,195,000	4,045,000	3,626,000	2,917,000
Total ...	7,820,000	5,274,000	5,209,000	4,299,000
Crop ...	—	10,900,000	8,971,000	8,772,000

Rio Exchange 11 7/8d, previous day 11 7/8d.

HAVRE, *October* 31.—Good average Santos November opened quiet at 43¾f. and closed steady at 43f., December opened at 44f. and closed at 43¼f., March opened at 44¾f. and closed at 44¼f., May opened at 45½f. and closed at 44¾f., September opened at 46½f. and closed at 45¾f.

HAMBURG, *October* 31.—Good average Santos November opened quiet at 35pf. and closed steady at 34pf., December opened at 35¼pf. and closed at 34¼pf., March opened at 36¼pf. and closed at 35¾pf., May opened at 37pf. and closed at 36¼pf., September opened at 38pf. and closed at 37½pf.

NEW YORK, *October* 31.—Closing prices of No. 7 Rio were as follow:—

	Nov.	Dec.	Jan.	Feb.	Mar.
October 31...	6·05	6·10	6·20	6·30	6·55
October 30...	6·15	6·25	6·35	6·45	6·40

IN THE U. S.

Active option trading, with prices advancing, has been the feature of the week, says the *American Grocer* of . . . Options are from 25 to 30 points higher than last week and spot prices of Brazil are ¼c better. This movement finds its basis in cabled reports of unfavourable flowering of the growing Santos crop. Such reliable firms as Holworthy, Ellis & Co., Santos, cable: "Growing Santos crop, first flowering poor. General opinion points to a poor crop." Similar advices came from other firms. It is well to keep it in mind that the world's visible supply, added to one year's production, will give a total supply of 9,000,000 to 10,000,000 bags above requirements. Present prices are more than 2c below those ruling last season at this time, when the statistical position was less favourable to "bulls." It may be that the speculative element has nerve and resources to carry the market up, up, up.

Deliveries have been large. Last month's heavy movement is recorded on the editorial page. The market closed firm, with spot No. 7 Rio at 6c; No. 3 Rio, 7¾c; No. 5 Santos, 7c.

Mild sorts are well held, particularly fancy and choice grades. Quotations are about as last week, but more firmly held. Padang Interior, 14@18c, with fancy at 24@28c, and very fancy higher; good Cucuta, 7½c, with choice at 10½c, best washed at 11c, and for extra fine lots. so far as colour and style go, a premium of 1@2c is asked; Central American, best marks, 9½@11c, and up to 13 for invoice lots—the latter choice Guatemala; Mocha, 14@18c, and higher for extra fancy; best Mexican, 9@11c.

TEA.

INDIAN.—Although the regulating of sales by the Committee does not come into operation until the 4th proximo, offerings were by mutual consent limited to the moderate total of 45,500 packages compared with 34,100 packages last week, and 57,500 packages for the same time in the preceding year.

The selection has continued to be a very useful one, and included a remarkably small proportion of undesirable Tea, Cachars, Sylhets and Dooars especially being above the average. The advance noted previously for the lower priced grades has been well maintained and higher quotations have often been recorded, common to ordinary fannings being the most affected. It is satisfactory to note that in spite of the rise below, the finer descriptions have been in better demand, medium to fine brokens more particularly having favored sellers. Under present conditions the tendency of the market is for all kinds up to about 7d per lb. to realise full values compared with those over 7d per lb., this being principally noticeable in Pekoe types.

It is a matter for congratulation that the marked improvement in the position of common did not develop until the bulk of the crop had been manufactured, as otherwise the usual rush to make quantity with a total disregard to quality would have occurred, notwithstanding the severe lesson of the past season. Nature, in the shape of slow growing weather, combined with finer plucking has, at least temporarily, saved the situation, and it is earnestly to be hoped that growers will not at the eleventh hour endeavour to increase the output and by so doing adversely affect the position.

For 35,600 packages on Estate Account 8⅛d per lb. was obtained, opposed to 7⅜d per lb. for 46,600 packages, and 9d per lb. for 37,400 packages in the two foregoing seasons.

Total printed for Importers in October:—

1901	1900.	1899.
189,700 pkgs.	256,900 pkgs.	230,300 pkgs.

This will make 470,700 packages of this year's crop offered, *versus* 551,000 packages, and 572,000 packages to the end of October in 1900 and 1899 respectively.

CEYLON.—A reduced quantity was submitted, *viz.*, 16,600 packages *versus* 19,500 packages on the 22nd instant, and 20,100 packages in 1900

Bidding was again keen for both leafy and broken sorts up to 7d per lb, with an inclination to dearer rates, and not many Pekoe Souchongs in garden invoices were to be had at 6¼d per lb. Medium and fine met with less competition, however, and prices ruled rather irregularly. Stand out lines were sought after and on the whole fetched good figures.

The average is 8¼d per lb. On the 24th ultimo it stood at a little over 8d per lb.. and 12 months since it was 7½d per lb.

In the month the number of packages brought forward was:

1901.	1900.	1899.
90,700 pkgs.	103,900 pkgs.	129,100 pkgs.
(Avge. 8d per lb.)	(Avge. 7½d per lb.)	(Avge. 8⅛d per lb.

JAVA.—Nearly 1,900 packages of direct import passed the hammer with a strong tone but without material change.

The following were catalogued for October:—

1901.	1900.	1899.
5,700 pkgs.	6,500 pkgs.	5,500 pkgs.
(Avge. 7d per lb.)	(Avge. 6¾d per lb.)	(Avge. 7⅛d per lb.

Deliveries.—Clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 29th October, 1901 ... ... 18,789,269 lbs.
Do. do. 1900 ... ... 17,380,202 ,,

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	40,312	4,966	45,278
Ceylon	14,909	1,749	16,658
Java	1,568	311	1,879
Total ...	56,789	7,026	63,815

Also 362 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated November 1st, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1901-1902	550,749	522,650	29,804
1900-1901	580,922	559,081	23,450

6,303 *pkgs.* INDIAN
6,926 „ CEYLON
1,879 „ JAVA
} Total 65,108 packages were offered in public auction this week.

Customs figures from the commencement of the season to the end of September show a decrease of about 11 million pounds in the quantity of tea brought into the country, while both Home Consumption and re-exports show a slight increase. Duty payments during October were also in excess of last year.

INDIAN.—The tendency of the market continues in an upward direction, teas for price still attracting the most attention, although other grades participated in the stronger competition noticeable throughout the auctions, with here and there slightly higher rates.

TRAVANCORE.—Offerings from Southern India continue to grow in importance, while some of the higher grown estates are showing a marked improvement in flavour and quality as evidenced by the "Munaar" teas sold this week. The following averages are worthy of note:—"Pabbojan T Co.," 1/1; "Margarets Hope," 1/0¾d; "Monteviot" and "Darj Con. Singbulli," 1/0½.

Week's average of New Season's tea sold on Garden Account 1901, 36,271 pkgs., av. 8·19d. 1900, 46,880 pkgs., av. 7·34d.

New Season's tea sold on Garden Account 1st June to date 1901, 400,421 pkgs., av. 8·28d. 1900, 467,739 pkgs., av. 8·02d.

CEYLON.—The better tone noticed during the last two weeks has been further emphasized, teas for price being about ¼d. per lb. dearer, while other grades showed an improving market. Only 2,613 packages are advertised for sale next week.

Average for week 8·18d., against 7·56d. same week 1900.

Ceylon tea sold on Garden Account 1st January to date, 973,493 pkgs., av. 6·76d. 1900, 1,049,292 pkgs., av. 7·20d.

JAVA.—The firmness noticed last week was even further developed, and prices generally showed a slight improvement. Invoices from "Tanawattee," "Perbawattee," "Djati Nangor," realized 9¼d., 8¾d., 7¾d., respectively.

Bank Rate 4 per cent. Exchange on London three months' sight:—Calcutta 1/4 3/16. Colombo 1/4 7/32.

IN CANADA.

Toronto advices dated October 17th in the *Canadian Grocer* states:—

There has been a little more disposition on the part of wholesalers to operate in Japan teas, but only a few transactions have taken place. as they are not willing to pay the prices asked. The market in Japan is firm at the present figures, and the third-crop teas are showing comparatively better value than the early teas. Very few teas, it appears, are this year being sent to Canada on consignment. This is not surprising, in view of the poor results that were experienced last year. The situation in regard to Indian and Ceylon teas also continues firm. Although a better feeling exists on the local markets, wholesalers are only buying for immediate requirements, hoping that better prices will rule later. It is worthy of note that Indian teas are just now at their best, being September manufacture, when the leaf is full of sap and flavory. The kinds of tea mostly wanted here just now are medium Pekoes and Pekoe Souchongs. Stocks of tea on the local market appear to be gradually diminishing, as far as we can gather. There are still some old teas on the spot, however, which are not without their influence on the market on new and better quality teas There is a little enquiry for Ceylon green teas, and a few are being offered, but sellers refuse to accept the bids which are offered. China greens are still scarce and firm, and 1½ to 2c. dearer than at the beginning of the season.

COCOA.

Public sales on Tuesday offered 5,855 bags; the result was very disappointing only about 250 bags selling. Of 619 bags Trinidad catalogued 100 bags were placed at 71s 6d for fine red, and 60s for common grayish. Of 1,317 bags Grenada only 60 bags fair to good sold at 61s to 64s 6d. 40 bags Samana sold, out of 204 bags offered, at 55s for grayish. Of 152 bags African 52 bags fine realised 64s 6d. The bought in growths comprised—10 bags Jamaica, 11 bags Dominica, 79 bags Venezuelan, 47 bags Bahia, 59 bags Puerto Cabello, 307 bags Colombian, 1,977 bags Quayaquil, 16 bags Seychelles, and 1,657 bags Ceylon. Since the auctions 200 bags Trinidad sold at 58s 6d to 60s, for weathered and dark, 67s to 68s for good red, and 72s 6d to 73s for fine; 50 bags Grenada at 65s for good; 20 bags Puerto Cabello at 110s to 135s; 60 bags Bahia at 62s; 350 bags Guayaquil at 65s to 67s for grey to greyish Caraquez, 69s for fine ditto, 67s for Machala, and 77s for fine Arriba; also 250 bags Ceylon at 64s to 69s for good and 82s 6d to 85s per cwt. for fine.

PEPPER.

BLACK.—The market remains very quiet. On the spot small sales have been made at 6d for fair Singapore; for arrival the only sale reported is a little lot of 25 tons, nearly due, at 5 15/16d.

The auctions on the 30th ultimo presented 380 bags Penang, weighing 3 lb. 4 oz., dust 5·30 per cent. per gallon, which retired unsold at 5¾ per lb.

WHITE.—The market is very quiet on the spot, with small transactions at 9⅛d to 9¼d for dull to fair Singapore, and at 8¾d for Penang. For arrival 100 tons have changed hand, *viz.*, October-December at 9¼d to 9 5/16d, November-January at 9¼d to 9 5/16d, January-March at 9¼d to 9⅜d, and Penang October-December at 8⅛d.

67 bags Singapore were offered at public sale on Wednesday, but were bought in at 9¼d per lb.

To-day quiet, and no sales reported.

The shipments of Black Pepper for the month of October compare as follows:—

	1ST-HALF.				2ND-HALF.			
	1901.		1900.		1901.		1900.	
	Tons.		Tons.		Tons.		Tons.	
U.K.—Singapore	40	40	130	130	20	30	30	30
„ Penang ...	*nil*		*nil*		10		*nil*	
Continent ...		20		200		260		220
United States ...		350		100		*nil*		*nil*
Total ...		410		430		290		250

The shipments of White Pepper for the month of October compare as follows:—

	1ST-HALF.				2ND-HALF.			
	1901.		1900.		1901.		1900.	
	Tons.		Tons.		Tons.		Tons.	
U.K.—Singapore	300	300	220	340	110	150	100	100
„ Penang ...	*nil*		120		40		*nil*	
Continent ...		50		40		130		190
United States ...		170		...		*nil*		...
Total ...		520		380		280		290

GINGER.

COCHIN.—A good demand was experienced privately in the early days of the week, and sales to a fair extent were reported at advanced prices, fair medium and small washed rough selling at 44s 6d to 46s, Calicut Sorts at 42s, with buyers over at these figures. At auction, however, there was little or no enquiry for the 64 cases offered, only 5 cases dull limed small and ends, with a little medium cut, selling at 55s per cwt. Subsequently buying again became active, and washed rough sold up to 47s 6d (48s now wanted), and Calicut Sorts up to 44s per cwt. Sales for the week about 2,500 bags.

JAPAN is also dearer. The value of fair plump limed on the spot is 41s 6d. For arrival sales of 50 tons are reported at 33s for November-January (s.), and 32s per cwt., c.i.f., for January-March (s.).

JAMAICA has participated in the improved trade, and business to the extent of about 700 barrels has been done at 3s to 4s per cwt. over the recent range of values Under the hammer 98 barrels nearly all sold at about 7s advance on the last auctions' prices—low middling to middling washed 49s 6d to 54s 6d per cwt.

CINCHONA.

Additions to the quantity of bark to be offered at Amsterdam on November 7 now bring the total to 8,980 bales and 325 cases, weighing 816,285 kilos. The stock in first hands now consists of 2,651 packages Government and 12,314 packages private bark, including the quantity to be offered in auction.

QUININE.

Quiet and easier in second hands. At the end of last week small sales good brands of German sulphate were made at 1s 2d for December delivery, and 1s 2¼d for March, and these prices are quoted nominally. To-day no business has been done and pr are quite nominal, owing to the bark-shipments being 1,50 Amsterdam lbs., which are said to be the largest on record. S have been advanced, the following being the quotations for more important in quantities of 100 ozs.:—Bisulphate 1s 3d per citrate 1s 9d, hydrobromide 1s 8½d, hydrochloride 1s 8½, lactat 8½d, phosphate 1s 1 d, salicylate 1s 8½d, and valerianate 1s 11½

VANILLA.

At auction the considerable supply of 1,800 tins were offe (chiefly Seychelles), and mostly sold at irregular, but lower pri 2/s per lb. was paid for 7½ to 8½ inch Seychelles pods; 16s to 19 for 7 to 7½ inch; 11s 6d to 15s 6d for 6½ to 7 inch; 9s to 14s fo to 6½ inch, and 7s to 11s for 4½ to 5½ inch.

(AVERAGE FOR ALL INDIA 8·19d., NOVEMBER 1ST.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Du and Various	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Pric
Travancore ...	**618**	**7·31**												
Lockhart ...	108½c	7¼	16½c	8¾	87½c	7	...	...	...	...	4½c	6	1¼c	4
Kan Dev H Co M ...	94 p	9⅜	22	10¼	37	8¼	35½c	11⅜	...	...	..	..	...	...
Poonmudi T Co B ...	62 p	6⅜	18	8¼ 9	24	6¼	..	...	12	6	5	5½	3½c	5¼
S I T Co Kud Kar ...	91	7¼	...	...	...	...	91	7 7¼	...	...		...	...	...
Stagbrook ...	174 p	6½	80 p.	7½ 8	48	6½	...	...	29	5¾	12	5½ 6¼	5	4¼
S T T Co Venture ...	89	7	...	...	41	6⅝	27	8¼	21	6¼	...	...	...	...
Wynaad ...	**·157**	**6·60**												
Walkers Achoor ...	74 p	7	20	6½	...	...	30½c	9	18	6	..	...	6½c	6
Wynaad T Co Per ...	83 p	6¼	28	6	..	...	25½c	8¼	26	5½	...	...	4½c	5

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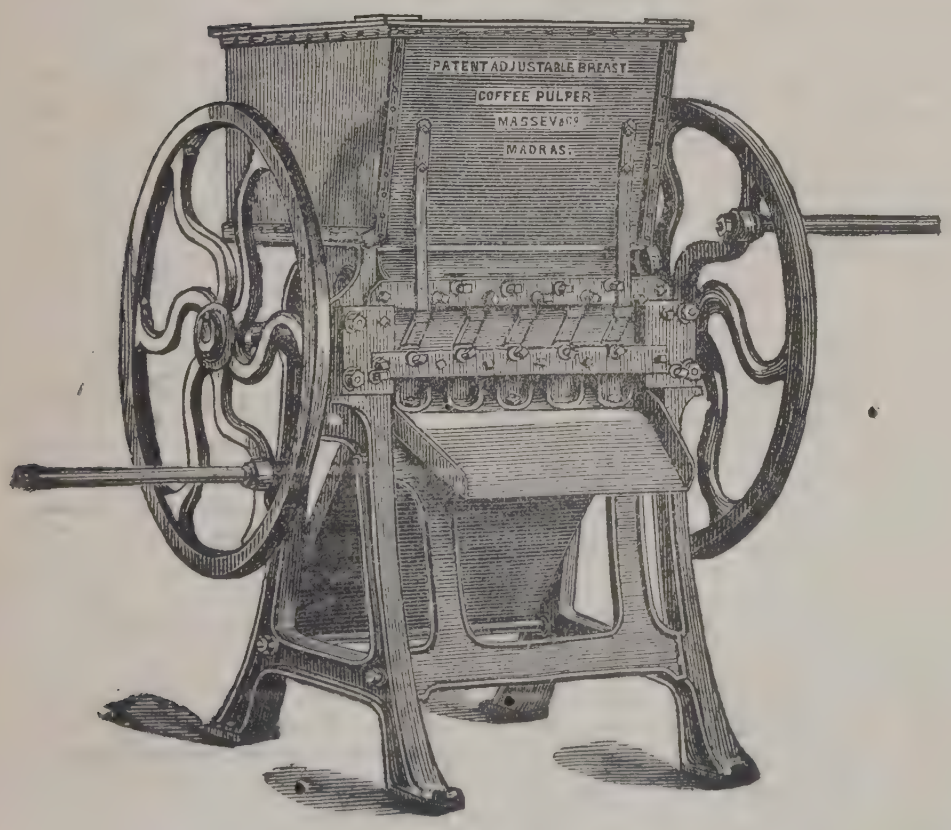

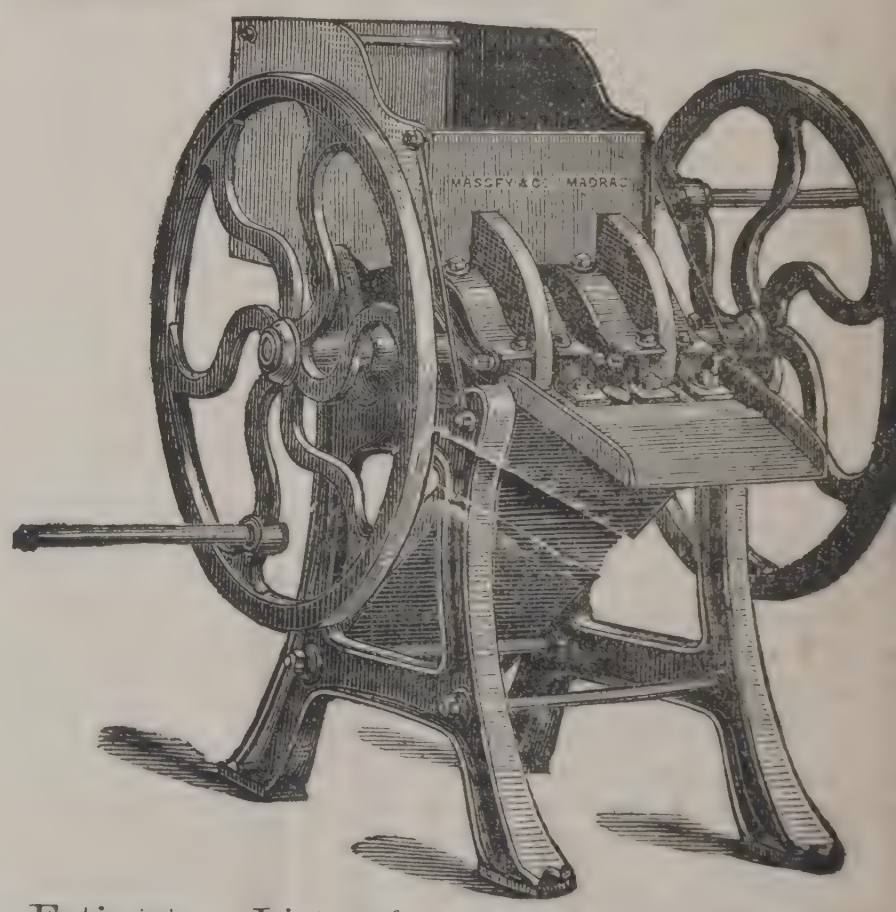

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PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

VOL. VI.] MADRAS, SATURDAY, NOVEMBER 30, 1901. [No. 48.

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N.B.—Remittances should be sent to E. C. DUFF & CO., Proprietors, "Planting Opinion," 106, Armenian Street, Madras.

SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 6th proximo. Season reports should be sent direct to the Printers, Messrs. HIGGINBOTHAM & Co.

Munzerabad. *November 26th.—Weather*—East winds and cold nights. Rain gone. *Crop*—well in hand, almost finished on many places. *Coffee*—healthy, here and there a little leaf disease. *Interesting item*—The Maharajah arrived at Saklaspur on the 22nd and left for Hassan on the 24th.

Coorg. POLLI BETTA, *27th November.—Weather*—Perfectly clear during the past two days, and the cold weather appears to have definitely set in. Coffee has lost a good bit of leaf from A. V., but the wood is fine and thick with plenty of promise on it. Present crops after the very heavy ones of last year are naturally short. *Labour*—Ample. *General health*—Fair. *Interesting item*—The Inspector-General of Volunteers' visit to Mercara on the 25th. There were 50 members on Parade, which was very creditable, considering the time of year. Many members had come in 30 miles at great inconvenience to themselves.

INDIAN TEA AT THE PARIS EXHIBITION.

THE immense strides towards popularity which were made by Indian teas in France during the Paris Exhibition, must indisputably show the grower here the vast possibilities that a continuous pushing of the article before the public, holds for India. According to the letter of Mr. EDWARD F. LANGDALE in the report on the Indian section of the Paris Universal Exhibition of 1900, extracts from which we publish elsewhere, from the 17th April to the end of November 8,364 lbs. of Indian tea were sold, in packet form. This grip of the public taste once made, should open the way for a steady increase of sale, if only interest in the work

be maintained by the Associations concerned, and the producer aims at an even standard of leaf. One great point to be considered in the introduction of tea among people with whom the beverage must be an acquired taste, is the imperative necessity for illustrating the best methods of infusing. Many people who have been tea drinkers all their lives, are yet perfectly incapable of making an ordinary, drinkable, cup of tea. Their idea is to produce something strong and black, which goes by the name of tea. That is one of the reasons why tea in some countries does not obtain a place in the household equal with coffee. Coffee can bear stewing; tea cannot. Therefore the consumer must be shown where the difference lies, and that good, well flavoured, tea which correctly made would be a pleasure to drink, under the stewing process becomes nothing more or less than poison.

Tea to the appreciated, and brought into daily use by persons unaccustomed to its properties, requires that the vendor shall fully illustrate its preparation, so that a sufficient quantity shall only be used, and further that the infusion may not be too long. A novice on being presented in the house of a friend with a black, bitter, fluid, and informed that it is tea, will scarcely after tasting, desire to introduce it into his, or her, own home; but if the infusion be properly attended to, then, in all probability, the same person will make an effort to procure some, and try the experiment also. A good, well-blended, tea, properly introduced to the purchaser, accompanied by instructions for preparing in accordance with its strength, cannot fail to increase in demand when once an opening has been established. Every effort then should be made by Indian tea growers to extend their market now that such an opportunity has occurred; for each of the eight thousand odd pounds which have already been distributed through different parts of France will serve as a separate stepping-stone to a still greater success.

Indian tea is not so generally known as it should be, therefore to bring it into a more prominent position before the world must be the interest of the Associations. There is so much cheap rubbish masquerading under the name of tea that in countries where the buyer has not yet learned to make the distinction, all teas are looked on as being much alike. If the word Indian can be made synonymous with "good" as relating to tea, then the first hold gained by Indian teas on the public will never be lost. It is where good articles are placed on the market at first as a kind of sop, and then, when some demand has been produced, inferior qualities are substituted to fill the gap and to work off old stocks, that the damage is done. Confidence is lost, and when once lost in an article of consumption, and one especially which is not too firmly established, there is no hope whatever of regaining the lost stand. Indian tea, to take a firm hold, must be kept above a certain minimum standard in order that confidence may be gained; and when once gained, maintained. The substitution of inferior blends under the pressure of demand, for a better and wellknown quality, is a mistake; better to admit the temporary shortness of supply, and uphold the quality, than fill the order and lose the public confidence. Here in our midst, and at our very doors we have a market for the inferior qualities; therefore we do not require to lose by them or risk our foreign trade by introducing them among the better class brands. India can absorb all the cheap teas we can produce if only the taste for it can be cultivated among the poorer classes. There is no reason to doubt that it can be done; and the fact of the teas placed on the market for that class of trade being our low qualities, will not harm our better cla trade in the least, but will instead more surely come with their limited means. Therefore, in pushing ahead t opening of the markets in our own country we not only consequence supply a purer quality of tea to the forei consumer who can afford to pay a better price for a go articles, by preventing the temptation to work off inferi stocks to our future detriment, but we get rid of the b freight and prohibitive duties. France is a big countr and a country where the life of the peasantry is very qu and uneventful; such people would make good tea drinke Tea and "crackin" have ever gone well together, and whe ever the custom of the people is to sit together in pea and gossip, there the market for tea appears.

THE INDIAN TEA EXPANSION QUESTION.

[CONTRIBUTED].

The *Indian Planters' Gazette* has quite taken sides wi Mr. J. B. Leslie Rogers in his remarks on the exclusi methods adopted by the Indian Tea Expansion Commissi in introducing Indian-grown teas among the poorer class of natives. Mr. Rogers points out in a letter to that Journ that his offer to assist the Commission in their endeavours supplying information, and placing his own Agents, at th disposal; besides the further offer to establish a branch agen at Lahore which he calculated would control a great area country, was received in anything but an encouraging manne plainly illustrating to him that outsiders were unwelcor among the chosen few of Calcutta. "Had mine, and oth such offers, been entertained," says Mr. Rogers, "ma glaring blunders, and much waste of time would have be wholly avoided; and we would not still have been waiti for the exploiting scheme in a part of the country whi comprises the most extensive tea markets in all India.

The placing of the work in the hands of a private fir which should be solely carried through in the interests of t planters by the Expansion Commission does not seem t correct thing to do, and also calls for much comment fro Mr. Rogers. The scheme of the Association may fall throug and the planters be the losers, yet were it to fail in the han of the Commission trying its utmost to carry the work o on the best and most economical lines possible the disappoin ment and loss to the planters would not be felt so severely but if, on the other hand, the scheme should fall throug while in the hands of the "Private Firm" it is safe to s the planters will have lost to the gain to some extent others, whose chief interest in the movement is secured the almighty dollar, and not by a desire to advance the wo of the Indian Tea Association.

The attempt to cultivate the taste of the poorer classes natives for tea, will be accompanied with sufficient expens without there being the need for work undertaken by o body of men, with attendant expenses, to be handed ov again by them to a third party. If the Indian Tea Associ tion acting for the planters generally cannot appoint the own officers to carry out the work, then they should transf it to someone else who is capable of doing, and will do i not hand it to another body who will again pass it o Money, time, and opportunity are soon frittered away in su methods; and after a series of these passings on, and t consequent pickings attending each, the planters will fi the game scarce worth the candle.

THE I. T. A. SPECIAL COMMISSIONER IN PERSIA.

Mr. Foley, Special Commissioner for the Indian Tea Association has laid himself open to two grave charges which, if proved to be true, will place him in a very awkward position with the Association. The first appears to be a remarkable lack of veracity in a letter published by him in the *Civil and Military Gazette* of 31st July last, and the other is contained in the suggestion by the *Indian Gardening and Planting* of a symptom of incompetency for the task. Regarding the former, Mr. Foley is said to have stated that the Russian Vice-Consul at Seistan, Mr. A. Miller, told him that Cossacks to whom Mr. Foley had given some samples of tea, had declared they would never drink Russian tea again if they could get Assam. Mr. Miller denies this statement *in toto*, and further adds that what he did tell Mr. Foley was that, in his opinion, the Assam tea was much inferior to the worst qualities of Chinese teas drunk in Russia. Truly, a most contradictory statement. Mr. Miller again says he did not mention the opinion of the Cossacks,—which in reality was that they would never drink Assam tea again if even they could not get Russian. Mr. Miller is not alone in his contradiction of Mr. Foley's statements. Mr. Bradford Ouseley, the British Vice-Consul, has also seen fit to make some corrections. The "symptom" of incompetency is traceable in the face of Mr. Foley's submitting Assam teas in a country where that particular class is absolutely opposite to the requirement. There is nothing to hinder a man with the experience Mr. Foley should possess of tea-drinking peoples, from ascertaining the rend of taste in the matter of quality and blend, before submitting his own in competition. Tea drinkers no more than any other class of consumer are going to jump to extremes in their tastes all at once ; and however plucky it may be to try to revolutionise the taste of a community straight away, it is something very like a waste of time. Better to introducc a tea which will not show too marked a change at first, except it be for the better, and trust to time for the rest. Mr. Foley will probably make full explanation to the Indian Tea Association, which, in point of fact, he is bound to do in the face of such awkward charges ; and it is to be hoped the contending statements, of his own letter, and that of Mr. Miller, the Russian Vice-Consul, may be satisfactorily explained.

COFFEE.

We would call our readers' special attention to our market report on Coffee. It is not merely exceptionally interesting ; it is indeed of a somewhat startling character, and brings the news to the very hour at which the last mail left London. The market was quiet and dull until the day before the mail left, when Messrs. Johnston & Co. cabled an estimate of the new Brazil crop, 2,500,000 bags Rio, 4,500,000 bags Santos, and thus set things moving upwards. There appears to be little room for doubt that the next Brazilian crop will be a small one, but the present statistical position of coffee is so weak that this small crop can do little more than save the situation. Of course, prices will probably rise, they are likely to rise much more than the actual shortage of crop warrants, for speculators are keen upon seizing the opportunity for a "bull" movement. Still, unless there be a succession of short crops, the reaction must come. Here are a few figures. Stocks on 1*st November*—

	Europe. Tons.	United States. Tons.	Totals. Tons.
1897	150,060	44,117	194,767
1898	209,450	61,529	270,979
1899	230,350	70,058	300,408
1900	224,550	53,352	277,902
1901	242,200	107,882	350,082

Against this tremendous increase of stocks must be set a very satisfactory expansion of deliveries, which has been particularly remarkable in the United States. In the first ten months of 1897 American deliveries totalled 260,350 tons ; in the corresponding period of 1901, 324,172 tons. Joint European and American figures are as follows :—

	First 10 Months. Tons.
1897	642,420
1898	697,078
1899	725,207
1900	701,050
1901	777,442

The following figures are given by Messrs. Duuring & Zoon as showing consumption during the first *nine* months of the year :—

Consumption in January to September :

	1897. Tons.	1898. Tons.	1899. Tons.	1900. Tons.	1901. Tons.
In Germany	102,900	119,460	116,010	128.030	131,490
„ France	56,480	59,480	58,650	60,800	60,400
„ Austria Hungary ...	28,840	32,000	29,120	31,470	30,720
„ United Kingdom ...	9,320	9,480	9,840	10,520	12,640
„ Belgium	20,440	23,590	21,560	20,650	23,460
„ Switzerland ...	6,920	8,300	6,720	6,660	6,270
	224,900	252,310	241,900	258,130	264,980
„ U. States of N.-Amer...	230,760	262,000	271,820	233,290	279,470
	455,660	514,310	513,720	491,420	544,450

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

The General Committee of the Indian Tea Association, Calcutta, dated 21st November, 1901, have issued their Monthly Return of Sailings and Daily Customs Entries of Tea from Calcutta and Chittagong, and also a Return of Exports of Ceylon Tea for four years up to 4th November, 1901 :—

Exports of Indian Tea from Calcutta and Chittagong.

	1901. Lbs.	1900. Lbs.	1899. Lbs.
Sailings to Great Britain from Calcutta in October ...	21,634,823	27,587,403	21,692,976
Sailings to Great Britain from Chittagong in October ...	2,085,500	—	—
Sailings to Great Britain from 1st April to 31st October (including Chittagong)	92,028,992	97,944,506	94,425,612
Sailings to Australia and New Zealand in October	1,769,138	2,136,951	1,763,291
Sailings to Australia and New Zealand from 1st April to 31st October	5,273,585	6,958,566	5,437,777
Sailings to America in October ...	295,563	925,525	1,495,391
Sailings to America from 1st April to 31st October	770,664	2,894,483	3,583,984
Sailings to other places in October...	874,390	1,598,533	1,031,405
Sailings to other places from 1st April to 31st October ...	6,527,793	5,269,381	5,284,577
Total Sailings from 1st April to 31st October	104,601,034	113,066,936	108,731,950

		Lbs.
Daily Customs Entries for Export from Calcutta to Great Britain from 1st April to 31st October, 1901	88,067,258	
Do. do. from Chittagong ...	7,242,530	
		96,309,788
Do. do. from Calcutta, 1900 ...	...	105,334,099

Exports of Tea from Ceylon.

Total Exports from 1st January to 30th September, 1901	...	119,256,869
Do. do. do. 1900	...	120,505,074
Do. do. do. 1899	...	107,891,056
Do. do. do. 1898		102,109,569

Statement showing the Exports of Tea to Sundry Ports during the month of October, 1901.

FOREIGN PORTS.

	Lbs.
Trieste	1,404
Copenhagen	1,000
Bremerhaven	27,182
Hamburg	36,120
Malta	186
Odessa	150,717
Mauritius	110
Mombassa	600
Cape Town	6,400
Port Said	300
Suez	8,045
Aden	1,650
Hong-Kong	130,890*
Shanghai	53,047
Tientsin	144
Jeddah	38,183
Bushire	10,221
Bunder Abbas	4,690
Penang	840
Singapore	1,240
Beyrouth	800
Trebizonde	182,146
	655,915 lbs.
Bombay 194,720	
Kurrachee 2,300	
Other Indian Ports 21,455	
	218,475 ,,
Total	874,390 ,,

* * *

The Indian Tea Association (Calcutta) has issued the following circular dated 19th November, 1901.

"Statistics of the production of Tea in India."

The General Committee of the Indian Tea Association have recently had their attention drawn to the paragraph headed "Export and Consumption" in the report entitled "Statistics of the production of tea in India," which is published annually by the Director-General of Statistics.

The paragraph contains a statement of the principal markets for Indian tea with the quantity exported to the various countries during each of the last five years. It was suggested to the Committee that this statement would be enhanced in value if it were so enlarged as to account for all the Indian tea exported, whether by sea or by land. This suggestion was made to the Director-General of Statistics, who has consented to carry it out in the future. The Director-General has also very kindly furnished the Committee with the annexed statement, which gives the total exports for each of the last five years.

* It is understood that the bulk of this tea consists of transhipments for the United States and Canada.

EXPORTS OF TEA (Indian Produce).

	1896-97.	1897-98.	1898-99.	1899-1900.	1900-19
BY SEA—	lbs.	lbs.	lbs.	lbs.	lbs.
From British India..	..	..	..	..	..
To United Kingdom..	135,456,884	137,655,857	139,245,995	154,161,492	166,171,
,, Australia ..	6,155,895	6,792,654	6,306,135	8,362,797	10,438,
,, United States and Canada ..	1,607,731	1,523,236	2,457,880	4,677,797	3,490,
,, Persia ..	1,993,823	1,464,394	3,456,791	1,953,900	2,429,
,, Russia ..	457,634	689,271	500,889	467,451	772,
,, Other Countries..	3,236,494	3,326,405	5,502,982	5,414,690	7,002,
From Travancore ..	78,400	6,384	2,688	..	26,
,, Native Cochin..	243,600	203,952	354,816	..	*
BY LAND—					
To Kabul, Kashmir & other countries on the North-Western Frontier ..	1,498,672	867,888	1,040,704	2,099,328	1,942,
,, Other trans-frontier Countries ..	13,552	18,144	23,968	25,312	25,
Total Exports by Sea.	149,230,461	151,662,153	157,828,176	175,038,127	190,332,
,, ,, ,, Land	1,512,224	886,032	1,064,672	2,124,640	1,968,
Grand Total..	150,742,685	152,548,185	158,892,848	177,162,767	192,300,

Note.—The figures for Travancore and Cochin are for the Calendar ye 1896, 1897, 1898, 1899, 1900.

* * *

Assam Tea Soils.

A Circular of the same Association, dated 25th insta states :—

The General Committee direct me to inform you that the have now published a pamphlet by Mr. H. H. Mann entitl "The Tea soils of Assam and Tea manuring." In order meet the printing expenses of this pamphlet—which exten to 137 pages—the Committee have decided to make a char of 8 annas per copy to members of the Association; and Re.1 per copy to non-members. Copies may be obtain on application at this office. Early application is requeste

NOTES.

Amsterdam Bark Auctions. At the sale on 7th instant t unit worked out at 7·70 cents.

Sao Paulo (Brazil). The Secretary of Agriculture co templates the publication of an illu trated work on the State. This work is to be issued in t interest of immigration and will be widely distributed.

Tea and Coffee at Reval. Imports of Tea and Coffee into t Russian port of Reval during 19 were as follows :—Tea £5,774 ; Coffee £41,704. Both show a falling off of about 10% from 1899 figures.

Sicily's Imports. Coffee is chiefly imported in Sicily from Brazil ; Cacao, fro the United Kingdom ; Pepper, from the same country. T pepper, like the coffee, is described as chiefly Brazilian.

Planters' Association of Ceylon. We have to acknowledge recei of Proceedings of the Planters' Ass ciation of Ceylon, Kandy, for t year ending 17th February, 1901. The smallest massi volume is well arranged and deals with quite a multitude subjects.

* Included under British India, as the Exports were from the Briti port of Cochin.

Indian Tea Exports. The following are the figures of the tea exports from the Calcutta Customs:—Quantity exported to the United Kingdom during the first half of November, 11,647,660 lbs., against 9,953,994 lbs., last year. The total from the 1st April to the 15th November is 106,957,448 lbs., including Chittagong, against 115,288,093 lbs. last year.

Tea in the Duars. The *Englishman* learns that the rush of leaf on Duars gardens in the two months just past has been abnormal for the time of the year and it may be that the falling off in Duars invoices recently to hand is due to the difficulty in dealing with the unusual quantity of leaf. It is too late, perhaps fortunately, to increase the general output to any great extent.

Giant Cacao. Mr. C. W. Murray writes from Katugastota to the *Ceylon Observer*:—Mr. Holloway's "Largest cacao and pod ever seen" measured length 13 inches and girth 15½ inches, making a total of 28½ inches. I now send you a pod, length 12⅝ inches and girth 16⅜ inches—a total of 29 inches. Will you send this round the Fort until somebody can beat it?

Fruit Growing. Fruit growers, as a whole, will believe with Orchardist Williamson of the National Apple Shippers' Association, as noted by him in the *American Agriculturist*, that the cardinal principles leading to success are cultivation, fertilization, pruning, and spraying. But many must good-naturedly take issue with his assertion that the average farmer will not give due attention to these four particulars.

The Tea Outlook. Calcutta news states that telegraphic advices from Sylhet report a smart fall of rain, accompanied by the lowering of temperature, which should practically bring the tea season in that district to a close. The garden returns of tea made up to the 15th instant show a decrease of between 160,000 and 170,000 maunds, say thirteen to fourteen million pounds, compared with last season at the same date. This squares very well with anticipations and, with a somewhat brighter outlook for direct foreign tea exports, should sustain prices for the remainder of the season above the level of last year.

Tea in the U. S. The *American Grocer* of 23rd ultimo reports:—This market is very firm for Moyune greens and Pingsuey. The tone is better all along the line. To-day at noon the Montgomery Auction and Commission Company will hold their regular auction sale of teas. The offering comprises 4,190 packages, as follows: 278 packages Moyune, 201 boxes Pingsuey, 227 half-chests Japan, 65 half-chests Japan dust, 818 half-chests, and boxes Congou, 30 boxes scented Orange Pekoe, 257 packages India, Java, and Ceylon Pekoe, 545 half-chests Foochow, and 1,769 half-chests and boxes Formosa.

Another New Coffee. The following extract from a memo. received from the Royal Gardens, Kew, is of interest. It may be added that Trinidad plants of the species mentioned are established at the Experiment Station, St. Clair. They are six feet in height, and bearing their first crop. In appearance and habit, the plants much resemble Liberian coffee, but the berries are not yet sufficiently advanced to judge of their mature form or their quality:—"This is a new coffee from the Congo. It is said to be a free grower and to fruit freely. The berries are smaller than those of *C. liberica*, and are otherwise distinct. When I was at Gembloux with Professor Laurent, a few weeks ago, he prepared coffee from beans of *C. robusta* which differed in flavour and aroma from any coffee I had ever tasted, was decidedly palatable, and left a pleasant taste in the mouth. One gentleman who tasted it described its effect as that of a "palate cleanser." The general verdict was that this coffee was likely to become of considerable commercial value."

Coffee in London. The position has shown little alteration during the week though there have again been some fluctuations, says the *Produce Markets' Review* of 2nd November, on the terminal market. Owing to a continuance of heavy receipts in both Rio and Santos, it has been difficult to keep quotations up, especially as there have been no fresh cablegrams respecting the coming crop, and without such news and the assistance of outsiders, the tendency is to lower rates, as the trade generally still hold persistently off buying. Quotations close at about the same as a week ago, although in the meantime they have been 1s 6d higher. The London stock is gradually being reduced owing to unusually small arrivals, and in consequence the auctions are much smaller than is usual even at this time of year. What is offered is mostly from second-hand stocks, and of an undesirable quality, or last year's coffee which has lost colour, and is always difficult to sell. There is still some demand for fine Costa Rica and bold Mysore, and, as both crops are likely to be late, and the latter very small, the few lots offering have realised very full prices.

Brick Tea. It seems odd, with a Tea Association in Calcutta crying aloud for new markets, that the natives of Burma should have to go to Keng-hung to satisfy there wants: yet the last report of Mr. Beckett, the British Consul at Chieng-mai, the chief town in Northern Siam, states that this is done. The traders of Yunnan pass annually through Keng-hung, and load of up their animals with tea grown in that country. "The Keng-hung tea," says Mr. Beckett, "which is an important item in this caravan trade, is in circular bricks for the convenience of pack transport. The leaves are steamed in copper pots, a cloth being placed over the mouth of the latter; when sufficiently steamed the tea is turned out and squeezed in the cloth till it is fairly dry, when it is ready for sale. The price increases two to three fold between Keng-hung and Chieng-mai, and four to five fold by the time it reaches Moulmein. It is strong for European palates, but is liked by Burmese and Shans." Perhaps Mr. David Yule will see his way to experiment with a copper pot and a cloth. What is possible to the Yunnan trader and the Keng-hung grower, ought not to be impossible to the Calcutta merchant and the Assam planter.

Indian Tea in London. The larger quantity brought forward met with a good demand, and the greater portion was sold, says the *Produce Markets' Review* of November 2. Teas up to 7d have again favoured sellers, the improvement in values being ¼d per lb., and a considerable quantity of this and last season's teas both in first and second hands has been disposed of. The market closed steady at the advance, and the rise from the lowest point in the early part of the year now reaches 1½d to 2d. Any further

upward movement will probably curtail the consumption of the lower kinds, and it would appear advisable that the trade should exercise caution in their purchases of the common qualities at the present high prices. For the medium descriptions the market has been irregular, and in some cases easier, and the excellent value now offering should not be overlooked, as prices have reached a point when reasonable working stocks may be held. The finer sorts formed a liberal portion of the supply, and, although there is a fairly good demand, prices have a declining tendency. At the public sales 45,880 packages were offered, and 5,713 withdrawn, the latter being mainly disposed of since the auctions. The common teas were freely bid for at the advance noted above, while the other grades, although meeting with a steady inquiry, were less firm.

Coffee in the U. S.

The speculative activity in coffee continues, and prices advanced ½@1c. above last week's quotations, says the *American Grocer* of 23rd ultimo. The reports from Brazil continue unfavourable for the next crop. The first flowering was poor, and drought is reported. It is possible for great capitalists to control coffee, as easily as they can a billion-dollar Steel Trust or a Northern Pacific railway deal. Prices may go higher, and they may go lower just as quickly as they are put up. There is no danger of a short supply of coffee. There has been active spot trading, with sales of No. 7 Rio at 7c.; No. 5 Santos at 7¾c., and No. 4 Santos at 8¼c. Option trading has been heavy. The firm tone and advancing tendency of Brazil, notwithstanding heavy receipts, together with unfavourable reports of growing crop, caused active buying of milds, and large sales were made, principally of the lower and medium grades, at an advance of from ½@1c. per pound. Padang Interior, 16@19c., with fancy at 24@28c., and very fancy higher; good Cucuta, 8½c., washed at 8@11½c., and fancy lots 1@3c. higher; Mocha, 14@19c., and extra fine higher. Sales from October 4 to 18 include 35,427 bags Maracaibo, 4,898 bags Savanilla, 2,841 bags Mexican, and 1,594 bags Central American. No Bucaramanga here, and little Bogota—the latter 8½@13c. for invoices. Package coffee advanced to 10c. nett.

GENERAL ARTICLES.

CEYLON AND INDIAN TEA AT THE PARIS EXHIBITION.

THE LATEST, LAST, AND FINAL OFFICIAL REPORT.

(Extracts from the report on the Indian section by Mr. Benjamin J. Rose, Honorary Secretary, Indian and Ceylon Committee, Paris Universal Exhibition, 1900).

THE CEYLON SECTION.

A full official report on the work of the Ceylon section having been issued by Mr. W. E. Davidson, the Government Officer the executive charge of that section, it is only necessary to very briefly refer to Ceylon in this report.

By a friendly agreement with the Royal Commissioners for Ceylon, Sir Montague Ommanney and Sir Cecil C. Smith, the Indian Committee consented to place an area of 3,750 square feet of space in the Indian Pavilion at the disposal of the Ceylon Government for the display of exhibits from that Island, as well as a space of 3,065 square feet in the grounds for the erection of a tea house, in return for a contribution of £5,000 towards the cost of buildi etc The sum was later on reduced to £4,150 on the strong re sentations of Sir Montague Ommanney. The Indian Committee w pleased to be able to ultimately more than double the space gra ed to Ceylon without requiring any increase on the contribut paid by that Colony. The actual space granted was:—

	sq. ft.
In Indian Pavilion Ground Floor	4,766
Do. do. Gallery	3,715
Tea House and Grounds	5,728
Total ...	14.209

The arrangements made by the Government and Exhibit Committee in Ceylon, under the presidency of the Hon. Mr. F Ellis, for the participation of the Colony in the Paris Exhibitio 1900, were admirably planned and executed. The whole of the cases of exhibits were despatched from Ceylon in December, arrived in Paris in good time, and Mr Davidson, ably assisted Mrs. Davidson, was, by almost continuous work, under the m trying climatic conditions, able to have the whole of the exhi installed by the opening day.

The Ceylon exhibits comprised the great staple products of Island, tea, coffee, cocoa, cinchona, spices, plumbago, etc., as wel the largest and most comprehensive collection of gems and preci stones ever brought together. The most popular exhibit was large and well-executed Jungle Tróphy, in which among other stuf animals, were shown a full-sized elephant, a leopard, bears, d crocodiles, etc. This trophy was arranged by Mr. E. Gerrard London, and was a never ending source of pleasure to visitors.

THE CHARACTERISTIC CEYLON TEA HOUSE

in the grounds was largely patronised, and it occupied a better a far more prominent position than the Indian Tea Courts. Mr H. Renton, the special Ceylon Tea Representative at Pa reports that during the six months the Tea House was o 134,257 pots of tea and 12,000 lbs. of tea in small packets w sold, a result which Mr. Renton states exceeded all his expectati and he attributes this marked success to the following causes:—

(1) To the good quality of the articles, the tea being very ca fully made and then poured, after five minutes' infusion, into an u heated by hot water;

(2) To the Sinhalese boys, with their rapid and Ci waiting; and

(3) To the aid of lady friends, journalists, and others, who fr the first assisted in advertising the merits of the tea and t attractions of the Tea House.

The total number of exhibitors in the Ceylon Courts was 2 and the awards they agained were four Grand Prix, 19 G Medals, 60 Silver Medals, 61 Bronze Medals, and 47 Honoura mentions. The success of the Ceylon section was undoubte due to (*a*) the ample funds lavished upon it; and (*b*) to the sk and energy with which the Government and the Commercial Co munity of Ceylon took advantage of the unique opportun placed at their disposal by the Indian Committee for an effect advertisement of the products of the Island; and (*c*) to the st nuous exertions of the Royal Commissioners, Sir Montag Ommanney and Sir Cecil C. Smith, aided in Paris by the untiri zeal of Mr. W. E. Davidson, the Executive Secretary of the Ceyl section, and Sir William Mitchell and Mr. J. H. Renton, t Commercial representatives of Ceylon.

The cost of the Ceylon Courts was about £16,500, of which £2,0 was paid by the Ceylon Planters' Association and the remainder the Government.

THE BRITISH INDIAN TEA COURTS.

HOW THE WORK WAS DONE.

48, Rue du Faubourg St. Honoré,
PARIS, *November 29th*, 1900

I am in great hopes that this my final report of work done at t exhibition will satisfactorily show the Committee that the prospe of Indian tea in France are brighter now, even than they w when I wrote on the subject in September last, and that t Association will feel how justified they were in deciding to contin a business which has commence so well.

As the sale of tea in the cup was chiefly intended to serve a

means to popularise Indian tea in France, the Association will be pleased to note what progress was made in

THE SALE OF PACKET TEA.

At their stall in the exhibition which was opened on 13th June, the sales increased, *pari passu* in a manner which I think the Committee will consider highly satisfactory. A tabular statement will be given at end of this report. It will show that to date over 3,000 lbs. tea have been sold.

The liking for Indian tea undeniably increased during the run of the exhibition, but the increase of sales for the last few days is partly to be accounted for by the fact that purchasers had formed the idea that when the exhibition closed the price of tea would be raised. This opinion was held by the trade, but that such will not be the case is now fast becoming evident to all, and our hopes, therefore, are that we shall not lose much ground by reason of the exhibition now being closed. That the low price can and will be maintained is, of course, in consequence of the support we have received, and are to continue to receive, from the Association, and which I venture to say is of far better form than that of subsidising grocers, with whom, however, we shall have to reckon later on when Indian tea is more generally inquired for in France. Up to the present we have not been able to do very much with the trade itself, for the reason that our price does not permit us to give a discount anything approaching the customary one in France—*viz.*, 25 per cent.—but our hopes are that the present trade price may be modified if we can buy our tea through more direct channels than we do now.

INFUSION.

Owing, as I have already said, to their somewhat unexpected secluded situation, the "Indian Tea Courts" were not easily found by many chance visitors, or by those who came especially to visit them, but once they were found they became the resort of the best society, members of which have been known to say that the Indian Tea Courts were the most *chic* of any in the exhibition. Although in such "rushes" of business as occured in the Tea Courts it was utterly impossible to give entire satisfaction to every one, the complaints were very few indeed, and of rather a hypercritical kind. On the other hand, I am happy and content to mention that unstinted and warm praise was given by the *habitués* of the Courts, notably the Princess Malakoff (who for nine days took her seat regularly at four o'clock), the Duchess of Mecklenburg, Baron and Baroness Alphonse Rothschild, and the French Commissary-General. The Baron and Baroness were pleased to say that the Grand Prix should have been awarded the Association for the manner in which the tea was served, as well as for the goodness of the tea itself.

THE PRETTY BOXES OF SAMPLES

were much appreciated by all visitors, and happily by the French in particular. About 20,000 sample boxes were given away during the exhibition, and the balance of our stock will be distributed in connection with the work to be continued at the Rue du Faubourg St. Honoré and Rue d'Alger.

* * * * *

TO REVERT TO TEA.

By a calculation of mine that on an average no one person ordered less than 75 *centimes'* worth of tea in the cup, the 69,500 francs receipts represent 96,400 pots of tea (two cups in each; but that number is considerably under-estimated because so many people often ordered pots of tea for a smaller number than their party consisted of, and also extra cups for the rest. Tea for two and cups for three, four and five, was an order frequently executed. As also hot water in addition was served, sufficient for another two cups, the quantity of tea drunk by each person was, of course, much increased. I have not taken that into my calculations but only the number of pots of tea served. Putting it, however, at a reasonably low figure, I believe that not less than 50 to 60 people were every day served with extra cups without having to pay anything except a penny for the accommodation. At this rate, in the 210 days of the exhibition 10,000 cups of tea can be added to the 96,400 pots accounted for. The

FRENCH DO NOT ALWAYS TAKE THEIR TEA AS THE ENGLISH DO,

but they persevere in their attempt and evidently wish to like the beverage. Some, more often than not, dip their bread and better and even cake into the cup of tea they are drinking, and some novices seemed to consider the tea was a kind of grog to be mixed with the hot water, which they poured into the cup first. Others poured the tea into the sugar basin, half the contents of which they had previously eaten and then into the hot water jug and from that into the cup. Or, for another change, they would partially empty the milk jug and then pour the tea into that. Our American visitors liked a glass of iced water to drink either with their tea or after it. I do not mention these little peculiarities for the purpose of ridicule, but rather to show that tea-drinking in France is yet very much in its infancy.

THE EXPERT

was, of course, sometimes present in the Tea Courts, judging from the procedure of some of the visitors, who, to the great wonderment of the foreign waitresses, would turn the leaves out into the saucer or plate, examine them closely and then turn them back into the tea pot, and, having added more water, drink another cup of tea. [Here comes the portion we quoted on Monday, specially criticising Ceylon methods to secure public attention, to which we have directed the notice of the "Thirty Committee" and Mr. Renton. —Ed., *C. O.*]

The exhibit of tea in the Commercial Court attracted much attention, more particularly so as the tea sales stall was close to two of the show cases. The light, however, was not good, and although, with the object of showing up the tea better, I did not fill the globes more than three-quarters full, the exhibit at certain hours of the day was not so effective as could be desired. I may mention that the exhibit of very fine tip from some of the gardens, apart from all other merits, was most useful, in that many of the purchasers of our packets became disabused of the idea that tea with tip in it was not good, but contained some foreign matter. I do not know if it is within my province to allude to

THE "JUDGING,"

for, of course, the reputation of the gentlemen appointed by the British Commissioners as jurors is undisputed; but I may, I hope, without presumption, ask to be permitted to say that no one could have taken more pains than Mr. Wilson did to have the tea properly judged and the awards fairly given. All the samples, more than Rs.400, which were in the show cases were carefully examined in the leaf by all the jurors of class 59, who, however, not being experts in tea, often deferred their opinion to Mr. Wilson and that of Mr. Dérode, the French expert, on the jury, and I would particularly mention how hard Mr. Wilson fought to have awards given to individual gardens independently of the Grand Prix which was to be awarded to the Indian Tea Association for the collective exhibit and how, too, he won his point in spite of very great opposition offered seemingly only on technical grounds.

The gold medal for coffee was, by a clerical error, first of all awarded to Ceylon, but was ultimately given to the United Planters' Association of Southern India, after repeated and strenuous representations on my part. Summary of quantity and value of tea in packets sold at the exhibition and at Depôt, 3 Rue d'Alger, Paris:—

	K.	Frs.
From 17th to 30th April at Depôt	13·125	90·40
For May do	114·890	737·60
For June at Exhibition and do	388·010	2,704·60
For July do do	483·600	3,354·10
For August do do	492·375	3,208·60
For September do do	673·750	4,642·85
For October do do	1,021·575	7,117·25
For November (approximately) at Exhibition and Depôt	1,000·000	6,600·00
	4,187·325	28,455·40

(Equals 8,364 English lbs.)

(Signed) Edward F. Langdale.

Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant the appointment of "Purveyors to Her Majesty The Queen and Empress of India" from the year 1837 until the time of her death, have now had the honour of being appointed by Royal Warrant "Purveyors to The King."

TEA-SEED OIL AND OIL-CAKE.

Many attempts have been made by tea-planters to create a market for tea-seed and the fixed oil obtainable from it. Thus, in 1885 the seed was put upon the London market under the name of "taune" as an oil-seed, but although the material excited considerable interest, the prices obtainable were not sufficient to cover the cost of importation. These products have, at the instance of the Indian Tea Association, recently been examined by Mr. H. H. Mann, B.Sc. The seed had previously been examined by Mr. D. Hooper, who found that it contained 22·9 per cent. of a fixed oil, 9 per cent. of saponin, 8·5 per cent. of albuminoids, and 3.3 per cent. of mineral matter.

The fixed oil can be obtained by crushing the seed between hot rollers to the extent of about 26 per cent., but a better oil in smaller quantity is obtained by cold pressure. Produced in this manner it is a clear, light yellow, non-drying oil, possessing a more or less acrid taste. It is in common use among the Chinese for cooking purposes, and it might also be used in the tea districts of India in this way. It produces a soap of good quality which is hard and white, and this appears to be the most satisfactory use to which it could be applied. The saponin which was obtained from the seed by Mr. Hooper is a white amorphous substance, acrid in taste and leaving a tingling sensation in the throat. It is somewhat poisonous, and since it is entirely retained in the residue after the expression of the oil, it is obvious that the oil-cake cannot be used as a cattle food.

It only remains, therefore, to consider the value of the cake as a manure. In this respect it is distinctly inferior to most oil-cakes in content of nitrogen and phosphorus, as the following table shows :—

	Nitrogen (per cent.)	Phosphoric acid (per cent.)
Mustard cake	4 to 5	2 to 3
Linseed cake	4 to 5·5	1·5 to 3
Castor cake	5·5 to 6.5	2 to 3
Cotton cake	3 5 to 4·5	3 to 4
Tea-seed cake	1·92	·58

It will be seen that, as a manure, the cake produced by pressing tea-seed is of a very inferior character, and would hardly pay for carriage over very long distances, although it is quite good enough to use locally. Mr. Hooper has suggested, apparently because the cake is supposed to contain saponin, that a decoction of it might be used to spray plants for the destruction of insect pests, and this method of utilising the cake, Mr Mann thinks, might well be tried, although there are at present no data available with regard to the utility of saponin-containing plants for such a purpose.

It might be remarked, in conclusion, that three small samples of tea-seed oil were received in the Scientific Department of the Imperial Institute for examination some time ago, but the amount sent was too small to admit of a careful examination of the oil and the determination of its properties, and, so far, larger quantities have not been submitted.

INDIAN TEA IN LONDON.

The Regulation of Sales.

The following are the rules for the regulation of quanti of Indian tea to be offered weekly at Public auction :—

1. That public auctions of Indian tea be, as far as possibl distributed over ten months, August to May, inclusive, and th the months of June and July be not regulated for. Importers Indian tea will be at liberty, if they think fit, to sell in tho months.

2. That a Committee consisting of five brokers (three to be quorum), elected by the General Committee of the Tea Broker Association, advised by representatives of importers if necessar shall regulate the amount to be printed for sale each week, an shall be called the Regulating Committee; that the clerical wor entailed by these regulations shall be arranged for by the Broker Association, and the expense shall be borne proportionately by th Indian and Ceylon Associations.

3. That the importers instruct their brokers regarding tea ready for sale and which they desire to have sold on the firs opportunity.

Note.—All teas *ex* vessels which have been entered at the Custo House on or before the previous Monday shall be considere ready for sale.

4. That the brokers hand in to the Regulating Committee parti culars of all the teas that they are instructed by their merchant to print for the first opportunity.

5. That the closing time for these particulars be Thursda night at the office of the Tea Brokers' Association, Dunster House

6. That the Regulating Committee sit every Friday morning at 11-30 to consider the quantity it may be advisable to print fo the next opportunity, bearing in mind the total amount include in the particulars sent in by the brokers

Having arrived at this amount it will then be necessary to deter mine the quantity, if any, to be deducted *pro ratâ* from eac broker's particulars.

In considering the particular invoice or invoices to be so elimi nated the Committee will be guided by the date of the arrival o the ship, and by taking those invoices that most nearly approximat the quantity to be deducted.

The invoices which have been deducted to take precedence o particulars handed in the following week, if so desired.

All teas passed for sale must be printed as arranged withou deduction.

7. That the auctions be advertised for Mondays and Thursdays and the order of sales balloted for as heretofore.

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

CROSSE & BLACKWELL'S, LTD.

By Special Warrant Purveyors to His Majesty The King.

CELEBRATED OILMAN'S STORES.

[w. 1-10-98 -t.f o.]

TEA.

One of the Flesh-Reducers.

A Press report that the illness of Empress Auguste Victoria, of Germany, was the result of excessive tea drinking in an effort to reduce weight, and that Emperor William is also said to be suffering from tea drinking, led the New York *Journal* to procure an opinion from Dr. Cyrus Edson about excessive tea drinking, as follows: "I have never heard before of anyone who drank tea with the sole object of reducing flesh, but it is a matter of common knowledge among physicians that this is one of its properties.

"Not only is it the property of tea, but of all 'nerve excitants,' like tea. That is, it produces a nervousness that wears a person out.

"It may be readily imagined how anybody very anxious to reduce flesh would hail the result of tea drinking with joy and use it to excess, forgetting that it must practically produce a diseased condition before the fat begins to fall off.

"No doctor in the world would countenance this way of getting rid of adipose tissue.

"Sleeplessness is one of the results of nerve excitation, and will come from excessive use of coffee, as well as tea. Both drinks contain an alkaloid known respectively as caffeine and teaeine.

"The result of these on the system is to excite the nerve system so much that the brain cells, instead of becoming separated when sleep is desirable, adhere together, and celebration not only goes on, but is increased. Hence the sleeplessness results.

"The cell theory of sleep is a new one. According to it the cells of the brain are ordinarily in close contact, thus causing the communication of ideas, sentiments, etc. When sleep comes these cells contract and do not touch one another, and there is no mental activity in the wakeful sense."

Much the same result would follow the excessive use of bread, beefsteak, pumpkin pie, or any other article of food or drink. If people fail to exercise ordinary common sense in choosing a diet, they will pay the penalty in ill-health. Excessive mental work will produce indigestion, sleeplessness, and a chain of physical evils. Moderation in all things is the factor to promote health and happiness.

EAST INDIAN GINGER.

The fog, which has been hanging over the City for about a week with abnormal denseness, has greatly interfered with the transacting of business in most branches of the Mincing Lane trade, says the *London Commercial Record* of the 8th instant. The showing of goods advertised for public sale, their transport by road and water, have thereby greatly suffered, and an inactivity has been established in consequence, which would probably not have made its appearance had normal weather prevailed. Complaints have been freely made about this unexpected interference which, it seems, has been severe in some cases, but whatever effect the fog may have had on the trade of some articles, it certainly has not acted as a depressing agent in the case of ginger. On the contrary, it seems to have stimulated the energy and enterprise of the operators in this article, for we have this week seen a display of exceptional activity, which resulted in a further advance of prices The business has by no means been confined to private transactions, the public sales even experienced the novelty of a demand at full market values, 50s being paid for Cochin washed and 46s for Calicut rough unassorted, registering an advance in values of over 12s per cwt. in about six weeks. There was nobody who foresaw such a rise in so short a time. We all believed in higher prices when the unsatisfactory state of the monsoon predicted another small yield, but, in the face of the dragging market of Jamaica ginger which paralysed the efforts of bulls, nobody dared to hope for such a thorough change in the position of the article. But it was apparently a question of "following my leader." The postion of all descriptions of ginger was exceptionally strong owing to diminishing stocks and increasing trade demand, only Jamaica held back, but with the gradual decline of its supplies the interest in this ginger increased as well, until the boom in it has been as firmly established as in any of the other descriptions. There exists, therefore, no discord in the position of the article on this side of the ocean, and, as to India, no attempt at smashing our market may be feared, at any rate for some time to come. India is the producing country, it is therefore in the interest of planters that the high values established in Europe be maintained or even increased, for they will want fancy prices for the small yield they will gather, and the keener the competition between Europe, America, and India, the better they will be pleased. No wonder, therefore, that absurd values are asked for new crop ginger, values which are beyond us and which only India herself can afford to pay. Business will be practically confined to the turnover of our stocks, for very little of the new crop will find its way next year into our market, unless, indeed, crops should yield larger quantities than expected, or Europe should feel disposed to concede the famine prices demanded by Indian planters. There are, so far, no indications that either of the two events will take place.

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

PRODUCE AND PLANTING.

The forthcoming exhibition at St. Petersburg should prove a very fine opportunity for developing the Russian taste for Indian and Ceylon tea, the trade in which is increasing. According to the report of the British Consul-General for Odessa it is likely that Indian and Ceylon teas will gradually make their way in the Russian market. At present, he mentions, they are merely required for mixing with China teas, and consequently only particular kinds find a market. Despite this, however, large quantities of the Indian and Ceylon product are already used for this purpose, and in view of this there seems no reason why the British article should not eventually capture the market. On the other hand, the Consul-General points out that should this desirable situation be attained, Indian producers must not expect to find Russia's tea consumption maintained, as the Ceylon and Indian teas being far stronger than Chinese, only half the quantity of the British grown leaf would be required. The same authority says that planters who wish to send tea to Russia would do well to employ a regular exporting house for the purpose and to recognise that uniformity of quality is highly desirable.

With reference to the private sales of tea, the following circular has been issued by the Federation of Grocers' Associations: "At the last meeting of the General Purposes Committee the private tea auctions which have been instituted were under discussion. The matter was brought before the Federation at the Brighton Conference, when a resolution disapproving of these sales as being contrary to the true spirit of public auctions and prejudicial to the interests of the retail distributor of tea was carried unanimously. The General Purposes Committee feel that it is a matter which should be brought to the attention of your Association at once, and that each member interested in tea should enter the strongest possible protest against the practice to the wholesale tea dealers with whom he does business. It would be a good plan if, on the receipt of this circular, your Association could get every one of its members to write forthwith to the firms with whom he is doing business, protesting against the secret tea auctions, and asking if they are supporting these sales. The Committee would be glad to hear the result of any such correspondence, and to assist your members in every possible way in opposing this unsatisfactory innovation. The Committee are informed that unless vigorous opposition is now

offered, the private auctions which have diminished in number will be very soon revived; therefore, prompt and determined action is necessary."

A Mexican living at Sierra Mojado claims to have discovered a process for extracting rubber from the hule plant, and a factory for this purpose has been established at San Luis Potosi. This plant is a species of sage-bush, with small leaves, which grows to a height of about three feet, and is found not only in Mexico, but also in Texas, Wyoming, and Nebraska. It grows in mountainous regions, and is said to contain 40 per cent. of rubber. While the cost of production is slight, however, the high cost of transport is a serious difficulty.—*H. and C. Mail.*

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange.—Extremes during the week ending October 11th were $11\frac{1}{4}$d.—$11\frac{9}{16}$d. for 90 d/s Bank paper and $11\frac{5}{16}$d—$11\frac{19}{32}$d for private. The average Bank 90 d/s counter-drawing rate for the week comes out at $11\frac{13}{32}$d., the corresponding sight rate being $11\frac{11}{32}$d. against 11 $\frac{25}{64}$d. the average sight rate of the *Camara Syndical.*

Coffee.—Entries at Rio and Santos during the week ending October 11th show a falling off of 36,904 bags when compared with the previous week, but were 159,655 bags greater than the corresponding week of 1900.

Aggregate entries for the crop at Rio and Santos to date are over 50 % or 2,203,590 bags greater than for the same period last year.

Embarques were a great deal smaller than the preceding week being 137,275 bags less and only 38,229 bags greater than the same week last year.

Stocks at Rio and Santos have increased 80,097 bags since last week and are 559,706 bags larger than on the corresponding date last year.

Sales during the week were very active, aggregating for Rio and Santos 104,000 bags above the previous week's total and 179,000 bags over those of the corresponding week last year.

JAVA AND SUMATRA COFFEE.

In a recent Sunday issue of the Philadelphia *Press* was an illustrated article on "Java Coffee," by Frank G. Carpenter, from which we take the following :

"The finest Sumatra coffee comes from the descendants of Arabian plants. It is very carefully cultivated and, after being picked, is sorted by hand. In the warehouses here I have seen scores of Javanese girls squatting down with basket trays of coffee in front of them. They handle almost every grain, putting the small ones into one place and the larger ones into another, sorting them as carefully as though they were grains of gold. As the coffee comes in it is of a rich olive-green color. It is left for some time on the floor of the warehouse, when it turns a light yellow. No coloring matter whatever is used, and the coffee is shipped as pure as it is on a plantation. The best varieties are sent to New York in sailing vessels which carry nothing else. The coffee steams and cures during the long three months' voyage, so much improving its flavor that sailing vessels are preferred to steamers. Coffee, like wine, improves with age, and up to a certain limit the older it is the better it is.

"Some of the private estates of Java are perhaps more scientifically managed than any other coffee lands of the world. At Sinagar a vast plantation near Buitenzorg everything connected with the curing of coffee is done by machinery. The trees are most carefully cultivated and the greatest care taken to produce fine fruit. I saw there one machine which cleans 20,000 pounds of coffee in a day. It reduces the dried pulp to a powder, but does not injure the grain. After this the coffee is further cleaned in a simple fanning mill. One of these machines costs about $320 in gold. I should think they would be of great value in Porto Rico.

"The private estates are rather increasing in number. It use to be that most of the crop came from the Government plantation whereas it is now from the private estates.

"The finest crop of the Java coffee, as we know it, is fro plants of Arabian descent. It was this variety that was affecte by the blight. The trees are small, slender, and delicate, comin originally from the hills of Yemen in Arabia from about the sam region as the Mocha coffee. In that country the Mocha coffee sti grows, but there is so little of it that it is safe to say that not grain of it comes to the United States. Twenty-five years ag about ten thousand tons of Mocha coffee were exported, but it said that the production is now not half that, and that it is a consumed in Mohammedan households. During my stay i Brazil I saw thousands of bags of coffee which I was told woul be sold as Mocha, and I visited warehouses where there wer sorting machines, in which the little round grains were picke out from the rest, to be put into bags and sold as Mocha.

"The coffee most raised in Java to-day is the Liberian coffe It is a coarse, large-grained variety. The beans are three tim as large as the real Mocha, and they have a different flavor. Th Liberian trees are stronger than any others. They have larg leaves and they grow thick and stout. They produce far mo than other varieties, and trees have been known to yield sixtee pounds. They will grow at a lower altitude, and in Liberia a found wild not far from the seashore. This tree has been taken Java, because it will withstand the blight and other parasite and also on account of its prolific bearing. The plantation on th Island of Jolo has nothing but Liberian trees, and I understan that there are large plantations of similar trees nearby in Borne I doubt whether this coffee would sell well in the United State although there is a good demand for it in Europe."

NEW MARKETS FOR BRITISH-GROWN TEAS.

The following letter has been sent by Messrs. Brook Bond & Co., Ltd., the well known firm of packet men the Manchester and many other papers :—

Many have wondered what effect the increased duty has h upon the consumption of tea at home. It is now seen from retur issued by the Board of Trade that the additional tax of 2d. per l imposed last year has slightly checked consumption. In 1899 t consumption of tea was 5·98 lbs. per head ; it has fallen to 5·91 lb

This has affected Indian and Ceylon planters, from whom w get our tea supplies. Already they were producing tea at a great rate than the normal consumption in the United Kingdom. Thi together with an over bountiful "flushing" season, and the arb trary fixing of the rupee value, has brought heavy losses on th tea planting industry. But such losses have only served to stim late the India Tea Growers' Association. With commendable ze they have turned their energies to seek outlets in new market and they have found one, they hope, in India itself.

To Englishmen it may seem odd that the land which produc tea should know little of its stimulative qualities. Yet that is s Many of the natives know tea only as a medicine, and not as beverage. The tea they have used has not been the clean, pur wholesome kind shipped to England, but decayed leaf mixed wit mud and sweepings.

It will be an excellent thing for the Indian people to acquire taste for the health-giving properties of good tea. When they c so, and drink it regularly, instead of "the fiery juice of the pal and unboiled tank water," there is reason to believe they wi become a hardier and a healthier nation.

The value of this outlet to the planters will be appreciated whe it is remembered that if only one-fourth of the natives become te drinkers, and drink 1 lb. per head per annum (one-sixth of th quantity consumed per head in the United Kingdom) more tha one-half the tea grown in India would be required for native u alone. So vast a trade is worth securing. But the taste of th native has yet to be educated to accept a clean, pure drink. Suc an education will take time. Meanwhile, the planters have decide to distribute one million pounds of tea, in free samples, among th natives for the purpose of stimulating this taste. The natives a not plutocrats, their income being in the region of 4d. per day, an their outlay for food usually one farthing at a time, so that th

sale of tea to them in packets will have to be in very minute quantities.

But it is not alone in India that new markets are being sought. Canada and the Northern States of America have hitherto drawn most of their supplies of green tea from China and Japan. British planters in India, however, are making efforts to capture a portion of this trade, and have begun to make a green tea specially for our kin in Canada and the States. One difficulty in deevloping this trade has been that many American people are indifferent to the flavour of tea, and are satisfied if what is served is a warm beverage. It is only a few who appreciate fine flavoured tea, such as that which, at least, two million of the British people drink daily!

A taste for tea is also fast increasing in Germany. At present it is confined to the wealthy classes of the community, for tea that is in any way agreeable costs in the Fatherland from 3s. to 9s. per pound. The same duty is charged as in England, namely, 6d. per lb.

France has developed a craze for "five o'clock" tea, and at the Cafe des Indes, in the Faubourg St. Honore, Colombin, in the Rue Cambon, and elsewhere, crowds of fashionables and Society butterflies regale themselves with afternoon tea. The Indian and Ceylon sections at the late Exhibition gave a distinct impetus to the trade in France.

So far as the United Kingdom is concerned tea has rarely stood at a lower price than it is to-day. It seems astonishing that really fine tea can be grown, plucked, manufactured, shipped, carried seven thousand miles, pay sixpence on every pound in duty, be blended, re-packed, distributed to retailers, and then sold to the public for so low a price as 1s. 6d. per lb. There is therefore, every inducement for the public to buy good tea. There is plenty of it, and they should "see that they get it."

VISIBLE SUPPLY OF COFFEE,

on November 1st,		1897.	1898.	1899.	1900.	1901.
		Tons.	Tons.	Tons.	Tons.	Tons.
Stocks eight European markets		150,650	209,450	230,350	224,550	242,200
to Europe	afloat —Brazil ...	37,980	40,780	51,710	52,710	86,350
	loading— do ...	—	—	—	1,120	6,350
	afloat —the East...	6,880	2,810	4,920	3,660	3,310
	do —U. S. A. ..	820	350	230	180	410
		196,330	253,390	287,210	282,220	338,620
Stocks U. S. of North-America		44,120	61,530	70,060	53,350	107,880
to U. S. A.	afloat —Brazil ...	25,710	21,470	23,880	35,180	40,880
	loading — do ...	—	—	—	1,820	5,650
	afloat —the East ..	710	1,290	1,350	1,650	880
		266,870	337,680	382,500	374,220	493,910
Stocks in Rio ..	...	23,880	25,880	15,940	16,060	35,180
Do. Santos ..	...	70,470	55,410	46,820	75,880	84,290
Total	...	361,220	418,970	445,260	466,160	613,380
On October 1st	...	354,270	402,800	468,360	429,100	552,910

WHAT PRODUCES THE FLAVOUR IN TEA.

AN INTERESTING INTERVIEW WITH MR. KELWAY BAMBER.

THE NEWTON "ENZYME" DISCOVERY DISCUSSED.

With reference to the discovery by Mr. Newton, of Darjeeling, of an *enzyme* or ferment other than that existing on tea which he has satisfied himself will produce flavour in tea, a representative of the *Times of Ceylon* has had an interview with Mr. M Kelway Bamber, M.R.A.C., M.R.A.S., F.C.S., the well-known Analytical Chemist, at The Laboratory, Hyde-Park Corner, with regard to Mr. Newton's discovery, the results of which are given below. The particulars which are as yet forthcoming regarding Mr. Newton's discovery, for the safeguarding of which he has apparently taken out patent rights, are as yet somewhat meagre, but Mr. Kelway Bamber was good enough to discuss in detail the general question of flavour in tea, and the tea *enzyme* upon the study of which, as stated by us some days ago, Mr. Bamber is engaged, as also is Mr. Mann, the well-known Indian expert. In answer to a question as to the nature of his enquiries on the subject, Mr. Bamber said

"I am personally engaged in trying to find out what the *enzyme* in tea does; whether the *enzyme* has anything to do with flavour, which has not yet been proved; and also to discover what are the causes which produce flavour in tea. If the latter can be discovered the natural sequel would be to try and aid in their development."

"What results have been so far brought out by scientific research or practical experience in these directions?"

"It is known that newly-pruned or heavily pruned up-country tea has little flavour, whereas after the same tea has run some time from pruning, it gets the flavour back again. If I only had the time, which I hope to have presently, to set up a laboratory on some estate, I would settle this question at all events. It means a thorough examination of innumerable sections microscopically and chemically, to ascertain the structure of, and the chemical constituents in, tea branches at different stages from pruning. At present, there is, roughly speaking, a period of about a year during which the pruned tree has little flavour. The examination I propose to make will, I hope, determine whether there is any constituent which can be added to the soil to hasten the return of flavour into the bush."

COLOUR AND STRENGTH AFFECTED RATHER THAN FLAVOUR.

"Do you yourself consider that the *enzyme* in the leaf has anything to do with the flavour of the tea?"

"I should not like to commit myself to a definite statement one way or another. There are, however, a few facts which help to show that the *enzyme* has more to do with the colour and strength of tea than with its flavour. Let us, for instance, take the case of green tea. The leaf is brought in direct from the field, it is immediately subjected to a temperature that would prevent the action of any *enzyme*, and yet the green tea will still have the distinctive flavour of the district. Again, such leaf will never assume the colour of black tea, which also, I think, goes to prove that the effect of the *enzyme* is upon colour and strength rather than upon flavour."

"Has China never been able to tell us what it is that gives the flavour to tea?"

"The Japanese have been studying tea scientifically for some time, but they do not seem to have discovered anything as regards a special ferment as yet. With regard to China tea, the process the green leaf undergoes in its early stages produces a result which supports my belief that if the *enzyme* has anything to do with the flavour of tea it effects this during growth or in the withering. Fortune, in his well-known book on the tea districts of China and India, says that the Chinese, in withering leaf for black tea, throw up and pat the leaves until they become soft and flaccid, when they are thrown into a heap and allowed to lie for about an hour or a little longer, by which time they have undergone a slight change in colour, are soft and moist, and have developed a fragrant smell From this it would appear that a slight bruising of the cells of the leaf was necessary to admit air for the production of this fragrant aroma either by direct oxidation of the essential oil, or through the medium of the *enzyme*."

"How then do you suggest that the tea gets its flavour?"

THE VIEWS OF PLANTERS INVITED.

"I think that probably it is due to the essential oil which is formed during slow growth. It would be very valuable if planters would give the benefit of their ideas with regard to these important questions—which would be the result of practical experience as to whether the *enzyme* could have any effect on the flavour. There is no doubt that the flavour in tea is most evident in the firing process when the oil has been exposed to a hot current of air. This would mean that the oil has probably undergone a slight amount of oxidation, and so developed an aroma which would not be noticeable in the unfired tea. As this takes place in hot air, it is possible a similar chemical action takes place during the oxidation process, possibly with the aid of the *enzyme* in question."

"You do not hold that bacteria produce flavour in tea?"

"Certainly not. It is quite certain that the bacteria do not produce flavour: numerous experiments have satisfactorily disposed of that idea."

"Then you are not, I presume in favour of introducing foreign bacteria or *enzymes* into tea under any circumstances?"

"I certainly do not like the idea of introducing foreign bacteria into tea; but this has not been suggested."

"I believe you hold that the loss of flavour in teas is probably due to the failure of certain soil constituents, do you not?"

"It is a well-known fact that the flavour is better on new clearings, and I find, from experiments I have made with innumerable speci-

mens of soil, that lack of flavour in tea is almost invariably accompanied by absence of lower oxide of iron from the soil. The flavour of tea largely governs its price in the market, as we all know. My experiments show that the soil on which six-penny teas are grown possesses no lower oxide of iron, that of seven-penny teas slight traces, that of eight-penny teas a fair quantity, whilst in teas of from nine-pence to a shilling there is always an abundant supply of lower oxide of iron. All new forest clearings have, moreover, far more of this lower oxide of iron than soils which have been opened up for some years."

"Cannot you replace this valuable constituent?"

THE ACTION OF OXIDE OF IRON.

"Certainly, but only at great expense, which renders it prohibitive. Planters have always held that iron in the soil has a great deal to do with the quality of tea. What we are trying to do, therefore, in regard to this important question of iron, is to prevent any further oxidation of iron in the soil by increasing the *humerous* or organic matter in the soil. We are endeavouring, as far as possible, to bring the soil back to its virgin condition."

"You are not prepared to say, I suppose, that the flavour of tea is entirely due to the presence of oxide of iron in the soil?"

"No, it is impossible to go so far as that. The absence of oxide of iron from the soil apparently affects the flavour of the tea; but the flavour might very well be due to certain conditions, which ensured the presence of the lower oxide of iron in the soil, or it is possible we may find that the presence of available iron is essential for the production of the *enzyme*, and that the *enzyme* is more active in consequence in young tea than in tea that has lost its flavour.

"To return to the question of Mr. Newton's discovery. He is supposed to have discovered an *enzyme*, other than the one to be found in the tea leaf. This he believes produces the same effect on flavour as does he says, the *enzyme* native to tea."

"Evidently Mr. Newton who has been closely studying the matter, believes that the flavour of tea is produced by the *enzyme*, and he has set himself to try and find a ferment elsewhere than in tea which produces the same effect. This he must apparently have been able to isolate and cultivate. Personally, I should conjecture that Mr. Newton proposes to apply the ferment which he isolates in some way or another during the manufacture of tea. One would hardly conceive it possible to go in for wholesale inoculation of the tea bushes."

"If Mr. Newton can give flavour to tea apart from the locality in which it is grown we are on the eve of a revolution in tea growing?"

"When you consider that the difference between the value of up-country and low-country tea is largely one of flavour, it is not difficult to conjure up in the mind what a halcyon period Mr. Newton's dream promises for the Kelani Valley for instance."

Mr. Bamber's smile as he spoke reassured me as to the impending horrible fate of the up-country planters. He, at all events, does not consider that science has yet discovered a means of making up-country tea in the Kelani Valley, and that epoch making discoveries in India need not absolutely fill with alarm the souls of the up-country planters.

A WALK AROUND THE LABORATORY.

Before leaving Mr. Kelway Bamber, I paid a visit around his laboratory, which is perfectly equipped in every way, and lacks in nothing to enable scientific research and experiment to be successfully and thoroughly carried out. A beautifully delicate instrument is a new polariscope which Mr. Bamber has just imported from Europe. The polariscope is used for estimating oils and sugars, for analysis and investigation work. The working laboratory is large enough for four or five men to work in with the greatest of comfort, and so replete with all necessaries that not infrequently the Peradeniya authorities from Kandy indent upon it, as they had done when I was there and carried off a bacteria apparatus, complete with incubators and sterilizers A considerable amount of assay work is done at The Laboratory. and Mr. Bamber could say a good deal if he liked about the anxiety of landed proprietors as to the auriferous nature of their estates. He showed me gold taken from a sample of the quartz of an up-country estate, which worked out on assay at an ounce of gold per ton! He also has fine specimens of lead from one or two districts in the low-country, and considers that many things are more improbable than that lead mining is a possible future industry for the island. An interesting apparatus was a chemical battery electrically depositing gold and other metals, and also a furna for assay work Distilling apparatus abounded—including a paratus for distilling in vacuum and otherwise—and shelves we covered with citronella and clove oil. Mr. Bamber thinks there a good deal to be done in the way of developing the essential o industry in Ceylon. At present citronella is practically the on one to which any attention is paid. As a matter of fa Mr. Bamber considers that there is endless room in Ceyl for the development of new products, and for their exportatin, su as gums, resins, scents, to mention but a few. I saw some bott of crude camphor, and here Mr. Bamber let me into a secret considers that there are possibilities of a new industry wi camphor, and as Government are very keen upon the possibili he has gone into the matter most carefully and embodied his vie in a lengthy report. The spectroscope is always interesting to t lay mind, and those which Mr. Bamber uses for testing for t presence of fine metals and for special forms of analysis are of t most modern character. There are two Sartorious scales—maste pieces of delicacy and accuracy—microscopes of various kin special specific gravity balances, special plates for counting ba teria, hydrometers for estimating the moisture in the air, etc., a thermomoters of all kinds. The Laboratory includes store-roo and sample-rooms which contain specimens of soil and rock fro practically every part of the island. Gradually Mr. Bamber working out the physical properties of the soils of the island: it a herculian task, involving endless labour, and when he finishes he may with pride regard it as his *magnum opus*. There is photographic dark-room fully equipped, for the camera has oft to be brought into requisition in The Laboratory to assist in i vestigation. Outside in the grounds Mr. Bamber is carrying o various little experiments with the citronella grass and the castor plant, endeavouring to destermine the most valuable in yield of t various specimens he is cultivating. There are again legumino plants of various kinds, some of which have been imported a others of which have been collected from various parts of t island: the object is to ascertain the amount of nitrogen they retu per acre, with the idea of their being used for manuring tea. T Laboratory is a place to visit, and, busy man as Mr. Kelw Bamber is, he always finds time to show the visitor arou Planters particularly have found out what an interesting pla The Laboratory is to visit, and they generally come away with fund of information gleaned from the enthusiastic chemist w labours there.

THE TEA INDUSTRY.

OULOOK FOR 1902-3.

(Special for the *Englisman*.)

The outlook for tea in 1902-3 is one which at the present ti is agitating the minds of brokers, proprietors, agents, a managers; in fact the subject, like the poor, is ever before the The shortage of the 1901-2 crop is at last becoming apparent the exports; and will be more and more accentuated as the da and months of the year (only two left) roll by; and although p phesy is a dangerous field we may take it that there will be sho age, and that too of a considerable number of million poun Exports by the Customs returns show some ten to eleven milli pounds short, and although the latter part of October was ve prolific of leaf, more so than usual, yet this only made up for t shortage of the first half of the month. Viewing the positi from a very fair, commonsense point of view, we would say that t deficiency between the outturn of this and last year had be slightly if anything reduced, but certainly not sufficient to in a way affect the strength of the statistical position According accounts published by the Indian Tea Association the shorta to the beginning of October reached as high a figure as seventeen million lbs. Now, suppose for the sake of being on the safe si we take it that this deficiency has been reduced two millions; still have a deficit of fifteen millions of pounds, which is about t ten per cent. reduction over which so much time and worry we spent in the beginning of the season. and which cost such a lot heart-burning at the time, but manifestly showed the want cohesion existent in tea circles. This was the more accentuated little later by the defection of Ceylon from taking part in a

attempt to regulate output, and plainly showed that the laws of supply and demand were the only safe factors to be calculated upon. Fortunately, nature stepped in, and affirmed this. Had it not done so, we doubt if teas would have been saleable at all by this time; and this brings us to the question of the 1902-3 crop.

Judging from the experience of former years, after scarcity comes plenty, and 1902 will most probably be a prolific year. What will the result be? Will planters, owners, and agents keep in memory the lesson of 1900 and 1901, or will they require a further practical lesson of adversity to bring it home? So far as human foresight can pretend to forecast, the market is bound to harden very considerably for the remainder of the season, more especially now that it has been wisely decided to regulate supplies in London. Will planters be content to pluck fine leaf and keep up the character of Indian tea? Will they be allowed to do so, in face of decent paying prices? That gardens are not making quantity has caused the present rise. This season so far, nature has stepped in, done the needful, and, in spite of planters, proprietors, agents, and directors a deficiency has been established, but this cannot be expected to follow as a normal sequence of nature. We do not believe for a moment the crisis is over, it will not be for a year or two more, and an approach to ruin has been effected in the case of a large number of gardens. It is the insane rush for wealth that is the cause of it all.

The point which we specially wish to draw attention to is that if instructions are already given out, what are these likely to be next year, when in all probability prices will open fairly firm at least, if not strong? Will the tea industry never learn a lesson? How often will it be pointed out that quality, not quantity, is wanted, and that those agents are directors who twit managers that so-and-so is making so many maunds per acre, while they are only doing so-and-so, are guiltly of a monomania, for suicide? What does it matter to an agent or director whether a planter manufactures his crop at three annas or four annas or five annas, so long as he gives good results? The end of this enormos cropping will be the abandonment of what we may term fair gardens and ruin to many, for only the very best ones will be able to emerge from the struggle, *i.e.*, unless wiser counsels than have hitherto obtained in tea are followed, and there is a strict adherence to fine quality in the leaf that is to be plucked, and to such orders as emanated from all agency house at the beginning of this year. Unless this is done, and we cannot too often refer to the subject, nor try to impress it too often, there will in the very near future be a collapse worse than any yet experience. Reckless plucking in 1902-3 will be attended by ruinous results, and we do trust that estimates will be framed on a scale of fine plucking, and keeping up the quality, the advantage of which this year is now only beginning to be felt. It will be a thousand pities if a course of free plucking is adopted next year, as it will completely wipe out the advantage gained this year, and which if lost, it will take years to pick up again. Mincing Lane after all is the true index of the market, and it is very coy. If deceived as it might be for a time by free plucking it would certainly retaliate, and no one could blame it; and everyone connected with tea must know that with be present surplus stock in London the consumer has the whip hand of the producer. The past season has helped the latter a great deal, and we trust the lesson will not be forgotten when the estimated output for 1902-3 sees the light of day.

DISTRICT ASSOCIATIONS.

INDIAN TEA ASSOCIATION.

Meeting in Calcutta.

The following is an abstract of the proceedings of a meeting of the General Committee of the Indian Tea Association held in Calcutta on the 19th November, when there were present Messrs. H. S. Ashton (*Chairman*), A. Tocher (*Vice-Chairman*), H. W. Boyd, D. A. Campbell, and Mr. R. R. Toynbee. Mr. D. Cruickshank, a former Vice-Chairman of the London Association, also attended by invitation.

Letters, dated the 24th October and the 1st November, from the Secretary, Indian Tea Association, London, were brought up for final consideration and disposal after circulation. The principal matters dealt with in these letters were:—Regulation of Sales—It was stated in the letter, dated the 24th October, that the steps taken in this connection had had a beneficial effect upon the market, and it was added that Ceylon was ready to support the regulation. Ocean Freights.—Mr. Tye stated in the letter, dated the 1st November, that the London Committee had again addressed the Calcutta Steam Conference upon this question.

The Committee decided to forward a copy of Messrs. Sanderson & Co.'s opinion to Messrs. Begg, Dunlop & Co.

Meeting of the London Branch.

A meeting of the Committee of the Indian Tea Association (London Branch) was held on the 29th ultimo. The chair was occupied by Mr. A. Bryans, and there were present Messrs. J S. Hulbert, G. Henderson, C. C. McLeod, J. N. Stuart, and A. G. Stanton. The minutes of the previous meeting having been read and confirmed, the Secretary read a letter, under date October 25th, from Messrs. Duncan Macneill & Co. Mr. Sinclair Macley was thereupon invited to become a member of the General Committee, and the Secretary was instructed to advise him of his election. The relations between the Chief Commissioner of Assam and the Indian Tea Association having been discussed, it was resolved to send the following telegram to the Private Secretary of His Excellency the Viceroy:—"Indian Tea Association (London) strongly but respectfully support the representations made by the Calcutta Association of September 27th on Assam labour report." The Secretary was instructed to forward a telegram to the Calcutta Association giving the text of the above telegram. The Secretary having read a letter from the Institute of London Underwriters with reference to the fraudulent sinking of country boats laden with tea in Cachar and Sylhet, it was decided to send a copy of the letter to Calcutta and advise the Association there of the suggestions put forward. The question of the compulsory cess was brought up, and the Secretary was instructed to circulate to members and proprietors generally copies of a memorial to the Viceroy with a covering letter asking if they were willing to support the same.

SOUTH MYSORE.

A special General Meeting of the South Mysore Planters' Association was held at the Munzerabad Club on November 7th. Present:—Messrs. J. G. H. Crawford (*President*), Anderson, C.I.E, Woods, Butcher, Robinson, Sladden, Park, Taylor, and Norton (*Honorary Secretary*).

Letters were read from several members regretting their inability to attend on account of unusually heavy rains.

1. The following motion was put at the request of the Chairman, U. P. A. S. I. (and his letter, as per circular 90, through the Secretary, U. P. A. S. I., read).

"That a general cess on coffee be levied in the following manner. The present curing charges amount to Rs.45 per ton in packed bags. That this be raised to Rs.45-4-0 and that Rs.1-4-0 of this be remitted to the Secretary, U. P. A. S. I., as the cess on coffee, the planter contributing Re.1 and the curer 4 annas per ton." Lost; all present voting against the motion. As amendments to the above were ruled out of order, a general discussion only took place, during which decided opinions were expressed in favour of a general cess being levied in a way to be settled hereafter, the Hon'ble Mr. Acworth's suggestion at the last General Meeting of the U. P. A. S. I. finding most favour.

Mr. Crawford, who attended the last U. P. A. S. I. meeting made the following remarks:—

Gentlemen,—You have all undoubtedly followed the proceedings of the U. P. A. S. I. in the *Mail*, so I need not recapitulate here further than to say, that as instructed by you, I voted against a cess being levied for pushing the sale of coffee and as others did the same, the subject fell through, to be brought up later on in a modified and, I might venture to say, improved, form by the Hon'ble Mr. Acworth. The latter commenced by saying that the advice he proposed tendering would be quite disinterested as he did not own a single coffee tree, etc., and from this went on to say that to

his thinking we had the machinery at our doors for the furthering of the sale of our produce both in India and elsewhere, in the U. C. G. Co. and suggested that as this was a going concern under able management with large supplies of coffee at its command it might pay the different Associations to purchase shares in the said Company from time to time as they found convenient, entering into an understanding with the Directors that they would do their utmost to increase the demand for East India coffee in India and later on at Home and on the Continent when funds permitted, and that French coffee when sold by them would be distinctly marked as such and as mixed with chicory. Members present at the meeting urged that the quantity of the latter should be stated, and this Mr. Hodgson promised to bring up at the next Board of Directors. The chief recommendations that this scheme offers appear to me to be the following: 1st, Feasibility, and that a business such as is required, managed on the most approved principles, is already formed, that we can take advantage of without running any particular risk, and so save ourselves and other Associations of S. India generally the grave risk and expense of starting a concern and maintaining travellers and agents, not to talk of stocks and buildings, to hold the latter, and a clerical staff for keeping the accounts, etc. The latter were some of the objections advanced when the subject was mooted here a year ago; they appear to me to have vanished, and it only remains with this and other Associations to see to what extent (when it can be afforded) we all are prepared to purchase shares in the U. C. G. Co., in doing which I need hardly point out that not only would the Company be assisted in pushing East India coffee, but that each Association would become a shareholder and not only have the advantage of drawing interest on the money invested, but eventually, if sufficient shares were held by the different Associations of S. India, to bring legitimate pressure to bear on the U. C. G. A. to abandon the sale of mixed coffees or to mark the percentage of adulterants used, as at present desired by all planters. I can say nothing further for this scheme than that to me it seems the most feasible one at present propounded; the risks are *nil* and the advantages obvious, they are mutual and not entirely one-sided, as some seem to think, and the plan has the merit of being an Association one pure and simple and not being in the least complicated like many others suggested, so I recommend it seriously to the attention of the members of the S. M. P. A.

I have now to allude to what is known as the Leeming system. While in Bangalore I had conversations with several gentlemen who had visited Scotforth and who seemed to think that there was a great deal in the idea and that planters in different parts of S. India should give it a fair trial. I am doing so myself and would suggest that others followed suit. I will say nothing further, as on the top of the report that appeared in *Planting Opinion* of the 10th of August, and later on Mr. Elder's lucid and exhaustive one on the same subject, my notes and additions on hearsay would be superfluous. Dr Lehmann's remarks (in the course of his lecture) about bone meal as a manure are worth bearing in mind. He practically said that this manure was not worth the money expended on it and planters could obtain a far better result from lime (air-slaked for preference) applied in quantities of one ton per acre. He also doubted the benefit derived from green manuring in the Malnâd *i.e*, planting leguminosæ between the rows and digging the same in.

2. RESOLVED.—That the members of the South Mysore Planters' Association desire to place on record an expression of their sincere sympathy with the Tea Planting community of Assam, and feel absolutely confident that the appeal to His Excellency the Viceroy will result in the prompt vindication of the essential and guiding principle, that the beneficial effect of all Government intervention between employers and their labourers is entirely dependent on the amount of tact, prudence, and impartiality exercised by the officials concerned.

3. The Honorary Secretary then called upon Mr. Graham Anderson to address the meeting in regard to a proposition which he had submitted at the last General Meeting held on the 6th of June last, copies of which had been freely circulated together with the minutes of the proceedings of that meeting at which many points had to be discussed confidentially, as they were connected with alterations and modifications of the draft of the new Labor Act submitted by the Government of Madras to the Supreme Government, the arrangement of which being a matter of collective importance could only be effected by the United Planters' Assoc tion of Southern India.

Mr. Anderson read a long and carefully prepared memorandu from which the following extracts are made:—

The proposition which stands in my name, and which we a about to discuss, must be considered as the supplement to t paper on the "State of the Coffee Market," which I read at t Annual Meeting of the United Planters' Association of Southe India in August, 1899.

I would solicit your attention to the printed proceedings of th meeting, as I specially desire to avoid any misconception relati to my action in this matter generally. If you will kindly refer pages 55 and 56 of the Book of Proceedings, you will see th although I endeavoured to obtain a resolution on the contents the paper I had read, and which I had prepared under the sancti of our Association, I was not successful, my representation bei simply recorded.

I venture to think that it is quite possible any casual observ might form the opinion that the views which I had expressed we not in accordance with those of the delegates present.

Now, this is an impression which I particularly desire to preve At the conclusion of my paper I summarized twelve distin subjects which I ventured to specify as affecting the interests our industry. The opinions expressed by the members prese were solely in regard to the first and most important, *viz.*, t alteration in the currency arrangements of the country.

As the mover of what I venture to consider one of the mo important resolutions which has ever been proposed by any indu trial Association in Mysore, I desire emphatically to state th the European planters are the most self-reliant body of men, a that the industry they have so long maintained in a flourishi condition is the most unselfish one in the Province, affordi constant congenial employment of many thousands of the labouri peasantry.

As you are all well aware, the affairs of our planting co munity have caused us considerable anxiety and vexation f some time past, and have been the subject of much deliberatio As a very old servant of this Association, I have frequently be asked as to what action it is possible for us all to take so as induce some improvement in a state of affairs which is gradual getting worse instead of better. We have before us two mo instructive examples of the wonderful results which have be secured by the thorough investigation of independent exper *viz.*, the Currency Commission and the Southern Indian Planter Enquiry Committee.

I cannot think how our reputation as a body of most self-relia men can, in any way, be compromised if, when our industry surrounded by difficulties which are relatively far greater tha those experienced by the Government of India in regard to t currency question, we venture to adopt a similar means of obtaini advice and assistance as to how our difficulties can possibly either mitigated or entirely removed.

I feel sure that the Government, with all the special faciliti for obtaining reliable advice which are at its disposal, will, once has comprehensively grasped all the details of the situatio cordially extend to us the benefit of its counsel and support.

Of one thing I feel sure, and that is that the prices ruling the London market this last year have had the effect of rousi planters to a full sense of their difficulties and responsibilitie Coffee planters have been nearly ruined this year at a time wh the middlemen are making fortunes by buying and selling the produce without conceding to the consumer any of the adva tages of the low level of wholesale prices.

Coffee planting in Mysore, like every other industry, requires f its maintenance and welfare the cordial assistance of the co mercial world, and the sympathetic support and co-operation Government in utilizing to the best advantage possible all existi means, institutions, and facilities for the removal or mitigation any disadvantages it may have to contend with.

It is extremely difficult to bring about an alteration in any usa or custom, especially when connected with a Government or co mercial system, and relief can only be hoped for by the caref avoidance of any disturbance of the necessary conditions of th alliance of interests upon which the success of all business tra actions must ever depend.

At no period of the existence of our industry has it ever be

beset by so many difficulties at one time, and when these are separately considered, many of them are at once recognized to be the usual factors which constitute industrial depression, but as our industry is a purely agricultural one, and as agricultural success is entirely dependent on propitious seasons, we, as planters, have all the difficulties, vexations, and losses consequent on abnormally unfortunate and unfavourable climatic conditions added to the usual group of untoward complications on which industrial depression invariably depends.

For the last five years India has been afflicted in a most unusually disastrous manner by faulty distribution of rainfall which by causing wholesale loss, failure or destruction of the crops of the country has induced widespread famine and scarcity which have caused Government immense trouble and expense, and have further necessitated other forms of assistance through the agency of what may be truly styled the most glorious and universal manifestation of private relief which the world has ever known.

To all of us it is a well known and thoroughly recognized fact that the same disastrously unfavourable climatic conditions which have caused all this ruin and destruction of life and property in vast areas of the Indian continent have not been wanting in their effects on our far more sensitive industry, and I may be permitted to point out that the planters have far greater difficulties to contend with than the ordinary agriculturist, the former having to cultivate and maintain trees which are established in the soil, while the latter has only to attend to cultivation during a few months of each year, and when he loses his crop prospects has no work to attend to, no expenses for upkeep to meet, while his land is benefited by the rest which a fallow induces. The planter has to continue the cultivation of his estates so as to secure the only chance of prospective good fortune, and any cessation in routine work or necessary expenditure is absolutely detrimental to his chances of future success.

All I wish to do is to dwell on the important influence which the matters specified by me have on our interests at the present moment, so that I may be able to explain what are the numerous confusing complications which have together caused so much vexation, loss, and anxiety to the coffee industry of Mysore.

I will now proceed to briefly touch upon some of the most important factors of the difficulties which sorround our industry.

His Excellency the Secretary of State for India in one of his masterly addresses has already given expression to his matured views as follows:—

"Does not India offer a wonderful field for private enterprise and the investment of private capital? In India there is a very great population, frugal, industrious, and orderly; a prolific soil, and a large amount of mineral wealth practically untouched. I will not take part in any controversy, but if, however it is done, people could be assured that they would get back from India the value of the money they had invested there, I believe it would effect an economic and industrial revolution in India."

These few well-chosen words accurately define the conditions on which the solution of the problems connected with the development of India's economic and industrial prosperity depends.

The free use of capital is indispensable to the development of India's resources, and anything which restrains or restricts its use is calculated inevitably to prove disastrous to its economic prosperity. You, I am sure, will readily agree that ever since our industry was established in Mysore, there have been most serious disadvantages always present which have caused immense discouragement to the free flow of capital into this province.

As a few examples of what I mean, let me remind you of our labour troubles, which have been constantly and vigorously represented for considerably over thirty years. All this time Ceylon has enjoyed the protection of a perfect labour ordinance, while we in Mysore have been losing lakhs of rupees annually in advances owing to the hedge of judge-made law which has grown up around Act XIII of 1859, which has generally been acknowledged to be utterly unsuitable for the purposes for which its provisions were specially extended to this province.

The entire absence of reciprocal arrangements in regard to Extradition is another most serious defect, as is emphatically explained by the following weighty opinion, recorded by the South of India Planters' Enquiry Committee:

"Mysore was under British administration when the planting industry developed * * * * * * and we considered that the paramount power is morally bound, especially in the case of Mysore, to extend to the planting industry in Native States as full a measure of its consideration and protection as in the case of British territory. This duty seems to us to rest on a three-fold basis,—the claims of the States concerned, the claims of the planters, and the necessity for removing from the recruiting tracts in British India a temptation which is found to be creating a special class of crime."

The adulteration of coffee still stands in the way of any chance of success following efforts of our own in regard to advertising or pushing our product, and has undoubtedly been the principal cause of intensifying the difficulties consequent on over-production in Brazil. I will merely say that recently I am led to believe that in regard to one improvement, namely, the prevention of adulteration of our coffee, the procedure recommended is for local Associations to move the Central Association which in its turn is to lay the matter before various Chambers of Commerce, who will draw the attention of Local Governments to the subject in view of their representing it to the Supreme Government, who will move the Secretary of State to take such action as may be necessary or possible.

Any one who has carefully perused the admirable proceedings of the recent meeting of the United Planters' Association of Southern India cannot but appreciate the good old saying that "unity is strength," and as a coffee planter myself I desire most emphatically to acknowledge that the strength of our position and of all representations have been vastly increased by the blending of tea and coffee interests, and especially by the counsel and advice of those who are engaged in conducting the sister industry.

The object of the proposition which I have had the honour to submit is simply to arrange for a Conference between one of the leading officers of the Mysore administration and the representatives of the Mysore planting community, in view of enlisting the friendly and general assistance of the Durbar in the organized endeavour to obtain some amelioration of the circumstances which place our industry at a disadvantage.

I beg to express a sincere hope that the United Planters' Association of Southern India may regard my action as an endeavour to strengthen its hands as the duly constituted medium for representing and arranging all matters of collective importance.

The interests of the Government of Mysore are so identical with those of the planters of this province that nothing but good can possibly result from soliciting advice and co-operation in regard to matters of vital importance to our industry.

Our present difficulties, as you are well aware, commenced in 1896 and 1897, when two very poor crops were produced, the heavy showers which fell in February, 1897, almost entirely preventing the formation of bud. This last season all of us have had very good crops, but not only have prices fallen to the lowest known level, but heavy rain again fell in February, and consequently the coming crop will be a record small one. I feel sure that the Government, with all the special facilities for obtaining reliable advice which are at its disposal, will, once it has comprehensively grasped all the details of the situation, cordially extend to us the benefit of its counsel and support.

The Government of Mysore has always extended its sympathy and support to local industries, and we as planters have on many occasions had the pleasurable duty of tendering our grateful acknowledgments for the benevolent attitude which the Durbar has persistently maintained in regard to all matters connected with our welfare. Our industry is now suffering from many untoward circumstances which we feel sure the Government will sincerely regret, as they are no fault of ours or of the Government.

I have the honour to make the following proposition:—

"The alarmingly depressed condition of the Planting industry in Mysore and the numerous confusing complications which have given rise thereto appear to be good and sufficient reason for respectfully representing to the Government of Mysore the propriety of deputing one of the leading officers of Government to visit the Planting districts with a view of making thorough investigations into the causes of the abnormal depression and advising the Government as to what measures are necessary or possible under the circumstances."

The President having called for a show of hands declared the proposition carried unanimously.

4. Mr. Crawford proposed that in co-operation with the North Mysore Planters' Association, this Association should depute two members (with Mr. Leeming's sanction) to report exhaustively on the "Leeming system."

Mr. Butcher seconded this and thought that this would be only satisfactory provided a man from each district was selected, as local conditions varied so much.

Mr. Park wanted to know what was to be gained after Mr. Elder's report, which appeared very satisfactory and full. Mr. Crawford explained that there was absolutely no wish to detract, in the slightest degree, from the merits of Mr. Elder's able report; but agreed with Mr. Butcher, that varying local conditions required an additional report. Carried *nem. con.*

Mr. Robinson called attention to the bad state of the road from Sucravasanti to Saklaspur parts of which were almost impossible for wheeled traffic during the monsoon.

5. Mr. Park proposed "that Messrs. Anderson, Woods, Sladden, and Butcher form a Sub-Committee to draw up a suitable address of welcome to the Maharajah of Mysore on his forthcoming visit to Saklaspur."

Seconded by Mr. Norton and carried.

A vote of thanks to the President closed the proceedings.

MARKET REPORT.

[*Per Mail advices of 8th November* 1901.]

COFFEE.

The London Commercial Record says:—Auctions have been held on only one day this week, when Santos was the only growth offered, which went off without alteration in value, further public sales being postponed owing to heavy fog, and there is consequently no business of interest to report, prices remaining nominally unchanged. The market for Brazil "futures" opened with a slight decline, but latterly a much stronger tone has prevailed, owing to further reports of drought, yesterday registering a rise of 2s 6d to 2s 9d on the day, and closing at the best point, on balance 2s to 2s 3d dearer on the week. Yesterday's sales include—December at 34s 9d to 36s 6d, March at 35s 9d to 37s 6d, May 36s 3d to 38s 1½d, and September at 37s 3d to 39s 3d. We quote:—

London ...	... Santos ...	Dec. delivery	...	35s 9d.
New York	... No. 7 Rio...	„	...	6·80 cents.
Hamburg...	... Santos ...	„	..	35¾ pf.
Havre ...	... Santos ...	„	...	43¾ francs.

Auctions to-day offered 6 casks 9 barrels 1 bag Ceylon, 1,378 bags East India, 52 bags Nyassaland, 39 bags Jamaica, 555 bags Costa Rica, 90 bags New Granada, 19 bags Vera Paz, 46 bags Mexican, 116 bags Salvador, 154 bags Ecuador, 147 bags Colombian, 39 bags Caracas, 38 bags Java, 279 bags Guatemala, 547 bags Rio, and 500 Santos. The sales went off with good competition at full rates.

A cable to hand yesterday from Messrs. E. Johnston & Co. says, "Prospects very bad indeed for the coming Rio as well as Santos crops. Estimate the former at 2,500,000 bags and latter at 4,500,000 bags."

Brazil futures have continued excited on strong improvement in the Continental markets on Messrs. E. Johnston's report, which we annex, and our market opened this morning at 1s 3d to 1s 6d advance, and we close at almost the highest of the day. May opened at 39s and has been done up to 39s 6d, March at 38s 7½d, September 40s 4½d up to 40s 7½d, December 37s 6d to 37s 10½d.

Receipts are moderate, *viz.*:—73,000 bags and pointers are still less, *viz.*: 40,000. Exchange remains unchanged at 11 29/32d.

In comparing Messrs. Johnston's estimate for the next crop with receipts already received from 1st July to present time, we would point out that so far this season we have received 8,250,000 bags which have nearly all gone into consumption, against their estimate of seven millions for both crops. If these figures are correct of course next year we must see prices many shillings dearer.

New York opens steady at 5 to 10 points advance.

Messrs. E. Johnston & Co. favor us with the following:—From Rio:—From information carefully gathered in all "districts, Rio flowering practically failure. In some districts owing to want of funds and low prices, labourers and Metayers abandoning land. From appearance at present new Rio crop estimated at about 2½ millions maximum. Owing to trees very bad condition, furth flowering unlikely."

From Santos:—"Trees very exhausted from old Santos crop, a damage to crop serious owing to drought. It has rained a lit recently, but not sufficient to be beneficial. Drought continue unless there is continued rain very soon, new crop estimated about 4½ millions."

At the Dutch Trading Co's public sale held in Amsterdam Tuesday, 19,699 bags 97 cases were offered; good ordinary Ja realised 38c against 35½c valuation, and 35c last sales held Rotterdam. The following are some of the particulars:—

Lying in Rotterdam.

No.	Bags.	Valued at. Cents.	Result. Cents.
1	339	36	39¼ @ 39
2	970	36	39½ „ 40
7	726	36	38 „ 38
13	468	23½	23¾ „ 24
14	1,248	38	40 „ 40
15	556	33	36 „ 36
16	444	33	35½ „ 36
17	649	45	47¼ „ 48
19	462	19	20½ „ ...

The next auctions will be held January 28th, 1902.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900
Tons ...	13,513	16,680	41,912	32,69
	Home Consumption.		Export.	
	1901.	1900	1901.	1900
Tons ...	16,984	13,879	25,957	16,73

The preceding figures exhibit—

	Tons
In the Imports an increase this year of ..	9,21
Home Consumption an increase of	3,10
Export an increase of	9,22
Stock a decrease of	3,16

Auctions on Tuesday went off as under:—

BRAZIL.—1,125 bags washed Dumont Santos sold—small greenis to colory 32s to 35s 6d, medium 37s to 41s, bold 42s to 49s 6d, pea berry 35s to 52s. 2,394 bags unwashed Dumont Santos, quay term sold—small greenish foxy to pale greenish 30s 6d to 32s, mediu 32s 6d to 36s, bold to extra bold 35s 6d to 44s, peaberry 35s 6d to 41

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99 Bags.
Rio ...	2,780,000	1,286,000	1,659,000	1,433,00
Santos ...	5,444,000	4,202,000	3,746,000	3,017,00
Total ...	8,224,000	5,488,000	5,405,000	4,450,00
Crop ...	—	10,900,000	8,971,000	8,772,00

Rio Exchange 11 29/32d, previous day 11 13/16d.

HAVRE, *November* 7.—Good average Santos November opene steady at 43½f. and closed steady at 43¾f., December opened at 43½ and closed at 43¾f., March opened at 44½f. and closed at 44¾f May opened at 45f. and closed at 45¼f., September opened at 46 and closed at 46¼f.

HAMBURG, *November* 7.—Good average Santos November opene steady at 34½pf. and closed steady at 35½pf., December opened a 35¼pf. and closed at 35¾pf., March opened at 36½pf. and closed a 37pf., May opened at 37¼pf. and closed at 37½pf., September opene at 38¼pf. and closed at 38½pf.

NEW YORK, *November* 7.—Closing prices of No. 7 Rio were a follow:—

	Nov.	Dec.	Jan.	Feb.	Ma
November 7...	6·75	6·80	6·90	7·00	7·1
November 6...	6·10	6·20	6·30	6·40	6·5

TEA.

Gloomy and foggy weather, both in town and many parts of th country, has interfered with the tasting and handling of tea durin the past few days, while the dull state of business throughout th provinces also helped to depress buyers and caused an easier ton generally.

Indian.—Offerings were heavier, *viz.*, 53,800 packages compared with 45,500 packages in the week before, and 43,900 packages for the corresponding period of 1900.

Quality was about maintained although in many of the better kinds any movement was towards an inferior article.

The immediate requirements of the trade having apparently been satisfied there was less disposition to follow the rise, and a tendency to lower quotations set in, medium grades especially Pekoes, perhaps showing this position more than others. As before, the chief demand ran on tea under 7d per lb., but it closes weaker to the extent of ¼d to ½d per lb., enquiry being no doubt somewhat narrowed, owing to the recent comparatively rapid advance which has taken place. Fine and finest broken were more enquired for and in most cases realised full rates.

For 40,200 packages on estate account 8d per lb. was obtained, contrasted with 7⅛d per lb. for 36,700 packages, and 8¾d per lb. for 6,900 packages in the two preceding seasons.

Ceylon.—Catalogues comprised only 12,500 packages opposed to 16,600 packages on the 29th ultimo, and 22,100 packages twelve months since.

This reduced quantity received diminished support, probably in consequence of the reasons given above, and considerable irregularity with easier rates for nearly all descriptions was noticeable. Leafy sorts under 7d per lb were usually ¼d to ½d per lb. down, while medium Pekoes and Orange Pekoes, unless suitable for outside quarters, mostly went in favor of buyers. Broken Pekoes and Broken Orange Pekoes were in smaller request, and a decline on previous quotations often had to be accepted to effect sales, though some of the choicest made good prices.

The average has fallen to 7⅞d per lb. On the 31st ultimo it was 8¼d per lb., and 7d per lb. a year ago.

Java.—Only 380 packages, 107 being of direct import, were submitted, and met with a quiet reception.

Deliveries.—Clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 5th November, 1901	2,965,236	lbs.
Do. do. 1900	2,721,708	,,

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	34,084	19,737	53,821
Ceylon	9,886	2,594	12,480
Java	121	260	381
Total ...	44,091	22,591	66,382

Also 2,036 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated November 8th, 1901, says:—

Quantity brought to Auction in London from 1st June to date.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1901-1902	606,128	535,765	30,212
1900-1901	624,878	582,153	23,614

5,379 *pkgs.* Indian
3,115 ,, Ceylon
408 ,, Java
} Total 68,902 packages were offered in public auction this week.

Although figures published by the Tea Brokers' Association show that arrivals of Indian tea to the end of October slightly exceeded those of last year, this is due to the quicker despatch of tea from the gardens, and does not alter the fact that the Indian crop will undoubtedly be considerably below that of last season.

Owing to insufficient support from sellers, the Regulating Committee have been unable to efficiently control supplies. This week's unsatisfactory market is mainly attributable to this cause.

Importers should therefore in their own interests give more effectual support to the movement, in order to prevent a further fall in price.

Indian.—The heavy auction has resulted in a drop of fully ½d. per lb., with a general slackness in the bidding. The official wire gives shipments to U. K. for the second half of October as 11,250,000 lbs. (including 1,000,000 lbs. from Chittagong), against 15,200,000 lbs. last year, and the quantity from 1st April to 31st October as 95,251,800 lbs., against 105,350,000 lbs.

Week's av. of New Season's tea sold on Garden Account 1901, 40,208 pkgs., av. 7·90d. 1900, 36,641 pkgs., av. 6·87d.

New Season's tea sold on Garden Account 1st June to date 1901, 440,629 pkgs., av. 8·16d. 1900, 504,380 pkgs., av. 7·93d.

Ceylon.—The market was disappointing to sellers, a decline being frequently noticeable of ¼d. to ½d. per lb. The official telegram gives exports to U. K. during October as 9,000,000 lbs., against 7,500,000 lbs. in October, 1900, which makes the total exports from 1st January to end of October 88,750,000 lbs., against 94,000,000 lbs.; it estimates for the current month 8½ to 9 million lbs., against 9,250,000 lbs. actually shipped in November last year.

The quantity exported during October has doubtless contributed to influence buyers, through the apprehension that coarser plucking may be again adopted in Ceylon with heavy supplies in the near future, an event which would be most prejudicial to producers.

Average for week 7·85d., against 6·99d. same week 1900.

Ceylon tea sold on Garden Account 1st January to date, 985,455 pkgs., av. 6·77d. 1900, 1,070,456 pkgs., av. 7·17d.

Java.—Only 408 packages were brought forward, of which 107 were of direct import. In sympathy with other growths the market was somewhat lower.

Bank Rate 4 per cent. Exchange on London three months' sight:—Calcutta 1/4 7/32. Colombo 1/4¼.

COCOA.

No auctions were held on Tuesday last, and privately the market is very quiet, the sales reported including 400 bags Trinidad at 67s to 74s for middling to fine, and 150 bags Grenada at 64s 6d to 68s per cwt. for fine.

PEPPER.

Black.—The market is dull and value is easier. For arrival 50 tons Singapore January-March shipment (s.) have been sold at 6⅛d, and 25 tons October-December at 6d. On the spot small sales of fair Singapore have been made at 6d.

At public sale on Wednesday 324 bags Singapore retired at 6d to 6⅛d, 200 bags Penang at 5¾d to 5⅞d, and 125 bags Aleppy at 6⅛d, also 250 bags shells at 3d per lb.

White is firm, but only small sales reported. Sales of fair to good Singapore on spot at 9¼d to 9⅜d and Penang at 8¾d. For arrival nothing reported.

At auction on the 6th instant of 247 bags Singapore 60 bags sold at 9¾d for good. 94 bags Penang retired at 8⅞d per lb.

GINGER.

Cochin.—The good demand of the past few weeks continues unabated, and values have experienced a further upward movement. During the week about 1,750 packages have changed hands—good small cut and scraped at 57s 6d, small and ends rather roughly cut and scraped, part limed, at 55s, medium and small washed rough at 47s 6d to 50s, and rough Calicut sorts at 45s to 46s. Under the hammer 202 bags sold, out of 35 cases 302 bags offered—medium and small washed rough at 50s, and bright Calicut sorts at 46s per cwt. To-day Cochin ginger firm. Sales of medium Native cut at 69s, being dearer.

Japan has participated in the rise in value, and 62 bags medium and small plump limed were bought in at 45s—a bid of 43s 6d per cwt. being refused, but subsequently accepted.

Jamaica has further improved to the extent of 1s to 2s per cwt. 279 barrels mostly sold—middling to fair bright 51s to 55s, good common to fair 48s to 50s per cwt. Since the sales about 100 barrels have changed hands.

CINCHONA.

The N. V. Nederl. Veem. cinchona-bark department at Amsterdam reports the shipments from Java to Europe during October, 1901, at 1,577,000 Amsterdam lbs., against 1,100,000 in 1900, 959,000 in 1899, 969,000 in 1898, and 735,000 in 1897. The total shipments from January to October have been:—1901, 10,301,000 Amsterdam lbs.; 1900, 8,190,000 Amsterdam lbs.; 1899, 9,421,800 Amsterdam lbs.; 1898, 8,895,000 Amsterdam lbs.; 1897, 6,717,000 Amsterdam lbs.; 1896, 8,280,000 Amsterdam lbs. In auction a parcel of 38 bales, apparently mixed Huanoco and Guayaquil bark, was bought in at 7d per lb. A bid of 3¼d is to be submitted.

The Amsterdam Auctions:—The auctions of cinchona-bark held at Amsterdam, November 7, consisted of 8,980 bales and 325 cases, weighing 816,285 kilos, and containing 41,386 kilos. (1,448,510 oz.) quinine sulphate. The manufacturing bark contained an average percentage of 5·55 per cent. of quinine, against 5·47 per cent. at the October auction, and an average of 5·26 per cent. for the ten

auctions of 1900. Of the above 9,305 packages 8,550 sold at an average unit of 7·70c. per half-kilo, against 8 25c. paid at the auction on October 3. The following were the approximate quantities of quinine purchased by the principal buyers:—English and American factories, who purchased the equivalent of 12,823 kilos.; the Brunswick factory, 7,167 kilos.; the Mannheim and Amsterdam factories, 7,302 kilos.; the Frankfort-on-Main and Stuttgart factories, 6,157 kilos.; and various buyers, 3,887 kilos. The prices paid for the manufacturing bark ranged from 2½c. to 88½c. per half-kilo., and druggists' bark from 13¼c to 47¾c.

QUININE.

Qunine is quiet in anticipation of the Amsterdam bark sale today. During the week a few sales of good German sulphate have been made on the spot at 1s 1¼d, and March at 1s 1½d per oz. Today there are sellers of December at 1s 1d and March at 1s 1¼d. The exports from Java during June amounted to 216 cases, 178 of which were shipped to New York, 24 to Holland, and 14 to Jap From January 1 to June 30 the shipments have been:—

	1901	1900	1899	1898
Cases	1,037	662	905	438

CARDAMOMS.

Cardamoms sold at very irregular prices, fine quality being n lected. The following prices were paid: Ceylon-Mysores, ex bold pale picked, 4s; medium to bold pale, 3s 6d; bold splits, 3s small splits, 1s 10d; very small ditto, 1s 4d; small to medi palish, 1s 10d to 1s 11d; ditto brownish, 1s 11d to 2s; small pali 1s 5d to 1s 7d; small brownish open, 1s 4d to 1s 5d; brown split, 1s 4d to 1s 6d; and seeds, 2s 2d to 2s 4d per lb. Telliche character, 1s 9d to 1s 10d. Ceylon-Malabar, small to medium bro 1s 4d to 1s 5d per lb; 22 cases sold without reserve at from 1s to 1s 8d per lb Mangalores were neglected at from 3s 2d to 3s for good to fine, and 2s 10d to 2s 11d for medium.

(AVERAGE FOR ALL INDIA 7·90d., NOVEMBER 8TH.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, D and Variou	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price	Quantity	Pri
Neilgherry ...														
New Hope .	48 p	6½	19½c	9¼	29	5½	..	...	...	...	..	...	..	..
Travancore ...	**530**	**6·70**												
Ellangy ...	89 p	6	...	...	40	5¾	20	7	20	5½	...	...	9 p	4
Lockhart ..	80½c	8¼	13½c	1 2¼	60½c	7	...	...	...	...	8½c	7¾	7¼c	4
Merchiston ...	56 p	6¾	9	7	28 p	6 6¾	11	8¼	...	...	10	5¼ 5½	4½c	4
Poonmudi T Co B ...	116 p	6½	18	8¼	34	6¼	25	7½	22	5½	13	5¾	4½c	4
„ Poonmudi ...	124 p	6½	51	7½ 8¼	43	6	...	...	20	5¼	6 p	5¼	4½c	4
S I T Co Kud Kar ...	65	7	...	..	...	...	65	6¾ 7	...	...	...	...	...	..
Wynaad ...														
Wynaad T Co Per ...	103 p	6¾	25	6¼	...	...	63½c	8	15	5½	..	...	...	..

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WRITTEN BY PLANTERS FOR PLANTERS.

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SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 13th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad.

December 2nd.—Weather—East winds, cool days with rain. Last week gave us three very cold nights, on the 26th the register was near the freezing point; and on the 27th the register was 38°F. The rain is doing the coffee infinite harm, and spoiling the paddy that has been reaped, but not carted. *Crop*—This year's crop is a dismal failure, there is also a great deal of diseased and worthless crop, a large percentage of the beans being simply black and rotten. *Labour*—Abundant. *Health*—Plague rampant at Hassan, plague camps being erected all round.

Coorg.

Polli Betta, *4th December.*—*Weather*—Clear and very chill from 25th to 29th ultimo, cloudy on 30th November, with light rain that evening, and on the 1st instant. There is leaf disease, but coffee is able to withstand it as there is very little crop for it to mature. *Crop*—Picking is in full swing. As regards prospects for next season, they are very good. In spite of the late rains, the bud is not as forward as it was feared it would be, and the east wind will keep it in check. *Works*—Weeding and picking. *Interesting item*—The harvest festival of the Coorg is being celebrated now.

THE MANURING OF TEA.

Mr. Harold H. Mann, in his report on the tea soils of Assam, gives many highly useful hints to tea-growers in general. Dealing with manuring of tea crops, he not only gives it as his opinion that manuring is a most necessary thing, but states his reasons for it. That objections to the system are raised, Mr. Mann admits; but they are objections confined only to certain classes of planters. That manuring costs too much, is one of these reasons given against it; and the other, that when once begun, it becomes a necessity to

use manures continually. This, as Mr. MANN admits, is necessarily so to some extent; for when land has once begun to deteriorate, it will take a great deal of careful working, and judicious selection of manures, to bring it back to its original fertility. If youth or its nearest semblance is required, we must supply in some manner the lost vitality; which, though not actually rejuvenating the body, artificially provides the necessary power, and holds the functions in much longer and more vigorous use than would be the case were no stimulants applied. So then is it with the soil. To continue cropping a soil, without providing it in some measure with assimilative food, means, as any agriculturalist knows, a steady and certain deterioration of reproductive power. Certainly some soils stand the strain longer; but when they do finally go, the collapse is generally more complete, and the time for partial recuperation required much longer. That which applies to the agricultural farmer in the feeding of his land, certainly applies to the tea-grower. Manuring *is*, as a rule, dear; but the bulk of the manures should be drawn from the estate itself in some shape or form. Mr. MANN mentions, among others, bone manures, dung, pruning ashes, green manures; could anything be better or more inexpensive than these? If other manures are required merely to co-operate with and forward the fertilizing work of those already applied, it is easy enough then to make the outlay, satisfied that it is only as an extra, and not as the great bulk. But that the complaint against the necessity for continued manuring should be made is strange, considering that, unless a man have a very big area of virgin land to run at, it is better to work the already cultivated land while it can be made to pay, even with manuring, than to keep continually making inroads into fresh land. For a time such a system is bound to act, and then the reaction sets in; the whole of the available property has been worked over, and where is the virgin land as a stand-by? With the one system the land is worked, and manured until the utmost limit is reached, when it may be safely left to lie fallow or occasionally assisted in recuperation by green cropping, and the virgin lands gradually brought bit by bit under crop; and, on the other hand, manuring is not resorted to, but in its place a sweeping clearance of virgin land is made and the old cultivated lands left, absolutely without life-giving foods, to recover, how or when they can; useless when they should be full of vigour, and superseded by the fresh land which ought to have been left idle for many seasons to come. The great deterioration of the older parts of the Assam gardens, Mr. MANN is inclined to ascribe to this lack of fertilization, and it is reasonable to suppose that the conclusion is correct. Naturally, with time, the plant must deteriorate to a greater or lesser degree. Yet that deterioration can be arrested to a considerable extent by supplying plant foods most easily assimilated by the tea. This will naturally keep the bushes in better health and bearing, and make their cultivation a matter resulting in greater profit.

Another point made by Mr. MANN is the necessity for systematic pruning in whatever style the planter may consider best. Whatever else it be, let it be systematic. Let the plan of pruning each particular plot be laid out, and strictly adhered to, year by year; not, as he suggests is too often done, go round in December with the pruning knife, and there and then decide the year's pruning without reference to the past history of the bush; that is too casual a method for an industry in which the bushes represent b capital and stock-in-trade. The summary of the rep Mr. MANN gives, is as follows:—(1) The older parts of Assam gardens are gradually deteriorating in yield, an may be also in quality. (2) It is unsound to try and m up for this loss in yield by putting out new clearan (3) This deterioration can be largely stopped by the judici use of manures, principally obtained locally. (4) No n clearance should be put out unless the old area is produc its maximum, or it is intended to abandon an area equival to the new clearance. (5) A system should be laid down the future pruning and treatment of every plot on a gard only to be departed from for very trenchant reasons.

In addition to the fact of the immense advantages to reaped by planters from manuring in the ordinary mann Mr. MANN urges the advisability of rotation in the dressin This is a practice which has found the greatest favour in eyes of agricultural farmers, changing as it does the clas plant food, and introducing fresh elements into the soil wh act directly upon others which were only one class of dress used, would probably lie dormant and useless for an indefi period. Rotation of manures, like a rotation of crops, is most perfect mode of feeding the land, and should be adop by all up-to-date growers of whatever class of produce quires cultivation, and it is a point to be well conside where the best and cheapest methods are required to ra the standard of land, and of the crop produced from it.

THE DEATH OF MR. LIONEL DE NICEVILLE

Much regret will be felt in planting circles when news becomes generally known of the death of Mr. Nicev who joined the staff of the Imperial Museum in Calcutta the latter part of last year. He was appointed to cond economic research with special reference to insects injuri to agriculture; and was early employed in studying habits of the Indigo bug in India; after that again, bei deputed to gather facts regarding sugar-cane disease. Tr the services rendered to the planters by Mr. Niceville w so far not of any great value, yet he had been gradua collecting information which would soon have resulted much benefit. In the early part of next year, Mr. Nicevi had been in hopes of obtaining sanction to make a t through the planting districts of Southern India, and the s news of his untimely demise will be received with ke regret by Southern planters.

A TRANSITORY BOON.

Recent advices from Brazil reporting a break in t drought have completely upset the high prices maintain for coffee in London. The first telegrams caused a fall from 1/6 to 2s. per cwt., which, however, after cooler refl tion was recovered, as the news had not been confirm and might possibly have been exaggerated. Still, gr nervousness prevailed, and neither "bull" nor "bear" f any confidence in making a move. This highly unsatisfacto condition lasted for several days, when Santos again report satisfactory rain all over the country; expressing at t same time the opinion that the crop had benefited there This came as a fearful shock to the "bulls," and a rush realise was made. A drop of 2 per cent. was establish

within a few minutes of the receipt of the news, and although some of the more confident "bulls" endeavoured to inspire courage by purchasing, prices remained down, and the market consequently continued in a most unsettled state until next day when some renewed buying took place, thereby stimulating the market. There is little hope for a change until more explicit news is received; and in the meantime the majority of operators incline to the belief that the Santos crop will not exceed 4½ million bags, as in their opinion the fall is too late to materially benefit the crop. Coffee may go higher, still the shortage is not great enough to put coffee on a high basis of cost. The visible supply, added to one year's production is fully 9,000,000 to 10,0 0,000 bags more than the world's requirements. It is a big contract the "bulls" have undertaken to rush coffee up much beyond present quotations. They may of course succeed, but that a big advance can be held is doubtful, unless the damage to the next crop be great enough to amount to disaster.

The *American Grocer* of October 23rd says:—"The market is abundantly supplied with cable reports confirming earlier despatches of damage to the next crop. Undoubtedly some injury has been done, but the chances are that many of the reports are grossly exaggerated. Option trading continues active, and deliveries well ahead of last year."

BOARD OF TRADE RETURNS.

October 1901.

Tables showing the Imports, Consumption, and Exports of the undermentioned articles for the 10 months ending October 31 in the present and 2 previous years, compiled from the Board of Trade Returns, with stock in U K. on October 31 furnish us with the figures given below.

Coffee.—The statistical position has greatly improved, probably because retailers have resumed stockkeeping in lieu of buying from hand to mouth.

—		1899.	1900.	1901.
Import ...	cwts.	942,171	720,871	808,164
Home Consumption	,,	222,518	234,316	279,669
Export ...	,,	545,777	406,815	605,832
Stock ...	,,	443,000	360,000	297,000

Cocoa (Raw).—This trade continues to grow rapidly, and consumption develops even faster with increase on imports.

—		1899.	1900.	1901.
Imported ...	lbs.	40,076,127	46,743,198	46,356,870
Home Consumption.	,,	29,246,086	31,578,037	36,038,992
Export	,,	9,646,849	8,229,706	9,774,242
Stock	,,	16,149,000	17,972,000	17,335,000

Cocoa (Prepared).—Foreign makers hold them on in competition with British.

—		1899.	1900.	1901.
Imported ...	lbs.	4,160,864	6,147,410	6,980,324
Home Consumption	,,	4,458,874	5,439,735	6,414,276
Export	,,	639,032	769,787	699,516
Stock	,,	333,000	220,000	201,000

Tea.—Figures call for very little remark, beyond a reference to the steady expansion of consumption. Though stocks also are heavy the growth of demand is a sign of decided health.

—		1899.	1900.	1901.
Import ...	lbs.	224,377,839	226,490,224	228,934,771
Home Consumption..	,,	201,716,586	209,320,234	213,153.334
Export	,,	26,571,000	35,750,696	36,027,833
Stock	,,	93,657,000	96,992,000	100,408,000

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.)

Indian Tea Association.

The following letter has been addressed by the Secretary of the Indian Tea Association to the Secretary to the Government of India, Finance and Commerce Department.—I am directed by the General Committee of the Indian Tea Association to invite the attention of the Government of India to certain matters relating to the duty levied upon teas imported into the island of Ceylon. In the first place I am to state the facts concerning the duty. The most important fact is that it is a protective duty; for it is levied at a rate of 4 annas per pound on all imported teas of whatever origin. The consumption of tea in Ceylon is said to be, comparatively speaking, insignificant. It is unlikely therefore that the duty was imposed for the purpose of conserving the local market for the Ceylon planter. But in Colombo the blending of teas for exportation forms a considerable trade; and it was no doubt with the view of preventing the admixture of low grade China growths with the produce of the island that prohibitive taxation was determined upon.

It is, the General Committee think, only natural and right that Ceylon should have taken stringent measures in order to preserve the good reputation of its teas. But the duty has also the effect of practically excluding from the Colombo market all Indian teas which might otherwise be sold at the public auctions there. This exclusion does not closely concern the industry in Northern India; but it is of very great consequence to those gardens which are situated in the Madras Presidency. The cultivation and manufacture of tea in Travancore and the neighbouring districts are assuming large proportions. The extensions of the planted area during recent years have been considerable; and the annual production now amounts to about five-and-a-half, or six millions of pounds. But the planters labour under one great disadvantage: they are at present without an accessible market for their teas. Calcutta is too remote, and neither Bombay nor Madras, nor any of the smaller ports on the south coast are, or are likely to become, centres of the tea trade. The only market within easy reach of the grower in Southern India is Colombo; and that market he is practically debarred from using by reason of the protective duty.

The hardships which this barrier entails have been forcibly represented to the General Committee by the United Planters' Association and the other kindred Associations of Southern India. It has been pointed out in these representations that under existing conditions Indian teas cannot be sold in Colombo on an equality with Ceylon teas. The reason for this is that, being dutiable, they are stored in the Bonded

Warehouse, from which they cannot be removed, except on payment of the duty (which is equal to about 70 per cent. of their average value) or on their being shipped. This precludes their being used by dealers for blending purposes, and consequently has a distinctly adverse influence upon prices. The Ceylon planters are—as has been already conceded—doubtless right in taxing foreign teas, because they object to their own being mixed with inferior growths. But this objection does not apply to teas produced in Southern India, because these are equal in quality to ordinary Ceylon teas. For the protection of the latter, therefore, it is not nearly necessary to tax the former; and the Southern Indian Associations are very strongly of opinion that their produce should be admitted free into Ceylon.

As has been already stated, the duty does not to the same extent affect the Northern Indian industry, which this Association more especially represents. But in one respect it indirectly exercises a prejudicial influence upon the distribution of teas produced in the northern districts. This is particularly so in the case of teas destined for the Black Sea ports, where a great prospective market is believed to exist. There is no direct steamer service between Calcutta and Russian ports, and consequently transhipment at Colombo or elsewhere is unavoidable. Moreover, the Russian Government gives certain advantages in inland transit to goods landed from the steamers of Russian Volunteer Fleet trading between China and the Black Sea. And in order to put Indian tea on equal terms with that from China and Ceylon, it is therefore necessary that these steamers should be the carriers. It is almost needless to say that Colombo in view of its geographical position in relation to Calcutta is the natural point for transhipment. But the charges which are levied there are so heavy—because the tea has either to be stored in the Bonded Warehouse or to be cleared by payment of the duty—that it is less expensive to tranship at Singapore, notwithstanding the greater distance. If Colombo were a free port such a detour would be unnecessary, and much valuable time would be saved. In this respect therefore the existence of the duty is a distinct disadvantage to teas shipped from Calcutta.

It is the opinion of the General Committee—after having given the whole question their most attentive consideration—that the facts disclosed in the preceding paragraphs justify an application being made to Ceylon for the abolition of the duty, so far as Indian teas are concerned. They have consequently instructed me to enquire if the Government of India would be disposed to assist the Indian industry by preferring such a request to the Ceylon Government, or, if need be, to the Secretary of State for the Colonies. In making this enquiry the Committee have not omitted to take into account the possibility that the Colonial authorities, if they consent to admit Indian teas free, may be willing to do so only on the condition that the 5 per cent. duty now levied in India is likewise remitted in the case of Ceylon teas. So far as Indian growers are concerned the Committee are unacquainted with any reason why such a demand, if made, should not be complied with. And seeing that the revenue derived from this source cannot be large, they presume that the Government of India would raise no serious objection; for any readjustment of taxation which might be required would apparently be trifling and easily arranged.

The proposal which the Committee venture to advance is, therefore, of a two-fold nature. First, that an attempt should be made to induce the Ceylon Government to exempt Indian tea from the payment of duty; and secondly, that, if necessary Ceylon tea should be likewise exempt from the payment o duty in India. In the case of non-British teas the Committe consider that the existing duties should be maintained. I has been suggested that if the Ceylon Government definitel decline to make the concession asked for, the Governmen of India should seriously consider the advisability o enhancing the Indian duty to a protective rate. That th present position as between India and Ceylon is unfair to th former is evident. For while Indian tea—as has been show —is practically excluded from Colombo, Ceylon tea is bein sent to India in increasing quantities. The rate of duty i so low as to present no real obstacle to its importatio either for consumption in India or for re-exportation to Centra Asia.

The Indian tea industry have determined, as you ar doubtless aware, to make a strong effort to extend the con sumption of Indian tea in both the markets indicated especially that of India itself. And it does not seem fai that Ceylon should enjoy the benefit of developments effec ed at the cost of India, while itself retaining a practica embargo on Indian tea. Statements have also been made t the effect that the quality of a large portion of the tea no being imported from Ceylon is so inferior as to necessitate protective rate of duty. Upon this point the Committee ar at present unable to express an opinion, but they are distinctl opposed to the continuance of the inequality as betwee the two tariffs. The removal of this inequality would, the think, be best effected by abolishing both the duties i question. But if the Ceylon Government are not agreeabl to this being done, then the enhancement of the Indian ta would appear to be the only alternative.

NOTES.

The Ceylon Tea Duty. The General Committee has ap proved a draft of a letter to th Government of India regarding the import duty on tea i Ceylon, but the letter has not yet been published.

Amsterdam Cinchona-auctions. The ten cinchona-bark auctions t be held at Amsterdam in 1902 wi take place on the following dates:— January 23, February 27, April 3, May 15, June 19, Jul 27, August 28, October 2, November 6, December 11.

Java Cinchona. The island of Java, according t recently-published statistics, has no 25,000 acres devoted to the cultivation of cinchona, fro which quinine is made. The world's supply of this particula drug is almost entirely dependent upon the Java crop.

Indian Tea Cess. An Imperial Indian Tea Cess i imperative—of this there is no ques tion. We must have it. A memorial drawn up in Londo by the Indian Tea Association has been received in Calcutt for signature, and will doubtless gain the support of all con nected with tea out here.

A Green Tea Factory at Colombo. Messrs. Finlay, Muir & Co. ar constructing a Green Tea Factory a Colombo, adjoining the Stores, whic is now rapidly approaching completion. The size is 200 fe

by 40. The leaf has been partially treated up-country, and will be finished off at Colombo.

Regulation of Tea Supplies.

The *Investors' Review* of November 9th has the following regarding tea :—The arrangements for controlling the supplies coming into the market have, after all, broken down, as sellers have apparently not recognised that it would be to their own interest to support the Tea Association in its efforts to ensure more regularity.

Calcutta Tea Sales.

The tea sales on 29th ultimo totalled about 16,000 packages. The quality generally was poor and inferior tea was shown from all districts. There was a fair demand throughout the sale, but an easier tendency was noticeable, and the falling off in quality was plainly reflected in prices. The market may be quoted steady on all but medium whole leaf grades, which were lower, and firm for common tea.

India's Re-exports of Foreign Tea.

The following figures compare India's re-exports of imported teas during the first seven months of the official years referred to :—

	1899 00.	1900-01.	1901 02.
To Russia	3,769	19,652	40
,, Persia	3,89,530	6,82,001	4,33 693
,, Other Countries ...	62,032	1,16,768	1,00,928
	4,55,151	8,18,421	5,34,661

Green and Black Tea in the States.

A Mr. Fels, the representative of a large American tea firm, visited London during the last week in October and made enquiries about Ceylon teas. Unlike Mr. Larkin, Mr. Fels does not think at all highly of the prospects of green tea in the United States, and thinks that Ceylon planters should stick to black tea, the consumption of which he holds will increase considerably when the duty is reduced, which he anticipates will happen shortly.

Tea in New York.

A writer in the "Tea and Coffee Journal" of New York, referring to the tea market there, says : "Ceylon and India teas must increase in popularity, so far as black teas are concerned ; and from some experiments made this season in 'Ceylon Greens' it is not unlikely that before many years more they may occupy an important place in our tea distribution, and the jobber and retailer who fosters the trade in both of the tea products from India and Ceylon will not be the loser."

Lighter Load of Cocoa stolen.

Bahia has long had the name of being one of the worst of Brazilian ports for pilfering and robberies from merchandise in lighters awaiting shipment or in course of discharge. A few days ago, says the *Brazilian Review* of October 22, things reached a climax when an entire lighter load of cocoa—500 bags—awaiting shipment per R. M. S. *Thames*, disappeared, and the lighter was discovered scuttled and in a sinking condition. The cocoa belonged to Messrs. Blumler & Pauli, a German firm.

Shade or no Shade.

Thus a correspondent of *Central African Times* on the "no shade" question for coffee :—"I have experimented unostentatiously in every possible way with trees after they have given off their maiden crop ; manured, deep trenched, pruned, irrigated, and shaded, but the result—nothing but leaves. I am now convinced the only way to get regular crops is to open up plantations in sections of from 10 to 20 acres per annum ; run trees with all the blossom they can carry to maiden crop, take it off, and destroy all trees and plant up anew, keeping one section bearing each year. No shading ; no pruning."

Indian Tea Prospects.

The following telegram with reference to the tea crop in the various districts has been despatched by the General Committee of the Indian Tea Association here to the Committee of the Association in London, *viz.* :—Assam—Outturn last month about normal ; the season is practically closed. Cachar—Outturn last month good. Owing to late rain the season may be slightly prolonged. Deficiency slightly reduced. Sylhet—Outturn last month good. Owing to late rain the season may be slightly prolonged. Deficiency slightly reduced. Dooars and Terai—Outturn last month about normal. The season is practically closed.

Coffee in Singapore.

The following reaches us from Singapore :—Coffee is now on the up-grade and planters feel that the tide has now indeed turned. Six years ago Liberian coffee stood at $44·50, and prospects looked so brilliant that coffee planting seemed to be more profitable than gold mining. A rush for coffee land followed in the F. M. S. Prices began to fall in 1896 and receded to $40·50 in March, and to $32·50 at the end of that year. In December 1897, the quotation stood at $19·50. The price remained depressed with fluctuations. It touched $19 on the 5th January last and dropped to $16·25 early last month. Then it crept up to $20 this month. Further improvement is imminent.

Indian Tea Exports.

The following figures of tea exports taken from the Calcutta Customs daily entries and received periodically from Chittagong are issued by the Indian Tea Association :—Quantity of tea entered for export to the United Kingdom for the second half of November, 1901 :—Calcutta, 10,337,055 lbs. ; for the second half of November, 1901, Chittagong, 1,376,000 lbs. ; quantity entered during the corresponding period last year, 10,121,840 lbs. ; total from the 1st April, 1901, to the 30th November, 1901, Calcutta, 108,683,473 lbs. ; total from the 1st April, 1901, to the 30th November, 1901, Chittagong, 9,987,030 lbs. ; total 118,670,503 lbs. ; total from the 1st April, 1900, to the 30th November, 1900, 125,409,933 lbs.

Brazilian Crop Prospects.

As regards the current opinions on the coming crop, it appears, says the *Brazilian Review* of 22nd October, that they must be taken *cum grano salis*. News received from a very good source informs that undoubtedly many districts in the State of São Paulo will be affected by the prolonged dearth, but that in compensation the crops in the States of Rio, Minas, and Espirito Santo are promising splendid results, and that the decrease in São Paulo will perhaps be partly made up by the increase in the other coffee producing districts. Anyhow, in our contemporary's informant's opinion, if there is going to be any decrease, it will be nowhere near that generally talked of.

India's Tea Exports.

The following are the official returns of Exports of Indian tea during the first seven months of each of the three official years, 1899-00, 1900-01, and 1901-02 :

	1899. lbs.	1900. lbs.	1901. lbs.
To United Kingdom ...	97,021,830	100,675,693	94,347,718
,, Russia	284,577	484,255	784,662
,, Canada	883,539	1,159,005	466,330
,, United States... ...	1,860,916	1,066,678	278,981
,, China	658,194	511,223	709,731
,, Persia	1,354,876	761,746	1,528,672
,, Turkey in Asia ...	1,432,291	1,911,292	1,774,208
,, Australia	5,452,808	7,028,453	5,330,322
,, Other Countries ...	1,202,328	1,525,197	1,119,611
Total ...	110,148,359	115,123,542	106,340,235

Green Tea Bulking at Calcutta.

Indian Gardening and Planting understands from the I. T. A. Committee minutes that there is on the *tapis* a project for establishing a sort of central Hong in Calcutta for equalising, sorting, and bulking green teas from various sources and placing them on the American market on the Chinese and Japanese system. It would be of great advantage to establish such a central factory in Calcutta, where half cured teas could be worked up into finished homogeneous breaks. The teas in bulk here, says our contemporary, could, in the final stages, be turned out far better under the eye of a practised expert for whom we would not have far to seek, and the result would be more satisfactory than that produced by many different planters making small breaks in the districts.

London Tea Market.

Special telegram dated 28th ultimo from Messrs. Gow, Wilson & Stanton to the Colombo papers reports that the competition for Ceylon tea is general and well distributed, while the market for medium liquoring Pekoes and Broken Pekoes, as well as that for Common Pekoes and Broken Pekoes, is steady. The price of fair liquoring Ceylon Pekoe Souchong is 6d (same as last week), and the average price of Ceylon tea sold on garden account this week was 7¾d (⅛d up). The average of the corresponding week last year was 7½d. Reuter reports that common qualities of Ceylon tea are firm and others quiet. Fair Pekoe Souchongs are quoted at 6d (a ¼d up) and the average for the week is 7⅞d (also ¼d up). 17,000 packages of Ceylon tea were offered for sale and 15,000 were disposed of ; while of the 49,000 packages of Indian tea offered, only 41,000 found purchasers, at an average of 7⅝d per lb. (⅛d below last week).

Consumption of Quinine.

Messrs. C., M. & C. Woodhouse remark as follows :—" We have already called attention to the fact that the consumption of quinine has recently shown a marked increase in many countries. During the past month there has been a strong demand for quinine from consumers, and after the London public sales of bark on October 22nd, the German manufacturers raised their quotations ½d per oz. (to 1s 2½d) although it was known the November auctions of bark would be larger than usual. The London stocks of quinine were also reduced during October to the extent of 80,000 ozs , and the general tendency of the market was upwards. The very heavy exports of bark from Java for October have however given, at any rate for a time, an effectual check to the upward movement. At the Dutch sales on 7th instant (the larg ever held), the result was better than might have b expected, but the next day the German manufactur reduced their quotations ½d per oz. to 1s 2d, and following day the American manufacturers lowered th prices 2 cents, or 1d per oz., equivalent to 1s 1½d per So much depends at present on the exports of bark fr Java, that the bi-monthly shipments will be watched possible with greater interest than ever, and it is evident t the Java planters have the future of the market in th hands. The latest quotations for quinine in the Lond market are : spot and December 12¾d, March 1s 1⅛d per o

GENERAL ARTICLES.

CEYLON AND INDIAN GREEN TEAS IN CANAD

The business that is being done in Canada just now in Indi and Ceylon green teas is not satisfactory. The package tea-hou are steadily taking them, but very few transactions are report on wholesale account. There is an inquiry for them from t wholesale houses, and some samples are being shown, but the 'di culty is in regard to price. During the Summer months t quantity of Ceylon green consigned to this market was rath larger than the requirements demanded The result was. as always inevitably is, that sales were made at prices that were ar thing put remunerative. Now, when those in the trade are op to buy, they want to do so at the old figures, which the holde declare they cannot afford to accept. The difference in the views buyers and sellers is from 2 to 3 cents per lb. Judging from t private advices from Colombo, to which we have recently h access, the growers there are anything but satisfied with the pri they have received. One of the largest firms in Colombo writes representative in Toronto that the prices at which he has be selling green teas are lower by ¾ to 1d. than can be got at t auctions in Colombo for black teas from the same gardens. T firm in question declares that unless buyers in Canada increa their limits or the Ceylon Government increases the bonus, whi is 80-100 of 1d. per lb., the growers will have to stop making gre tea. It is no doubt most discouraging to sell tea at a loss : but cannot but think that those engaged in making green teas Ceylon are disposed to evince discouragement rather early in t campaign. The position that black teas of Ceylon and Indi growth occupy in the world to-day was obtained only after t expenditure of much effort, time, and money. It may not requ as much effort, time, and money to introduce and establish up the market the green description as it did the black, simp because India and Ceylon are now well known as tea-produci countries. But the growers and dealers in India and Ceyl cannot expect that they are going to accomplish with green tea a few months what has taken them several years to accomplish regard to black teas.—*Canadian Grocer.*

THE ROMANCE OF PEPPER.

The important part which the gourmet has played in mouldi the history of the world has never been adequately described, b ve can trace clearly his influence in the recorded annals of bla pepper, that commonest yet most delightful of condiments. V make little doubt that many bags of pepper were found in th very great store of spices which the Queen of Sheba brought Solomon, and of which the ancient chronicler wrote with ingenuo regret: "There came no more such abundance of spices as the which the Queen of Sheba gave to King Solomon." We know th a few hundredweights of pepper aided materially in the ransom the Eternal City from the hordes of Goths. Alaric and captains were gourmets who appreciated at its true worth t most finely flavoured of all spices. One of the great inducemer that started Vasco da Gama on that long voyage that ended Calicut in Malabar, was the hope of cheapening the price pepper. And is it not on record that the Dutch having raised t

price of pepper against England from three shillings to eight shillings a pound, the merchants of London held a meeting at Founders' Hall, with the Lord Mayor in the chair, on the 22nd September, 1599, and agreed to found an Association for trading directly with India? Such was the first beginning of the old John Company. But what London citizen of the twentieth century, ever dreams as he shakes the pepper-pot over the matutinal egg that he is handling the motive-power which set a-going the enterprise that at the last won for England her Empire in the Orient.

It was more through good luck than by design that da Gama steered his ships to the very home of the pepper vine. Pepper from time immemorial has been the mainstay of Malabar. For centuries that strip of prosperity, lying between the Western Ghâts and the Indian Ocean enjoyed the monopoly of the world. But as Arabia gave the coffee bush to Southern India, so did Southern India bestow on the sacred isle of Lanka and on the isles that stud the ocean farther east the precious gift of the pepper vine Penang, Java, Sumatra, and Borneo all export the spice. And the coming of the vine gave new wealth to the thrifty tiller of those volcanic soils, and added a new charm to the luxurian landscape. For the pepper vine is a plant of singular grace Its cradle is among the rocks that crouch in the everlasting gloom of Malabar's primeval forests. Is it not fit that this spice which has spurred men on to deeds of splendid daring should have its home in beautiful perilous valleys? For the valleys of Malabar are perilous, not so much because they harbour tiger and leopard and death-dealing snakes, as because malaria ever breathes from them fell miasms. A drink of pellucid water from a rippling mountain stream, and within three days the strongest frame shivers in the grip of ghastly ague. And very beautiful are the valleys clothed in the perennial verdure of the ancient trees. On the hill-tops the sun beats down with untempered fury. Shrill cicadas pierce the ear. Kites keen wearily as they circle beneath the cloudless blue. The red earth gives back the heat of heaven, and adds to it chocking dust. Down the hill strides the tired traveller and enters the forest. Here is shade; here is silence; here is rest. As one passes from a noisy Continental market-place into the quiet of an historic cathedral, so is the contrast between hill and valley in Malabar Creepers bind tree to tree, and over the huge boulders that rise out of the deep black leaf mould, softer than any Turkey carpet, are other creepers of delicate stem and thin leaf, shaped as the ivy. These rock creepers are pepper.

And one will find them growing up the rough bark of the more patriarchal trees. The fruit, before it ripens, resembles, not a little, bunches of unripe white currents, save that each berry is set closer to the parent stem.

The industrious husbandman of Malabar at a very early date discovered the commercial value of this jungle fruit, and he transferred the vine to his orchard, and by cultivation increased its yield and quality of its produce. Malabar is a land of a thousand hills, small hills uprising nearer the coast from alluvial flats cultivated with rice. Round the base of the hills are orchards, each house standing in a separate orchard. Here grow cocoanut palms and areca palms, also the mango, the jâk fruit-tree, and the nux vomica tree. To the three latter the pepper vine is wedded, but best of all it loves the mango tree, covering from stem to topmost bough mighty giants of this species. Happy is the man with such a tree and such a vine beside his palm-thatched cottage, he draws from it an annual income that is accounted wealth in that fortunate land of few wants and simple tastes. As time went on and progressive ideas ensued, the slopes of waste hills were specially devoted to pepper vineyards. First it was needful to find supports for the vine. The Erythrina Indica, or coral tree, so-called from the peculiar pinkness of its blossom, is a rapidly growing tree. In the hot moist climate of this "hilly country" beside the sea (Malabar means nothing more or less than "hilly country") the Erythrina can be readily propagated from live stakes, eight to ten feet in length. These stakes are set in the ground ten feet apart, and in the same year pepper cuttings are planted at their base. Four years later, when the vine begins to bear, the standard will have attained a height of twelve to fifteen feet. The leaves of the Erythrina are of the palest green, contrasting well with the dark verdure of the pepper. A lovely sight is a Malabar vineyard at maturity. The vines, clustering round the trees, form solid columns, three feet or more in diameter, and they appear to support a canopy of emerald silk, flecked by vivid sunlight. In March and April the Erythrina sheds its leaves and wears a coronet of coral flowers. By that time the crop has been picked, and the fierce heat of this Malabar midsummer prunes the vine so effectually that little work is left for the knife of the agriculturist. The crop is picked when the berries are turning from yellow into red. Purple is the sign of dead ripeners, but if allowed to pass into this colour, many drop and are lost while being gathered. A delightfully primitive ladder is used to gather the crop from lofty trees. It is nothing more than a long single bamboo, from which the lateral branches have been lopped some six inches from the stem, thus leaving horizontal pegs at regular intervals on each side. The bamboo is laid against the tree, and up these pegs climbs the pepper-picker with the agility of a sailor in the rigging.

Peter Piper, who is reputed to have picked a peck of pepper, was probably not aware that he bore the classical names of the pepper which he possibly picked. For "piper nigrum" is the correct botanical term for black pepper. Now Peter means rock, and the finest quality of Malabar pepper—that very variety which has gained for Malabar its pre-eminence in the spice markets of the world—is known locally as "kulloo vully," signifying rock vine The reason why it was so called is an open question. Some hold it came from the particular love of this kind of vine for rocks, others that it had reference to the weight and solidity of the fruit. The latter is the more usually accepted derivation. A very favourite form of pickle in Malabar is made from bunches of pepper, picked green, and preserved in vinegar. They possess all the delicate aroma of a peppercorn, but are not so hot that they cannot be enjoyed with comfort by even the most soft-mouthed gourmet. Curried prawns or oysters eaten with pickled pepper is an experience the memory of which does not quickly fade from a fastidious palate. —*The Globe.*

COOLY SANITATION.

Remarks of a Ceylon Planter.

The following paper on the above subject was read by Mr. MacLure at the Maskeliya Planters' Association meeting on Wednesday, 20th November :—

"This is a question the importance of which is not sufficiently realised by a good many people.

We can all remember the terrible death-rate through disease among our troops at one period of the war in South Africa. In response to the popular outcry, a Commission was appointed by Government to inquire into the working of the hospitals at the front. The results of the investigations of the Commission went to show that a large proportion of the deaths must have been due to the neglect of proper sanitary precautions.

A LESSON FROM SOUTH AFRICA.

"I think we might take this lesson home to ourselves. This and last year there has been a great deal of sickness amongst our coolies, and the death-rate has been higher than usual, and we have all been rather alarmed at the prevalence in our midst of enteric fever, and epidemic which, medical men tell us, is directly due to insanitary conditions of some sort. This abnormal sickness is no doubt due in a great measure to the seasons, but perhaps some of it is also due to the neglect of proper sanitary precautions in cooly lines. Anyhow we should see to it that everything is done that can be done to keep lines and surroundings clean, and prevent all sickness that is preventable, for our own sakes as well as the coolies. Having to pass and re-pass dirty lines might very easily affect Superintendents' healths too. There may be contamination in the atmosphere as well as in water or milk.

IS IT A HOPELESS AND THANKLESS TASK?

"It has seemed to me that greater efforts might be made to try and get our coolies to show a little more attention to cleanliness. It is uphill work I know. I don't suppose there is a single planter, who has the welfare of his coolies at heart, who has not, at one period of his career, made an honest effort to induce his coolies to keep their lines and surroundings cleaner, but spasmodic efforts are not enough. We must keep pegging away, and in time you will find coolies begin to appreciate the efforts, and show their appreciation by complaining of dirty neighbours, suggesting that they should be fined. I know a good many men look upon it as a hopeless and thankless task to try and instil any ideas of clean-

liness into the cooly. Let us not forget that it is not so very many years ago since the low classes in our own country were every bit as careless, and sanitary officers found the same indifference and even obstruction. It may be a disagreeable duty, but it is none the less a duty to see that our coolies live decently. The Superintendent who takes some trouble has his reward in better behaved coolies, not to mention the pleasure it must be to him in passing and re-passing his lines to see them swept and garnished. If they are allowed to live like pigs, coolies will behave like pigs. And now if I am not wearying you and you will forgive me for my little lecture, I will try and give you the results of my experience and efforts,—in the hope that they may be some little help to the younger generation of planters amongst us.

HINTS TO THE YOUNGER GENERATION.

"The Superintendent should see to it that there is ample line accommodation for his labour force, crowded lines are a most fruitful source of disease. Better to have too much than too little line room. I am sure proprietors or directors would never be so blind to their own interests as to refuse to sanction necessary expenditure on lines.

We all know what an important thing it is in the busy months to get our coolies to turn out to work, and how the outturn depends on the condition of the coolies as regards health. A room of 10' x 10' or 10' x 12' should be provided for at most every five labourers. Coolies should not be allowed to build in their verandahs, this excludes light and air from the rooms; if there is not sufficient room without the verandahs, then additional accommodation should be built. Nor should they be allowed to erect their garden fences bang up to their lines; there should be a good open space between lines and garden fence. In building a new set of lines the first essential is a

PLENTIFUL SUPPLY OF GOOD WATER.

I have some lines near a good supply of water, and others where the supply is rather scanty. The difference in health is most marked, and yet such is the callousness of the coolies that they prefer the less healthy lines, as they are on flat land, the others on the hillside. If a plentiful supply of good water be not available, I will tell you how a rough and cheap but effective filter may be improvised, a cooly mason could make one in a few days. Build four walls of rough masonry, enclosing a space of 4' x 4' walls, lay 3 ft. high, no mud or mortar should be used, it must be dry masonry, then at the bottom of the enclosure lay down charcoal broken into small pieces, to the depth of about 1 ft., then on the top of the charcoal put say 2 ft. of clean river sand. The water-supply should be conducted in spouting or pipes on to the top of the sand. It will percolate through the sand, then through the charcoal, and find its way through the stone walls into the drain or spouting conveying it to the lines. It should be made as near the lines as possible, and it should not be put in the natural bed of the stream, or floods will carry it away. Care should be taken when applying artificial or other manure, not to put it anywhere near the sources of the water supply. Next in importance to the water-supply are

CLEAN SURROUNDINGS

and with a lot of dirty and indifferent coolies this is hard to get, but not impossible. The cooly is a selfish creature and will do nothing for the general good, so a certain amount of compulsion must be used. Regular line sweepers are, I believe, a mistake. Left to themselves as they are, they do little or nothing, and that little is useless I believe the best system is to make each line occupant responsible for the space immediately in front of his room, and periodically to put on a small gang of coolies to clean up round about, burning all rubbish that will burn, and burying the rest. This is the system in South India where the climate necessitates very strict attention to sanitation. I have walked through some of the villages there, ond I was surprised to find how clean they were. What they can do there we can surely do here. Coolies who do not keep the space in front of their houses clean are fined. I have found a system of rough latrines to work fairly satisfactorily, but they must be made easy of access, and kept clean. It is a common sight to see a woman come out to the door of her room with a chatty full of rice water, and just throw it down right in front of the door. This should not be allowed. A good plan, for those who have a drain and running water round their lines, is to make paved receptacles, says one to every two rooms, into which the dirty water can be thrown. For those lines that have no running water, the same kind of thing can be made, some distance away, and leading into a drain, which should be flushed regularly. In the light of recent discoveries, stagnant water should be allowed near lines, and swampy plac should be well drained.

"We all know what an unsightly, dirty, rotten thing the usu cooly garden fence is. If I had an estate of my own, and if it we paying fairly well, I would go in for galvanized wire netting f

THE FENCING OF COOLY GARDENS.

5 feet netting can be got for about £5 per 100 yards. It wou greatly help towards keeping surroundings clean, and would pr vent gardens continually encroaching on the tea or line compound Another good fence can be made, cheaper but not so permanne by those who have suitable timber available, and that is by sawi good splitting logs into lengths of say 5 feet, and then splitting the logs into sticks, about one-and-half inch thick, in the same w as coolies split firewood; these sticks, which should be all the o length, can be nailed on to horizontals, fixed on to uprights in t usual way. Two good coolies I found could split about 30 of the sticks in a day. I do not believe in restricting coolies in garde It is a good sign to see them busy in their gardens, it means th have settled down; but they should not be allowed to make the gardens just where they please. To those who are convinced of t necessity for greater attention to sanitation in cooly lines, and wi to put their convictions into practice, I would say, tackle one s at a time, do it thoroughly, and when it is done, keep it right, a get your Kangany to help you. The coolies in the other sets w soon ask you do the same to theirs, and perhaps help you in yo endeavours."

A hearty vote of thanks was proposed by Mr. G. C. Alston, a seconded by Mr. G. Greig, to Mr. MacLure for his most interesti paper. This was carried with acclamation. The meeting clos with the usual vote of thanks to the chair

A CANADIAN ON THE TEA TRADE EXPANSIO

Mr. P. C. Larkin, of the Salada Tea Company, and Mrs. Lark have returned to Toronto after three months' absence in Gre Britain. The journey to Great Britain was taken with the spec object of seeking renewed health for Mrs. Larkin, and which w successful. Although the visit was chiefly for the object state Mr. Larkin spent some time in the tea circles in London, Englar When I saw Mr. Larkin in his office on Wednesday, he was as de as ever in the affairs of his own business, but found time to gi me a few minutes' talk. "I understand, Mr. Larkin, that y were present at a meeting of the Indian Tea Planters' Associatio where some discussion took place in regard to ways and means promoting the tea industry."

"Yes," said Mr. Larkin, "I was. On my arrival in Londor was requested to meet the Indian Tea Planters' Association, a give them some idea from my point view of the tea situation the United States and Canada. They were particularly interest in the prospective development of the green tea trade, and we had handled Ceylon greens for the last three years, since th were first produced, I was in a position to convey to them an id as to how they had been received by the public, not only in Canad but in the States of New York, Michigan, Pennsylvania, and t New England States. I showed them how sales of Salada gre Ceylon had gone on increasing, from week to week, through at lea two years, and that the sales were much larger now than they h been at any previous time. I also told them that we were maki much more rapid progress with Ceylon greens than we did wi Ceylon blacks, seven or eight years ago. And everybody kno that there are now practically no China Congous sold in Canada.

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, oth have no effect, and none do good. Sugar and water, or a little glycerine, gi relief when the throat is inclined to be dry; this applies to persons whose thro are affected by the weather. About a third of a teaspoonful of Condy's Fluid a tumbler of water, if used as a gargle every morning, will clear the throat brace up the uvula, which, in some singers, is so long that it interrupts the p emission of the voice, and introduces a grating undertone, while it also tends make a tremolo on the upper notes."—*The Idler*, February, 1900.

"The meeting resolved itself into a discussion of how best to quickly displace Japan teas on the Canadian and United States markets. Of course my advice to them was on the lines that the 'Salada' tea business has been carried on. I told them we had a fine article to offer the public, and we told the public about it. I explained that the only way in which you can reach the large mass of the people was by advertising sampling, etc. I furthermore told them that if they could see their way to expending such a sum as ½d. per lb. on all the Indian tea produced, which would mean an expenditure of $400,000 or $500,000, it would be sufficient for advertising purposes and would create a very quick revolution, particularly in the green tea trade. The expenditure of such a sum in sampling and advertising would, I felt, positively increase the consumption in America of Indian and Ceylon tea by fully 10,000,000 lbs. per annum during the next four are five years. This, from the planters' point of view, would be a most excellent thing. It would relieve the London market of such a quantity of tea annually that the price for blacks would be increased fully ld. per lb., and that this expenditure need not be continued for more than four or five years. The increased consumption thereby brought about would be permanent."

"How were your suggestions received?"

"I might say that a number of persons in London interested in the tea trade, whom I met, agreed that my suggestions were excellent from a business point of view, and that if they could be carried out would put all the gardens on velvet; but they stated that the difficulty lies with people who feel that, as they are not making money now, they cannot entertain the idea of increasing their expenses one iota. However," continued Mr. Larkin, "I understand that something is to be immediately done in an effort to capture the American market, which means the capturing of 100,000,000 lbs. of tea per annum. The great difficulty heretofore has been the fact that most of the planters have a very faint idea of the amount that would be sufficient to attack the attention of the whole tea-drinking community to the article which they have for sale. No matter how good that article may be, unless this is done, dozens of years must pass before the whole trade is secured."

"What about the package tea trade in England?"

"The package tea trade is making wonderful progress in England. One of the largest concerns there have a most magnificent establishment covering acre upon acre of ground"

Mr. Larkin, before concluding the interview, stated that one of the things that struck him forciby while in England was the sympathy exhibited by the people there with the United States over the assassination of President McKinley. He said that in London there was a large profusion of flags, and that it appeared to him that out of every three flags displayed, one was the Stars and Stripes. The day that Mr. McKinley was buried, Mr. Larkin was in Oxford, and he noticed the same display of United States' flags there.—*Canadian Grocer.*

THE NEW PROCESS FOR FERMENTING TEA.

FURTHER INFORMATION ON THE ISOLATED ENZYME.

SIR,—It was with great pleasure that I read Mr. Bamber's criticism on my proposed new process of fermenting tea, in the *Ceylon Observer* of the 13th November. I have always looked up to him as the greatest authority on the chemistry of tea manufacture, and his difficulty in finding and isolating the tea enzyme in Ceylon goes far to corroborate my contention, that the better the quality of the tea the more enzyme it contains, as in the best class Darjeeling teas it is easily demonstrable and there is no difficulty about isolating it.

Mr Bamber has evidently had very little experience with plant enzymes or he would not say they increase in quantity after plucking, it being one of their peculiarities that they neither increase nor diminish in quantity, when separated from their original source, although they have the power of oxidising quantities of the product to which they are adapted.

In the Chemistry and Agriculture of tea by Mr. Bamber. he says that the essential oil is considerably increased in quantity during the process of manufacture. This hardly agrees with his present statement, but this is immaterial, my contention being that during the process of oxidation certain ethereal flavouring substances are formed which give flavour and aroma to the tea, and that by the addition of a proper enzyme more of the cell contents are rendered soluble, thereby increasing flavour and strength. Undoubtedly if a large excess of enzyme is added, or it is allowed to act for too long a time, there will be a loss of delicate flavour through the over-oxidation and rendering insoluble these delicate flavouring materials, the same as there would be by over-fermentation, but the one can be guarded against as easily as the other.

By the addition of the enzyme to most teas, the infusion is considerably improved in body and colour, by the larger quantity of the cell contents rendered soluble, and it remains to be seen whether with all teas an improvement in the flavour takes place, I sincerely hope that for the sake of the tea industry it does not, as that would mean a levelling-up of all qualities.

I have known of the oxidising enzyme in the tea for a considerable time, but have always hitherto thought it inadvisable to try to introduce chemistry into tea manufacture, in case we might reduce the industry to a level with that of Indigo. But now that the Japanese and the Ceylon and Indian Tea Planters' Associations have taken the matter up, it behoves all of us to do our best.

Unfortunately our tea season up here is over for this year, so I am precluded from continuing my experiments in manufacture and am reduced to those of the laboratory.

The enzyme can be demonstrated in the tea leaf by crushing a leaf, and then adding a few drops of tincture Guiac, when a blue colour will appear It may be necessary in some cases to add a few drops of Peroxide of Hydrogen, to intensify the re-action or, in extreme cases, when there is deficiency of enzyme and an excess of tanning, to disolve out some of the latter first with alcohol. If the chemically pure article is required it can be dissolved out of the tea with water, the tannin absorbed with gelatin, and the enzyme precipitated by adding five volumes of alcohol.

Yours faithfully,

KURSEONG, *November* 22. C. R. NEWTON.

TEA FERMENTATION OR OXIDATION.

In a paper on fermentation read by Mr. H. Sanderson before the Luskerpore Valley Society of Planters, many excellent hints to tea-makers are given which should prove of incalculable benefit in the manufacture of a more evenly coloured and flavoured tea. Mr. Sanderson considers fermentation, or oxidation, the most important process in tea-making, therefore special attention must be paid to the leaf in this stage, to secure the best results. "Bamber," he says, maintains that oxidation more correctly describes the changes in the leaf in the comparatively short time allowed. If, however, the leaf was allowed to lie in heaps for many hours, the temperature would rapidly rise to between 90°-100° and a *kind of fermentation* would set in, accompanied by decomposition, and in that view of the matter he is quite prepared to agree.

The following are a few of Mr. Sanderson's hints taken from the paper in question :—

As good colours are dependent on the leaf plucked, withering and rolling, it will be necessary to mention these briefly. From young and fine leaf it is easier to obtain good colour than from older and coarser leaves, and hard and sapless leaves are extremely difficult to colour.

Lightly withered leaf, after rolling, takes less time in assuming a good colour than highly withered leaf. With quick fermentation pungent liquors are obtained; with long fermentation, thick but dull liquors are the result. The happy medium, if it could be obtained, is what all tea-makers should strive for.

One of the most important points in rolling is that the tables should be situated in the coolest part of the tea house, free from the hot and oil-laden air of the engine house and of the exhausted and heated air of the firing machinery. The rolling table should not be filled to bursting point, nor should pressure, if required, be so prolonged as to cause heating of the "mahl."

On the discharge of the table, the rolled "mahl" should be broken up at once and aërated, and carried away to the fermenting house as soon as possible.

The fermenting house should be a *pucca* building with thick walls, and every means should be taken to keep it as cool as possible. A free circulation of air without strong draughts is most requisite, and it is generally accepted that strong light should be avoided. A *pucca* floor sloped so as to facilitate washing and

draining is, I consider, the best and cleanest mode of fermenting. The "mahl" should be spread in layers from 1½ to 4 and 5 inches, according to the state of the atmosphere, and then covered with wet cloths to prevent too rapid evaporation

A certain amount of heat is generated during the process, and it is generally considered advisable to reduce the temperature of the "mahl" by not allowing the beds to exceed 85°F. The period of time required to obtain the requisite colour varies much according to the heat of the atmosphere, the amount of moisture in the air, the quality of the leaf, the nature of the wither and time of the year, and no rule can be laid down as a guide to the length of time required. I have found that the best colours are always obtained in July and August.

The colour most desired in the final tea on infusion is one resembling that of a new penny. To obtain this, it is necessary that the "mahl," on leaving the table after the first roll, should be of a bright green colour, which can only be obtained with a perfect wither, a cool roll, and a moist atmosphere The fermented "mahl" should be removed to the second roll by the time that the small leaves have become tinted; to wait until the whole mass assumes a correct hue will discolour the finer portions of leaf. To a great extent this can be obviated by sifting the *kutcha* "mahl" after the first roll, an operation which also helps to break up and aërate the roll, and I would advise a second sifting before the second roll, if time and space permit.

When the second roll is completed, the sooner the "mahl" is placed on the firing machines the better chance there is of retaining the colour obtained. Colour, and I have no doubt liquor, are often spoilt by the "mahl" being allowed to lie in a big heap whilst waiting for the firing machines. Much better keep it longer in the rolling table or on the floor of the fermenting house.

With the limited amount of rolling tables and firing machinery usually at our disposal, it is a matter of great difficulty to obtain uniform colour throughout a day's manufacture, but much can be done to maintain uniformity by a system of allowing longer intervals between the gunnies early in the morning, decreasing the interval as the temperature rises, and, if necessary, decreasing the time of rolling and making up for the shorter roll by heavier pressure in the table; and as the temperature falls towards evening so can the intervals be prolonged by longer rolls. But this can only be done by constant supervision by a European, though in some cases I have known native tea-makers capable of using the requisite discretion and judiciousness in working, other than by the rule of thumb so prevalent in most tea houses.

In conclusion, I should advise every tea house man to keep a record of each day's rolling, gunny by gunny, noting the state of weather and temperature during the day, the style of wither, time of fermenting and the colour of the fermented "mahl" before firing. A sample of each gunny should be carefully taken and the following morning a selected batch of samples, representing teas made in the morning and midday and evening should be infused. By comparing these and noting any differences in colour of infusion, depth of colour in cup, and with the aid of notes made in the rolling book at time of manufacture, the careful tea-maker can learn much to avoid and plenty to follow. I take this opportunity of impressing on you the importance of tasting teas early in the morning, with a clean palate, if you wish to detect slight differences in the liquors.

THE STUDY OF ENZYMES.

Indian Gardening and Planting publishes a well written article treating on the subject of Oxidising Enzymes, by G. K Newton, F.R.M.S. The original discovery of the oxidising plant enzymes, says the writer, is principally centered round the investigations of G. Bertrand, who investigated the peculiar properties of Japanese lacquers, and proved that their hardening property was caused by the action of an oxydase which he named laccase, acting on a peculiar constituent of the juice of the plant *Rus vernicifera*. This juice, which is of the consistency of thick pale cream, remains unchanged when stored in well stoppered bottles, but almost immediately commences to turn brown and thicken when exposed to the air Here was a clear case of oxidisation, and it was proved that the juice had not the power of hardening in the absence of its enzyme, only a resinous soluble grease being obtained under such circumstances.

The above discovery gave an impetus to the enquiry into m domestic problems, amongst others into an enquiry as to wh apple turns brown when the rind is broken or taken off and exposed to the air. L. Landos in 1893 explained this discolours as resulting from an enzyme to which the name of *malase* subsequently given; the rapid discolouration of the cut slice beet in the sugar works even in the absence of all contact with or steel was also traced to an enzyme which was named *tyrosin*

C. Lowe in America, who investigated the cause of the flavou of tobacco for the U. S. Government, after deciding that it was caused by bacteria, describes first an enzyme, then a per-enz and, lastly, a *catalase*, all of which had the power of oxidising s of the constituents of the tobacco plant, and it was entirely to t action during fermentation that he attributed the different flav of the tobacco. One named *olease* is also present in the olive, w is the principal agent in its decomposition before being put in press; it also passes into the oil expressed at a temperature b 70°C. and continues to convey oxygen thereto, forming oleic acetic acid, sabacic acid, etc. Mustard oil as such does not in the seed, but is the product of an enzyme myrosin acting glucoside sinigrin or potassium myronate, which is also prese the seed In the presence of water the myrosin becomes dec posed, the potassium myrosin splitting into potassium hydr sulphate, sugar, and allyltheocarbimid (mustard oil). Flax, cas oil and many other plants contain in the seed an enzyme ca *lipose*. Care must be taken when experimenting with these enzy as they are not all harmless compounds. In the Rosaceae is fo an enzyme emulsion, often associated with a glucoside amyg which it decomposes into benzaldehyde (oil of bitter almo sugar, and the very poisonous prussic acid.

The above are a few of the well-known enzymes from the ac of which by analogy we can, to some extent, trace that of the found in tea.

A number of people have discovered enzymes and have assig to them different names and functions, but the broad fact rem that the majority of them have the power of oxidising in presence of air—lacoll, other palyotomic phenols, pyrogalic, hy quinone, etc , as well as their acid derivates, gallic acid, and tan as also the polyphenols contained in the last two groups of O NH_2 either in the ortho or in the pari position.

The known enzymes all appear to belong to the proteid clas organic compounds, and a small quantity of each is enable transform a large bulk of the object on which it acts without inc ing, or suffering much diminution in quantity; they are gene destroyed at a temperature of about 70°C., are very much r active in the dark, and are gradually destroyed on exposur bright light.

Now to turn more directly to tea, an enzyme is present in the also a per-enzyme, and a catalase, the former of which we may inaptly name as *thease*. This enzyme when isolated has most, i all the above chemical reactions, besides probably a few m which up to the present time I have not fully investigated function in the living plant is probably in conjunction with s plant acid to act on the tannins, which in this case are glucos converting them into aldehydes and phenols, which are absorb the nutriment of the plant. Isolated it converts tannic acid glucose, and during the fermentation of the tea leaf it is principal factor, as when extracted the leaf fails to colour; quantity present also seems to vary with the quality of the lea

This enzyme is probably in the sap of the tea plant and no the cells in contact with the tannin; as, if small pieces of leaf young stems be soaked for some days in an alcoholic soluti acetate of copper, then thin micrometer sections cut from t after some of the copper has been precipitated in the cell by tannin and then treated for one or two seconds with a very v solution of acetate of iron in water. the sections if then put u the microscope will show that almost every cell contains tannin now some Tinc, Guiac, and H_2O_2 be gently run in under the c

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Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant appointment of "Purveyors to Her Majesty The Queen and Em of India" from the year 1837 until the time of her death, have had the honour of being appointed by Royal Warrant "Purveyo The King."

glass the outside cells first turn a brilliant blue, and small globules also occur in the other parts of the leaf, leading to the fibro-vascular bundles. The latter part of this experiment is a very delicate one, and the investigator must expect many failures, the whole section generally turning an intense blue all over, obscuring everything. If now we take sections of the root of the tea plant we shall find that we have the enzyme in much larger quantities than in the young shoots, and this is the first time it has been noted in this part of the plant. It is also present in the seed, and seems to exert an oxidising influence on the tea oil when expressed cold, as under certain conditions I have observed a decided aroma, but up to the present I have not found time to investigate it.

That this oxidising enzyme is of great value in the manufacture of tea. Mr. Newton illustrates by pointing out, that as in some teas where the enzyme was deficient in quantity, and the oxidising effect not properly secured, the use of extracted enzyme produced a considerable improvement in the quality immediately. The subject, as he remarks, is indeed a vast one; and will, if successful, revolutionise for the better a great part of our tea manufactories.

COFFEE IN LONDON.

No fresh news as to the coming crop was received until Thursday, says the *Produce Markets' Review* of November 9, 1901, when it was stated that Messrs. Johnston & Co. had cabled that prospects were very unfavourable both in Rio and Santos, and estimating the next crop at 7,000,000 bags. If such is true, there is at least some justification for the recent advance, though we still think, taking other facts into consideration, that the rise has been too sudden and too great. It is the speculative element and not the regular trade that has rushed prices up, and it has yet to be seen whether they can carry the enormous weight of coffee which the present record crop is daily adding to the stocks. During October the visible supply of the world increased no less than 60,530 tons, and this, in the face of the heaviest deliveries ever known in both Europe and the United States, namely, 108,385 tons. It is hardly to be expected that the trade will want to continue to buy at this rate, and if not, a further large addition to the stocks must be looked for during the next two months. Moreover, there is still the possibility of a second flowering in Santos, which would alter entirely the estimates of the crop. As we have repeatedly stated it is never safe to rely on estimates given before January, and even then, judging from the experience of recent years, they often vary a million bags or more from the out-turn. In actual coffee very little has been done, the fog stopping all the auctions until yesterday.

INDIAN TEA IN LONDON.

The market has been less active, says the *Produce Markets' Review* of 9th uitimo, and a considerable quantity of the larger supply was withdrawn from the public sales, as the prevailing fog made it difficult to value the teas. Prices for the common grades are easier, more tea being obtainable at 5½d and under. With a continuance of lower values the demand will probably materially increase, as several of the larger buyers of these decriptions hold only moderate stocks. The medium and finer qualities have shared in the decline, which will probably prove but temporary under more favourable conditions for dealing with the teas. It will be noticed by the figures below that the stock is about 8,000,000 lbs. larger than last year, which is mainly accounted for by the quicker transit, several of the districts being able to forward their teas two or three weeks earlier than in former seasons. The quantity imported from the 1st July to October 31st amounts to 64,846,000 lbs. as compared with 62,178,000 lbs. in 1900, while the imports for the same period of all growths reach 109,812,000 lbs. against 116,113,000 lbs., the deficiency being principally attributable to Ceylon tea. The returns for the past month and for October last year were: imports, 24,515,000 lbs. against 19,450,000 lbs.; deliveries, 13,864,000 lbs. and 11,593,000 lbs. respectively, while the stock shows an excess of 7,820,000 lbs. Of the 55,379 packages catalogued for auction, the heavy proportion of 21,300 was withdrawn; the bidding generally was inactive, and prices were in favour of buyers.

PACKET TEA.

The following remarks about packet tea and the Merchandise Marks Act appear in the annual report of Mr. George F. Allwood, inspector of weights aad measures to the Wolverhampton Corporation: "Local conditions have operated this year to necessitate the institution of legal proceedings in regard to packages of tea sold and exposed for sale, upon which the weight was marked. A common custom now in vogue is for large firms of tea-dealers to import consignments of tea in bulk, and cause it to be wrapped in packages of various weights from 1 oz to 1 lb. These packages are then despatched for sale by the numerous small shopkeepers, who retail as received. Several quantities of these weight-marked packages have, from time to time, been tested in the shops, and the results go to show in some instances a large proportion of the packets were deficient in net weight. It is considered desirable, wherever blame appears attachable, to proceed against the wholesale dealer. Great difficulties, however, are found to operate against this being done with the prospect of a successful termination. Under this Act, if a defendant can prove to the satisfaction of the Court that he has taken reasonable precautions to ensure full weight, he is exonerated from liability. The two cases dismissed were in this manner adjudicated upon, although the retail shopkeeper was shown to be in possession for sale (in one case) of no fewer than thirty-four packets short weight, out of a total of forty-two tested. The cases against the shopkeepers were then withdrawn, although it is only a fair requirement that these traders should take the precaution of ascertaining how far such weight-marked packages are safe for sale before offering them to the public. How important a matter the subject dealt with in the above paragraph is will be fully realised when I mention it was stated in evidence that one of the firms concerned disposed of no less than 20,000 marked packets per week—and this by no means a leading firm in the tea trade!"

THE TEA TRADE.

NEGROES TAKING TO TEA.

"The increased consumption of tea is one of the interesting phases of modern commercial life in the South," said a drummer for a New Orleans house to a New Orleans *Times-Democrat* reporter, "and you would be surprised at the vast change which has taken place in this respect. The fact is that during the last few years the changes in the tea business have amounted to a revolution. I have just returned from a trip on the road, and I touched some of the more remote places in Texas and Mississippi, and while I have been out before in the same territory, I was surprised at the increased number of tea drinkers.

"Up to a few years ago, in the more remote sections of the country, tea was used almost exclusively in the sick-room. Tea had to be bought in the country from the druggist. The man who dealt in general merchandise rarely thought of selling tea, unless he had a medicine counter in his store. Tea was something finicky, something to be given to the convalescing patient along with crackers, tasteless broth, and things of that sort.

"This is not the case now. Tea is bought in rather large quantities by country merchants, and the country folk use it for other than sick-room purposes. It is extensively used throughout the country.

"There is still more interesting fact in connection with the growth of the tea trade. Negroes are now great tea consumers. You would be surprised at the amount of tea consumed by this element of the population. Using tea is a new thing with the negro element, but since they have got into the tea-drinking habit they have vastly increased the consumption of the product. Yes, they have about quit using sassafras roots for tea-making purposes, and this rather primitive drink is now used for its medicinal properties. It has exchanged places with the other tea.

"There are some reasons for the increased consumption of tea There are, of course, many other special and general causes for the new demand, and altogether the changes form a rather interesting subject, so far as modern commerce is concerned."—*American Grocer.*

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

A Coffee Exchange.—A center, where coffee-brokers and commissarios can meet in order to transact their business and ultimate negotiations is in the course of organisation. It is to be hoped that the steps already taken in this direction will be successful, because such a center has long been badly wanted.

Labour.—According to the *Gazeta de Noticias* there are between 1·500,000 and 1·600,000 Italians in Brazil, half of whom in the State of S. Paulo. Of this number only between 200 and 300, it asserts, have failed to receive the full amount of their wages up to date.

Exchange.—Extremes during the week ending October 18th were 11½d.—11¾d. for 90 d/s Bank paper and 11 17/32d—11 15/16d for private.

The average Bank 90 d/s counter-drawing rate for the week comes out at 11 9/16d., the corresponding sight rate being 11½d. against 11 9/16d. the average sight rate of the *Camara Syndical.*

Coffee.—Entries at Rio and Santos during the week ending October 18th were 35,517 bags smaller than the previous week and 82,229 bags larger than the corresponding week last year.

Aggregate entries for the crop show an increase of 2,285,819 compared with the same period last year.

Embarques were both greater than the previous week and the corresponding week last year, 26,184 and 113,513 bags respectively.

Stocks at Rio and Santos are still increasing being 47,138 bags larger than the week before and 508,545 bags greater than on the corresponding date last year.

Sales were regular being however 43,000 bags smaller than the previous week, but 14,000 bags larger than during the same week last year.

Values of embarques during the week amounted to £698,339 against £726,691 the previous week and £369,998 the corresponding week last year. Aggregate values for the crop to 19th October this year reached £7,976,872 against £7,542,322 to 20th October, 1901.

Meteorological.—The report of the *Boletim da Agricultura* of the State of S. Paulo for the month of August states that at S. Paulo "the average of temperature for the month was 15°7 against 15°4 the previous month. The maximum temperature reached was 29°4 on the 27th, the record for the respective month being 31°5 in 1897.

The South winds predominated causing abnormal an rainfall which reached 642mm, an increase of 23 % on the normal rate, 523mm, for this month. There were 17 rainy days against the normal rate of 8, and only 7 days fine against the normal 16, 7 stormy against normal 2.

In the interior, on the 4th, a terrible hailstorm passed over Pirajú, causing heavy damages to a large number of buildings. On the same date at night a hailstorm fell on the city of S. Paulo.

On the 6th, a storm, almost a hurricane, fell on the city of Brotas, the wind attaining a velocity of 27 metres for 3 minutes together, and 3mm rain fell.

On the 20th, hail fell at Brumado.

The inspector of the 1st district communicates that rain fell in the Tiété valley and the Paraïyba valley was dry. The flowering there, although premature, promises a fair crop. There is plenty of maize and beans, and rice is being sown.

The rain in the Tiété zone and at the Itapecirica serra stopped the cleanings and clearings, so that in the North there is but little beans and maize, and on the serra there has been no sowing yet.

The inspector of the 2nd district writes that rains have not damaged the crop but have made drying difficult. The trees in general have a poor appearance, the result undoubtedly of the past heavy crops, they are almost leafless and many of the branches are dried up. Even the newer trees do not look well. Were it not for the rain a large number of trees would have perished.

All the trees under 4 years and a few others started flowering between the 3rd and 12th. In some localities, such as Mogy-mirim, Amparo, etc., a very large quantity of hollow beans (*chôcho*) has been found.

The inspector of the 3rd district informs that gathering of the present crop is going on well; in some districts, however, there is lack of hands. He also recommends that the Railways should reduce fares for the transport of labourers during the gathering period, believing that this measure would help planters without loss to the Companies.

He thinks it is a great mistake to believe that this year's crop will be larger than the last, in fact he thinks it is smaller, becau based on data personally obtained last year, the average yield 76 litres of berries was 1 arroba of coffee, whereas this year litres are necessary to obtain the same result. He noted that whe the trees are most laden, the real production is smallest, but compensation the quality is finer. The facts stated are not, ho ever, common to all localities, being less frequent on red ear (*Terra roxa*).

The rain and fog have retarded gathering and drying in the 4 district and planters have had recourse to other means to dry the coffees.

The inspector of the 4th district states that sprouting is ve backward in the North which he attributes to the present hea crop. The new as well as the prepared trees are flowering, mo especially at S. Carlos, Ribeirão Bonito and vicinity, where t future crop is likely not to be much inferior to the present on This flowering is, however, likely to be damaged by the b weather of January and February, as also by the second floweri

The inspector of the 5th district states that disease (*febre ap tosa*) has attacked the cattle and even the deer in that locality, b that mortality therefrom is insignificant. As regards coffee says picking is being continued and the new flowering is develo ing. It is the general belief that the future crop will be small and therefore planters look forward to better prices.

Large Shipments.—Some of the largest shipments of coffee ev made by a single firm from this port, were those lately effected Messrs. Arbuckle Bros: one of 88,000 bags by the *Germanicus* a another of 46,000 bags by the *Mountfields*; both shipments we for New York.

THE TEA SOILS OF ASSAM AND TEA MANURING.

IMPORTANT REPORT BY MR. MANN.

From a report of exceptional interest issued by the Indi Tea Association, written by its Scientific Officer, Mr. Haro H. Mann, B.Sc., we make the following extracts :—

INTRODUCTION.

The successful production of any plant or of any vegetable pr duct is influenced for good or for evil by a number of conditio Soil, climate, "breed" of plant, conditions of culture, prevalence pests and blights, may each play a preponderating rôle in deci ing the possibility or imposibility of profitably growing a plant a given situation. But among these natural conditions there perhaps none (except that of climate—and this is entirely beyo our control)—which take a more fundamental part in determini the character of the cultivated plants in a country or a district tha that of the soil. Its character in England, for instance, determin whether land shall be devoted to wheat or to barley, to turnips to some other root crop, to pasture or to arable culture. In Ind likewise, entirely apart from climatic questions, it determines t paramount suitability of a district for rice, for millet, for cotto for sugar, or for tobacco.

Its influence is not less paramount in the case of tea. In ma parts of the tea districts it might be said that every condition h been favourable except that of soil, but as a result of bad soil co ditions in certain Assam districts garden after garden has pass entirely out of cultivation. It might be thought that the esse tial importance of a suitable soil was too obvious to need th stress should be laid on it, but I have noticed quite a number pieces of tea put out during the past three years in total ign rance of the character of the subsoil—which really proved to very unsuitable,—and also in positions where the tea can nev flourish nor do well. Such incidents seem to indicate that there room for insisting on the soil requirements of the tea bush, a for further investigating those soil conditions which answer t purpose best.

Not that it could be maintained that one class of soil and o alone is satisfactory. Far from it. The tea plant has a marvello faculty of adapting itself to conditions—within certain limit But even in these limits great care has to be taken to adapt t type or jât of plant, and the culture of the crop to the soil cond tions. For instance it would only be to court failure to attem to plant one of the delicate jâts of Upper Assam on a Cachar

Sylhet bheel—or even on the heavier and more difficult soils of some of the lower districts of the Brahmaputra Valley itself. Then again the amount and kind of culture given in the extremely sandy soils of some parts of Jorhat—magnificently suitable as they are for tea—would be totally inadequate if applied to the stiffer soils of Nowgong or even of the Tezpur bank; and would again be far too great under the peculiar root conformation found in tea grown on peat land.

My own investigations into the subject of this report have been conducted during two tours in the Assam Valley, one of which lasted from May 28 to July 3, 1900, and the second from November 3, 1900 to January 19, 1901, the latter being especially devoted to the investigation of the soils. From the end of January to the end of July, 1901 (excluding June when my time was otherwise engaged in Assam), I have been occupied with an attempt to work up some of the large amount of material collected during this tour,—but after all the results here presented only give the more obvious part of an extremely complicated and difficult subject.

DETERIORATION OF OLD TEA.

In a report presented to the Indian Tea Association in July, 1900, after my first preliminary tour in Assam, I made use of the following language:—

"The most striking observation made during my tour, and which was repeated in every district to which I went, was the manifest deterioration of the older parts of the garden, whatever the seed may have been with which they were originally planted. In fact, the question of most immediate importance seems without doubt to be: How can the vitality and yield of the bushes, together with the quality of tea produced, be kept up for a longer period than is at present the case? Whether the cause of this deterioration—which, though only suspected at the time of Dr. Watt's tour in 1895, is now obvious on almost every garden—be exhaustion of soil on the one hand, or old age of the bush on the other, or a combination of both, is left for experiment to solve. There is, however, little or no doubt in my own mind, even now, that exhaustion of the soil plays a very great part in the matter, and this is confirmed by the fact that in those gardens which possess soil of an exceptionally favourable and lasting character, or in which means have been adopted for keeping up its fertility, the deterioration of the bush and consequent loss is much less than in other cases. This conclusion, I am afraid, involves the belief that manuring, in one form or another will have, in future, to be a regular adjunct to tea culture on all but the youngest gardens."

To every word of this opinion I still adhere. There is absolutely no doubt that the gardens in Assam do deteriorate as they get older, with very rare exceptions, and, it is only according to reason that they should do so unless an attempt is made to keep them up to their original fertility. As a rule, however, no such attempt is made except by means of very deep cultivation, which is only a method of staving off the evil day; or by top dressing with bheel or hullah soil, which if correctly done with good material is one of the best operations, which has become at all general in the valley in the past few years. Even here, as I shall show later, a vast amount of expense and labour has been employed in putting absolutely useless material on to the land, and I can only urge very great caution in deciding whether or not it is worth while to spend a large amount of money in lifting any particular material.

I cannot consider that for many years to come any but a comparatively small quantity of the manure required will be in the form of artificial manures, unless it be to a certain extent as phosphates. In other respects as far as most places in the province are concerned, Assam is abundantly capable of supplying, if means were taken to utilise it, practically the whole of what is needed. I have yet to see any place where the vast amount of cattle manure is preserved with any reasonable care, and yet each cow will produce 2,000 lbs. of manure,—and useful manure,—per annum—the whole of the valuable constituents being obtained from land outside the tea area. Mustard is extensively grown in the province, and though much oil is used in the valley, a large proportion of the seed is exported to Calcutta and the oil re-imported, instead of the seed being pressed on the spot, and the cake used as manure. Green manuring is still in its infancy, and so on.

But beyond this, experiments are necessary everywhere to determine the best means of keeping up the standard of a garden. Laboratory analyses can show in some measure where the soil is deficient, but in their application to a new crop and especially one in the tropics there always must remain very grave doubts as to the conclusions only removable by actual culture trials in the field. One thing is now practically certain. It is impossible to apply without very great modification the experience of temperate climates to the condition of the tea industry. Plant nutrition is here very likely governed by somewhat modified rules. The conditions of the soil during the rains, that is, the growing season, is entirely different from what it is during the comparatively dry weather,—again the growing season,—used for the production of the ordinary crop in Europe, or even of the kharif crop in India.

In general the principle of culture adopted in most instances in Assam has been nothing more nor less than "juming"—the system adopted by the Nagas in the hills above. In brief it consisted of opening out virgin land, putting in the crop, utilising this land until it ceased to be profitable, and then again abandoning it to jungle and planting out more. The best managed gardens put out ten, twenty, thirty or more acres per annum to make up for the falling off in the old tea, and as a result had a constantly increasing acreage with a constant produce. As an example I may say that in one case which has come before my notice, a garden practically made the same crop in 1899 from 833 acres, as it made in 1893 from 525 acres. Making every allowance (say 20 per cent.) for increased fineness of plucking, a system which produces results like this cannot be called either sound agriculture or sound business. It means that the additional area added has to be worked and this must cause the use of extra labour and hence extra expense. It also handicaps the new land by the extra cost of carrying or carting leaf from a greater distance to the factory. And further, it means either more expensive or less adequate supervision. This principle, in addition, creates a tendency to ignore vacancies, and often has the statement been made to me that it was easier to plant out new land than to fill in vacancies, heedless of the fact that the vacancy land though producing nothing cost just as much to work as that producing the maximum crop. I think it must once and for all be recognised that the practice of making new clearances to take the place of the deficiencies of old tea still kept in cultivation is illogical and based on unsound principles. And as a natural consequence it must be laid down as an absolute rule that extensions are inexcusable unless the tea already in extistence is producing the maximum it is capable of producing of the quality of tea desired. I do not mean to say that one can always expect 20 year old tea to give as good a yield of as good tea as ten years old plant. This is, to say the least of it, very doubtful But if the yield of a plot of land shows a gradual tendency to fall lower and lower, it is time to deal with that plot and bring it up to the standard laid down before any further extension is carried out.

If such be not the recognised principle of culture it would be far better to frankly recognise that our tea culture is "juming" pure and simple, and abandon an equivalent for the tea coming into bearing. This would at least be a confession that it paid better to put out new tea than to keep tea up to a certain yielding power, but the system of constantly extending area at increased cost for working, with greater difficulty in working, and with less capacity for supervision is utterly wrong as an agricultural principle, and may be said to be non-existent in any other agricultural industry.

In brief then agriculturally the only sound system would be never to put out new tea until the old is yielding its maximum. If this old tea cannot be profitably kept up to the standard required either uproot and replant the plot, or plant out fresh tea with a view to the abandonment of an equivalent area so soon as the new plant comes into bearing. I am very doubtful whether this latter alternative will be necessary in many cases, unless some grievous errors have been made either in the original plant or in the subsequent treatment.

And here, as part of the introduction, to the study of the conditions existing in tea soils and their improvement, I cannot help remarking that, given the best soil in the world, a constant change in the system of dealing with the bushes will so ruin the tea that a time will come when it will no longer be possible either by pruning or by treating the soil to bring them back to anything like a reasonable yield. Such tea must be uprooted and replanted, or abandoned. But it seems a very great pity that tea should be allowed to get into such a condition. I know there are many different ways of dealing with a tea bush—all, it may be, equally or almost equally good. Two of the best gardens I know on the south bank of the Brahmaputra have been treated by almost

entirely opposite systems of pruning, but the same system has been applied for many years in each case—and an equally good result is obtained.

It would almost seem, if such a system were feasible—and I hardly see why it should not be—that a plan should be laid out ahead for five or ten years for pruning every plot of tea, and this, whatever manager were in charge, should only be altered for some very special reason. The present method of going round each plot with a knife in December, and there and then deciding the year's pruning without reference to the past history of the bush is, I think, far too casual an arrangement for an industry in which the bushes represent both capital and stock-in-trade.

SUMMARY.

Summarising therefore it may be said that—

(1) The older parts of the Assam gardens are gradually deteriorating in yield, and it may be also in quality.

(2) It is unsound to try and make up for this loss in yield by putting out new clearances.

(3) This deterioration can be largely stopped by the judicious use of manures, principally obtained locally.

(4) No new clearance should be put out unless the old area is producing its maximum, or it is intended to abandon an area equivalent to the new clearance.

(5) A system should be laid down for the future pruning and treatment of every plot on a garden, only to be departed from for very trenchant reasons.

In the consideration of the subject which follows one can only be said to have just opened the matter. We are ludicrously ignorant on almost every point on which I have touched, and were it not for the results obtained by Mr. Bamber both here in India and also more recently in Ceylon, it would almost be impossible to obtain any independent testimony on any question relating to tea soils which could be discussed. I have undoubtedly drawn illustrations, especially in that part devoted to the physical properties of tea soils, from results obtained both in England and America, but this is entirely because such data are non-existent for India and Indian conditions. The questions of the relation of soil to quality are still practically untouched except for Mr. Bamber's Ceylon results, and my view here reported, but altogether they form a most inadequate commencement to the study of the most difficult part of tea culture. Not until one can settle in the tea districts in a position where one can daily watch the influence of various conditions on the plants, conduct experiments—perhaps utterly unpractical in appearance—on the growth of the bushes under varying conditions, study the relationship of various conditions—not to quality as a whole, for this is a complex property, but to the relative amount of various constituents in the leaf; not till then will one be able to give out anything but more or less general platitudes as to the relationship of cultural, soil, or manurial conditions to quality of tea.

Such an investigation or series of investigations is for the future. In this report I have tried to indicate the present state of the question; the methods by which certain difficulties can be removed; some warnings against the probable results of continuing the use of methods now in vogue; some suggestions for making greater use of materials at hand than is now done; a discussion on the basis of Mr. Bamber's results and my own of the relationship of the constituents of soil to quality of tea and luxuriance of the tea bush; and finally a series of notes on the special needs, manurial or otherwise, of each district, so far as I know it, in the Brahmaputra Valley. A great many of the results may be applicable to other districts, but I have preferred for the moment to speak more specially of those parts of the Indian tea area which I know best, leaving to a future date, after a separate and careful examination of the soils of other sections, the presentation of special reports on those districts.

On these lines I have divided the consideration of the subject into chapters as follows:—

(1) Physical properties of Assam tea soils.
(2) Chemical characteristics of Assam tea soils in relation—
  (*a*) to luxuriance of bushes.
  (*b*) to quality of tea.
(3) Manures available and their utility for producing—
  (*a*) quantity of tea.
  (*b*) quality of tea.
(4) Notes on the tea soil of each district of Assam and its improvement.

THE CHEMICAL COMPOSITION OF TEA SOILS.

Having devoted a chapter to the physical properties of tea so Mr. Mann takes up the chemical composition of tea soils, summary of his observations with regard to the latter branch the subject being as follows:—

In summary, therefore, tea requires for its successful cultivat a considerable quantity of organic matter and nitrogen in the soi the best results being only obtained when more than 35 per ce of the non-sandy portions of the soil consist of organic matter, a 0·8 per cent. of nitrogen. Provided this is present, tea can cultivated with success in presence of a minimum quantity other constituents, notably Phosphoric Acid and Potash, but obtain high quality tea these latter materials must exist in soil in larger amount, and other things being equal, the lar the quantity of phosphoric acid (in presence of sufficient nitrog the better will be the tea. Potash runs parallel with phospho acid, but is probably present in ample quantity in Assam so In short, much nitrogen with little phosphoric acid will produ rank growth with medium tea only—much nitrogen with mu phosphoric acid will give luxuriant growth and high qual tea—little nitrogen with much phosphoric acid will give hi quality tea, but comparatively little of it—and if there is deficiency in both, tea can never be profitable. Other constitue besides the three named may possibly have an intimate conn tion with the quality of the tea. Lime probably has little or no —and is in any case present in ample quantity everywhere. I —available. Iron may have some influence and apparently c creases in old soils, but this requires further investigation, a iron, at any rate, does not apparently need to be applied manure. Manganese—whatever its value, which needs to be pro ed yet by thorough experiment on a garden—is, I believe, gener ly present in abundance in an available form in Assam. T deficiencies, and the increasing deficiencies, of the soils of many the tea gardens in the Brahmaputra Valley render manuring necessity in the future.

MANURE.

Chapter four deals with manures for tea in Assam, the subj being thus summarised.

We therefore limit the possibly profitable manure in Assam t the present to the following:—

1. Bheel Soil and Top-dressing material of all kinds.
2. Cattle Manure.
3. Green Manuring.
4. Fertilising Trees and Bushes.
5. Bones.
6. Oil-cakes—chiefly those of castor and mustard.

These are all more or less complete manures. Of those useful t special constituents we have—

7. Nitrate of Soda, or Potash in rare cases for nitrogen.
8. Superphosphate from Bones or from Mineral Phosphate phosphoric acid.
9. Basic Slag for phosphoric acid and lime.
10. Wood Ashes for phosphoric acid and potash
11. Sulphate or Muriate Potash in rare cases for potash.
12. Lime.

I have already, under each heading, pointed out the utility each of these, but it remains now to submit certain general con derations on the methods in which it should be carried out.

1. I am strongly of opinion that manuring should always carried out the year before heavy pruning a plot. Thus, if section is to be cut down in December, 1902, it should be manu with whatever it needs in the Winter of 1901-1902. This is on principle that before a serious operation is undertaken, the gene health of the bush should be as great as possible, and the manu should be so incorporated with the soil, that without undue stim lation the bush recovers from the serious cutting.

2. In 1898, Dr. Watt hinted in several places that rotat of crops in some form or other was imperatively needed in gardens. In this, I am at one with him, and would add that th is equal need of rotation of manuring, and would suggest here so rotations which might be profitably carried out. As far as manu ing is concerned, I do not think that a period of more than se years should go by on any plot of established tea without at le one application of manure. Ten years might occasionally pass some lands and some gardens, but this is, I fancy, quite the lim

WAS IT A POISON SNAKE?

Sometimes John Garrett would go from morning till night without bite or sup. This was three or four years ago. Every morning he got up with a disagreeable, gnawing pain in the stomach or abdomen—he couldn't quite locate it, but he felt it all the same. Still he kept on working. He meant to see a doctor but neglected it. So a year ran away. By then the complaint had got hold of him as a wild grape vine does of an old tree.

He was a man full of pain as an unsunned cellar is of mould and crawling things. Often they kept hot flannels on him for twelve hours before he got a bit of ease; and for three weeks straight away he was in racking pain. At intervals it made the sweat run off him in streams.

Then he went to bed, John did, and a doctor took him in hand, as a pilot does a ship when the navigation is growing ugly. "My doctor," Garrett says, "was the best of men, but he didn't seem to know what ailed me." Nor did the other medical man who followed him.

On this our poor brother's heart sank within him, as King David's did when he heard of the fate of Absalom. Having nothing to do except to think, he thought he would go to a London hospital and ask the learned men there what was the matter with him. They said his right kidney was diseased and the left one affected. They feared they couldn't help him but would take him in for a month if he cared to stay. He said he didn't care to stay, and went home to Dartford. Quite right. As a place to die in the hop country beats a hospital!

Then he told his home doctor what the London doctors had said. The home doctor agreed with the London doctors and told him he would soon join the silent majority—who are done with diseases.

The end of Garrett's story, written by him at his home, 13, Wellington Road, Dartford, Kent, January 7th, 1901, runs this way: "I kept out of bed and moved about all I could. I turned up at the works sometimes, but from January, 1900 to Easter I did not earn enough to keep myself. More than once they sent me home.

"For three years I lingered along in this fashion when one Sunday I read in *Lloyd's Newspaper* about a stevedore who was handled like me and had been cured by Mother Seigel's Syrup; and without saying a word to anybody I got that medicine and began taking it.

"The first bottle pricked up my appetite and I actually felt hungry—a strange sensation for me. I slept better. The pain was not so sharp and the kidney secretion was clearer and of a better colour. The second bottle did me more good still, and after the third I felt like a king, I mean a healthy and happy king, if there is such a being."

"To-day I feel as well as I ever did. Saturday last I felt a bit out of sorts, from indigestion probably, and took a dose of Seigel's Syrup; and to-day I am right as rain. You may publish my tale." —JOHN GARRETT.

Did this man have Bright's disease? You have heard what the doctors said. Let us leave the point to them. Whether the snake that bit us was a poison snake or not is of no importance after we have got rid of the effects of the bite. Anyhow, whatever Garrett had, Mother Seigel's Syrup cured him; and the rest is nothing.

He has been employed at the *Daily Telegraph* paper mills for twenty-six years, but does not look his sixty years, his real age. Meeting him to-day you would not imagine he had ever been ill at all.

MARKET REPORT.

[*Per Mail advices of 15th November* 1901.]

COFFEE.

The London Commercial Record says:—With the exception of Santos the market has again been very sparingly supplied, and prices for the most part show a fresh advance of 1s to 2s per cwt. Public sales were held only on Tuesday, and the business privately is of moderate extent at full prices. Further unfavourable weather reports and a low estimate of the 1902-3 crop in Santos in Rio gave fresh excitement to the market for "futures," and the quotation for December Santos advanced to 39s 6d, but did not long remain at that point; yesterday a cable from Messrs. E. Johnston & Co., Santos, dated 13th instant, said—"Rain general in the interior. Drought ended. We think Santos receipts likely soon to fall off. In our opinion prospects of new Santos crop more favourable," caused a sharp decline of 2s 6d, partially recovered subsequently, but the latest prices show a decline of 3s to 3s 6d per cwt. from the recent highest point; business yesterday comprised December at 37s 6d to 36s, March at 37s 3d to 37s, May at 39s 9d to 37s 6d, and September at 40s 9d to 38s 6d per cwt. Auction supplies to-day consisted of 16 casks 6 tierces 9 barrels 3 bags Plantatation Ceylon, 830 bags East India, 150 bags Java Liberian, 40 bags Java, 78 packages Mocha, 480 bags Colombian, 92 bags nicaragua, 50 bags Nyassaland, 175 bags Vera Paz, 238 bags New Granada, 28 bags Mexican, 313 bags Costa Rica, 107 bags Guatemala, 409 bags Santos, 11 bags Rio, and 195 bags Bahia. The sales went off with a good demand at full prices.

London ...	Santos ...	Dec. delivery	...	36s 6d.
New York	... No. 7 Rio...	,,		6·40 cents.
Hamburg...	... Santos	,,	...	37 pf.
Havre ...	... Santos ...	,,	...	45½ francs.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	12,973	16,328	42,066	32.910
	Home Consumption.		Export.	
	1901.	1900	1901.	1900.
Tons ...	17,270	14,231	26,374	16,982

The preceding figures exhibit—

	Tons.
In the Imports an increase this year of	9,156
Home Consumption an increase of	3,039
Export an increase of	9,392
Stock a decrease of	3,335

Tuesday's public sales passed off as follows:—

MOCHA.—110 half-frazils withdrawn.

NYASSALAND.—53 bags sold—good middling blue 56s 6d to 58s, peaberry 57s.

COSTA RICA.—507 bags about half sold—good ordinary mottled greenish 42s 6d, good middling dull blue 71s, fine bold blue 94s.

MEXICAN.—33 bags sold—small 42s, good middling 63s, good bold 81s, peaberry 60s.

COLOMBIAN.—481 bags sold—smalls 37s to 47s, middling to good middling 53s to 67s 6d, good bold grayish 71s 6d to 72s, fine hard blue bold 83s, peaberry 55s 6d to 62s.

BRAZIL.—1,375 bags washed Dumont Santos sold—smalls 37s 6d, medium 44s 6d to 45s, bold to extra bold 51s to 56s. Of 2,125 bags unwashed Dumont Santos, quay terms, about one-half sold—smalls 36s 6d to 37s, medium 38s 6d to 39s, bold to extra bold 42s to 44s 6d, peaberry 41s to 46s. 23 bags washed Santos sold—good bold coloury 51s. 159 bags washed Rio were bought in.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99. Bags.
Rio ...	2,917,000	1,349,000	1,753,000	1,483,000
Santos ...	5,720,000	4,434,000	3,881,000	3,118,000
Total ...	8,637,000	5,783,000	5,634,000	4,601,000
Crop ...	—	10,900,000	8,971,000	8,772,000

Rio Exchange 12$\frac{1}{32}$d, previous day 12$\frac{1}{32}$d.

HAVRE, *November* 14.—Good average Santos November opened steady at 46½f. and closed steady at 45¼f., December opened at 46¾f. and closed at 45½f., March opened at 47½f. and closed at 46¼f., May opened at 48½f. and closed at 47f., September opened at 49½f. and closed at 48¼f.

HAMBURG, *November* 14.—Good average Santos November opened steady at 37¼pf. and closed steady at 37pf., December opened at 37¼pf. and closed at 37pf., March opened at 38½pf. and closed at 38¼pf., May opened at 39¼pf. and closed at 39pf., September opened at 40¼pf. and closed at 40pf.

NEW YORK, *November* 14.—Closing prices of No. 7 Rio were as follow:—

	Nov.	Dec.	Jan.	Feb.	Mar.
November 14...	6·40	6·40	6·50	6·60	6·70
November 13...	6·70	6·70	6·80	7·85	7·95

Brazil futures opened firm to-day at about 7½d above last night's closing rates; then reacted and close about 1s off the best. Transactions include May 38s 4½d, 38s 6d down to 37s 7½d, and September

39s 3d, 39s 6d down to 38s 7½d, December quoted 36s, March 36s 9d, May 37s 6d, July 38s, and September 38s 6d.

Havre opened ¼ to ¾ up, but has since declined 1¼ to 1½.

Hamburg ¾ to 1¼ lower.

New York opens 5 to 10 up.

Brazil receipts 81,000 bags against holiday last year and 52,000 in 1899. Exchange 12d.

TEA.

INDIAN.—Supplies at auction were much lighter, *viz.*, 41,000 packages contrasted with 53,800 packages last week and 46,500 packages a year since.

The more manageable quantity brought forward together with clearer weather has had a beneficial effect and a steady market at the recent decline with a wider demand may be advised. Enquiry was best for low to useful common descriptions and stand out parcels, either for tip or liquor—Pekoes from 7d to 9d per lb. continuing the least in request. Sellers appear to be gradually realising the great importance of not printing more at one time than can be dealt with except at a sacrifice. If the trade is able to rely on support in this direction it can of course proceed with confidence to the benefit of all concerned.

For 33,100 packages on estate account 7⅞d per lb. was obtained compared with 7¼d per lb. for 37,000 packages, and 8¾d per lb. for 39,500 packages in the two former years.

CEYLON.—Public sales totalled 17,200 packages *versus* 12,500 packages on the 5th instant, and 17,300 packages at this period twelve months since.

Competition was brisker for leaf teas under 7d per lb. which occassionally showed a slight recovery from the depression lately noticed. Medium to fine Pekoes and Orange Pekoes sold without much change in value. There was not such good bidding however for broken Pekoes of ordinary quality, for which a slight concession to induce business often had to be made, but the higher grades kept about firm though some irregularity in quotations was observable. Exporters secured a fair number of lots suitable to their requirements.

The average is 7¾d per lb. On the 7th instant it stood at 7⅞d per lb., and 7⅜d in 1900.

JAVA.—Nearly 2,300 packages (of direct import) passed the hammer with somewhat better spirit, though prices did not alter materially.

Deliveries.—Clearances of all tea (on which duty has been paid) from the London warehouses, as per official returns are, *viz.*:—

From 1st to 12th November, 1901	...	...	7,329,117 lbs.
Do. do. 1900	...	...	7,135,744 ,,

During the week the following have been printed for sale by public auction:—

	Sold.	Withdrawn.	Total offered.
	Pkgs.	Pkgs.	Pkgs.
India	28,218	12,771	40,989
Ceylon	15,037	2,186	17,223
Java	1,687	582	2,269
Total ...	44,942	15,539	60,481

Also 794 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated November 15th, 1901, says:—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian.	Ceylon.	Java.
	Pkgs.	Pkgs.	Pkgs.
1901-1902	648,389	553,658	32,481
1900-1901	672,008	600,945	24,323

42,261 *pkgs.* INDIAN
17,893 ,, CEYLON
2,269 ,, JAVA
} Total 62,423 packages were offered in public auction this week.

The steady progress in the use of British-grown tea in markets outside the United Kindom continues to be maintained, the quantities taken for the first nine months of the present year comparing most favourably with previous years, partially no doubt owing to the exceptionally low prices ruling during many months of this year, *viz.*:—

	1901.	1900.	1899.	1898.
Indian ...	24,008,887	18,503,944	17,806,844	15,994,547
Ceylon ...	43,371,580	35,571,028	28,221,746	26,914,107
Total lbs. ...	67,380,467	54,074,972	46,028,590	42,908,654

	1897.	1896.	1895
Indian ...	14,058,281	11,809,394	10,311,1
Ceylon ...	20,800,934	16,441,567	14,691,1
Total lbs. ...	34,859,215	28,250,961	25,002,2

The developement which has recently taken place in the re-expo from Great Britain is very encouraging, showing that Continent markets are now becoming large and important consumers Indian and Ceylon tea.

INDIAN.—The Indian Tea Association has published figures sho ing the comparative outturn of a number of gardens, from 1st Ap to the 30th September, which includes almost the total quanti manufactured up to that date with the exception of Travancore.

	Assam.	Cachar.	Sylhet.	Darjeelin
1901 ...	48,521,567	16,328,863	18,866,492	5,164,55
1900 ...	52,047,133	20,105,826	23,313,645	5,825,45

	Terai.	Dooars.	Chota Nagpur.	Chittagor
1901 ...	2,199,728	19,160,281	108,160	488,112
1900 ...	2,783,787	20,287,686	116,302	654,650

	Kangara Valley.	Dehra Dun.	Total lbs
1901	748,659	1,560,000	113,146,4
1900	759,142	1,390,000	127,283,6

With somewhat more moderate supplies a further depreciati in price was arrested, and even a slight recovery here and the perceptible, the smaller quantity inducing rather more competiti with a distinctly better tendency, while the firmness displayed b merchants has also assisted to steady the market. The followin averages are worthy of note:—"Seeyok," 1/2; "Teesta Valle T Co.," 1/2¼; and "Okayti T Co.," 1/1¾.

TRAVANCORE.—This district continues to grow in importance, a has recently sent home some teas of very fair quality. The highe average this week was obtained by the "Munaar" estate of th Kannan Devan Hills Co., from which garden 149 packages realize 9d. per lb., while the "Sevenmallay" and "Peraivurrai" gardens the same Co. averaged 8½d. and 8d., respectively.

Week's av. of New Season's tea sold on Garden Account 190 33,283 pkgs., av. 7·82d. 1900, 38,389 pkgs., av. 7·17d.

New Season's tea sold on Garden Account 1st June to date 190 473,912 pkgs., av. 8·21d. 1900, 542,769 pkgs., av. 7·87d.

CEYLON.—Although no actual recovery can be quoted from th lower rates of last week, there was more disposition to operate, an competition was somewhat more general, prices being firm for th lower grades, although medium teas were here and there rathe easier, really fine parcels on the other hand selling well. Averag for week 7·69d., against 7 40d. same week 1900.

Ceylon tea sold on Garden Account 1st January to date, 1,002,31 pkgs., av. 6·79d. 1900, 1,086,421 pkgs., av. 7·20d.

JAVA.—A fair selection was brought forward, and comprise some very useful teas. The market was steady, and prices we fully up to those recently ruling. Invoices from "Goalpara" an "Perbawattee" averaged 9d. per lb.

COCOA.

Public sales on Tuesday embraced 3,636 bags, which induce little or no competition, the sold portion being only about 900 bags prices showed hardly any alteration. 163 bags Trinidad about ha found buyers at 66s to 68s for middling, and 59s for defective, bein unchanged. Of 89 bags Grenada 35 bags sold at 64s to 66s fo good to fine, down to 60s for fair common. 24 bags fine Demera realised 66s. Of 223 bags Jamaica 90 bags were placed at 62s 6 to 64s for good to fine, and 54s to 57s for common to fair, bein firm. 11 bags good to fine St. Lucia sold at 62s 6d to 66s 6d C 2,465 bags Guayaquil 55s bags sold at 70s to 71s for late Arriba, an 63s to 64s 6d for grayish Balao. 100 bags good African realised 6 per cwt. The following all passed the hammer unsold:—43 bag Colombian, 20 bags Venezuelan, 30 bags Puerto Cabello, 137 bag Haiti, and 331 bags Ceylon. Private transactions embrace 1 bags Trinidad, good at 70s, fine at 74s, an odd lot of Puerto Cabell at 135s; 60 bags Caracas, ordinary to fine clayed at 78s to 95s, fi unclayed at 80s; 50 bags fair African at 58; 50 bags Haiti a

53s, and 200 bags Guayaquil—Machala at 65s 6d, and good Arriba at 78s per cwt.

PEPPER.

Black.—The market is firm in tone, with value dearer. On the spot 500 bags Singapore have been sold at 5 3/32d to 6d; for arrival 150 tons have changed hands, *viz.*, near at hand at 5 5/16d, October-December (s.) 6 1/32d, and January-March at 6 1/16d to 6 7/32d.

Nothing offered at auction on Wednesday.

White is dearer, with a good business in all positions. Sales on the spot have been made at 9¼d for fair Singapore and at 8 3/16d for fair Penang. For arrival 50 tons Singapore, January-March shipment, have been made at 9½d, and 50 tons Penang, January-March, at 9d to 9⅛d per lb.

No supplies of white pepper were included in Wednesday's public sales.

Black pepper firm to-day. 50 tons Singapore sold at 6 7/32d for January-March shipment and buyers.

For arrival 5 tons Tellicherry November-December (s.) sold at 56s 6d per cwt., c.i.f., delivered weights Trieste.

GINGER.

Cochin.—In the early days after our last, washed medium and small rough further advanced to 51s, at which business was done, but subsequently the market became rather flat, and at the auctions there was not much life. 130 cases 100 bags were catalogued, and 3 cases 100 bags sold—fine bold plump A cut 100s, good bright medium and small washed rough 51s per cwt. Small and tips roughly cut and scraped sold privately at 57s 6d per cwt. To-day 25 tons washed rough have been sold to arrive *ex* January-February (s.) at 45s per cwt., c.i.f., London.

Jamaica received very few bids, and when offeres were made they were many shillings below the rates required by holders, and, in the end, the whole of the 369 barrels brought forward passed the hammer unsold—at 48s up to 65s per cwt., as to quality.

QUININE.

As a consequence of the 7 per cent. decline in bark at the Amsterdam auction, makers of German quinine reduced their quotation by ½d per oz.—now 1s 2d—with the intimation that "until further notice the falling clause will be given for contracts." A larger reduction had been anticipated by outside holders, so this was considered satisfactory, and the week closed with sales of about 40,000 oz. at 1s 0¾d for December delivery, and 1s 1¼d for March. Early this week, however, prices slightly receded again, December selling at 1s 0½d, and March at 1s 1d, subsequently becoming rather firmer, with a small business at 1s 0¾d for December, and 1s 1¼d for March. To-day the market is quiet, and the above prices are unchanged. Whiffen's price has also been reduced to 1s 2d for 1,000 oz. lots. The result of to-day's quinine-sale at Batavia is as follows: Of 6,600 kilos. Ed. II. offered, 5,200 kilos. sold at an average of 20fl. per kilo. (about equal to 7¾c Amsterdam), against 20½fl. at the October sale. The next auction to be held at Batavia will take place on December 18. In response to a petition the Board of Trade have consented to publish the imports and exports of "quinine and quinine-salts" monthly in the Board of Trade returns commencing January next.

(Average for all India 7·82d., November 15th.)

Garden.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Dust, and Varions.	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.
Neilgherry ...														
Glenfruin ...	20	6	13	6¼ 7¾	3	5¼	...	...	4	4¾	..	...	...	...
Travancore ...	1522	7·31												
Arnakal ...	176 p	7½	67	9	95	6½ 6¾	...	...	...	...	...	...	14½c	4¾ 5¾
Ashley ...	69	6½	...	...	33	6	36	7	...	...	...	...	...	...
Balamore ...	88½c	6¼	...	..	63½c	6¼	21	6¾	...	...	2½ 5	5	2½c	4
Corrimony ...	180½c	6¼	...	...	65½c	6	80½c	7	30½c	5¼	1½c	5	4½c	4
Kan Dev H Co M ...	148 p	9	29	10	35	7¾	43½c	11½	25	6¾	...	..	16½c	10½
,, Peraivurrai ...	139	8	71	8½ 9¾	37	7¼	...	...	31	6½	...	...	...	...
,, Sevenmallay...	109	8½	23	8¾	32	7½	29	10¼	25	7	...	...	...	...
Mount ...	96	7	...	...	20	6 6	36	8¼ 8½	12	5½	...	..	28	6½
Seafield ...	200½c	6½	...	...	130½c	6¼	66⅔c	7¼	...	...	2½c	5	2½c	4¼
T T E Co Bon A ...	144	7	45	6¾ 9½	28	6	29	7¼	20	5½	...	...	22	7¼
Vembenard ...	153	7	43	6½ 7¾	78	6 6¼	2	6½	...	...	...	...	30	4½ 9¼
W ...	20½c	4	...	...	20½c	4	...	...	...	...	...	...	...	...

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Do. do. 7 ,,	... ,, ...	19	12	0
Mamooties, all steel, 9″ x 7″	... ,, ...	11	0	0
Do. do. 10″ x 8″	... ,, ...	11	8	0
Do. long-neck, steel, 5 lbs.	... ,, ...	15	8	0
Do. do. 6 ,,	... ,, ...	23	0	0
Do. do. 7 ,,	... ,, ...	26	0	0
Quintanies, all steel, 12″ x 5½″	... ,, ...	16	0	0
Do. do. 15″ x 6″	... ,, ...	17	0	0
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Bill Hooks	... ,, ...	16	0	0
Pruning Knives ...	... ,, ...	12	0	0
Do. **Saws**	... ,, ...	25	0	0
Cross Cut Saws, 4 feet long	... each ...	5	0	0
Do. 5 ,,	... ,, ...	9	0	0
Digging Forks, 3 prong ...	...per dozen...	27	0	0
Do. 4 prong ...	... ,, ...	29	0	0
Mamootie Forks ...	... ,, ...	23	0	0
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		RS.	A
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Do. do. do. 3 lbs. and under	... ,, ...	0	
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Do. do. do. do. 3″ ,, 7 ,,		14	
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Do. do. do. do. 3″ ,, 7 ,,		25	
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Do. do. do. do. 3″ ,, 11 ,,		33	
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Do. do. do 15 ,,	... ,, ...	8	
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PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 20th instant. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Coorg.

Polli Betta, *11th December.*—*Weather*—Very heavy rain here yesterday, 1·30 inch. Previously, for one or two days, it had been cloudy and drizzly. Of course, this weather is unseasonable in every way. It will be very injurious to paddy, causing a lot of light beans. I notice that pruning has been inaugurated. Weeding and gathering constitute the work on most places. Coffee is generally looking very fine. *Labour*—Ample. *General Health*—Very fair.

BRAZILIAN COFFEE.

Position and Prospects.

We give to-day some remarks on Brazilian Exchange and on Coffee at Rio de Janeiro during the year 1900. The year 1901 is now drawing near a close, but the only change that has occurred is in regard to crop estimates—an important change, indeed, but one that can scarcely have more than temporary influence upon prices. Any rise that may result will probably have the usual effect of stimulating production, and thus, while one "good" year may cover the loss incurred by planters during several "bad" ones, it is almost certain also to bring about those same bad seasons whose effects it counteracts. Coffee continues to be the economic mainstay of the district, but many plantations are now causing loss rather than profit. There seemed, moreover, in 1900 little prospect of any improvement for a considerable time, in view of the enormous production and of the fact that consuming markets were apparently so well provided that they need buy only at prices which absolutely suit their own purposes. The situation was doubtless much aggravated by the disaster to the Banco da Republica and other native banks in September, 1900. At the end of the year probably but few estates were

free of encumbrance, and planters had to borrow money for their working expenses in raising and marketing the crops. Under the circumstances it was difficult, in many cases impossible, to get the necessary accommodation, while the difficulties were added to by the attitude of the labourers, who energetically resisted the lowering of their wages when this was attempted in order to meet the new conditions. The amount of money available for trade purchases in the interior was very limited; merchants were unable to collect accounts, failures were frequent, credit was practically suspended, and importers, having thus a very restricted field for action, had naturally to curtail their orders. Efforts were being made to compensate the unsatisfactory results from coffee planting by raising cereals and other produce, which formerly were being brought almost entirely from other countries, chiefly the River Plate Republics. Much had been accomplished in this direction, but until the means of communication, both internal and coastwise, are more extensive, and economical, and inland taxation regulated with a juster appreciation of fiscal attributes—inter-State duties in particular being abolished—it is to be expected that foreign supplies will continue to find a ready market in Rio, particularly with a low currency valuation of gold, unless an absolutely prohibitive tariff against foreign produce be created, as some appear to desire.

Apart from other considerations, however, the extremely erratic course of exchange was sufficient in itself to discourage commercial enterprise. The rate was said to have improved 100 per cent., but the improvement was not at all of a solid and assured character. Fluctuations, upwards and downwards, of more than 1d. in a week, or even in six hours, were still being seen; every day each bank fixed its own particular value for the currency, and the rates were frequently altered about six times, sometimes twelve times, in the same day. Under such conditions it is impossible to carry on steady business, and trade was practically limited to speculative ventures. Even moneyed proprietors were undoubtedly feeling the strain, and it would seem that there is necessary a complete revolution in the system of marketing the produce with the object of freeing the trade from many of the high intermediary charges with which it is now burdened in the transfer of the coffee from plantation to export ship. Direct purchases by exporters from planters are steadily increasing, and another new feature is that exporting merchants are now making preparations to hold stocks on the Rio market, for which purpose several of them have already acquired the necessary warehousing accommodation. Great results are by many expected from the introduction of bonded warehouses and sales by "warrant," the adoption of which system has been sanctioned by the Legislature, and for the application of which, it is said, a code of regulations is being drawn up by the Executive. It would appear, however, that while such a system is admirably calculated to flourish when capital is abundant and credit easy, the same results can scarcely be expected during the absence of these commercial essentials. If the adoption of this system only leads to more careful selection and the adoption of improved methods in preparing the coffee for market, much will have been accomplished, as more satisfactory valuations must necessarily ensue. It has been frequently asserted that, were this principle acted upon, there would be no need to curtail or destroy production in order to bring it down to the level of demand, inasmuch as quite 20 per cent. of the material now marketed as coffee is in reality no better th rubbish. With a view to discouraging trade in unselec qualities it is proposed to adopt a scale of differential duti which would bear more heavily on the lower grades, and, fact, render the marketing of them impossible except at loss.

The wages of agricultural labourers vary considerab according to the districts, and efforts to reduce them have led serious trouble and disturbance throughout the country. T scale most generally adopted appears to be 70 milreis for ca and treatment of 1,000 trees per annum, and 1$600 reis for ea bushel of coffee picked during the harvest; for day laboure 1$500 reis per diem with board or 2 milreis per diem witho board. The crisis had naturally led to considerable depreci tion of the value of estates and landed property in gener but prospective investors should bear in mind that the figu published as the purchase values of plantations are mo frequently fictitious. During recent debates in Congress transpired that the real prices paid are considerably unde stated in order to evade payment of the full transfer taxe which are very heavy.

INSECT PESTS AND ACETYLENE GAS LAMP TRAPS.

Wherever planting, in any shape or form, is carried on, matter in what part of the world, there an insect or a fung pest of some sort is sure to appear sooner or later. It is t chief stumbling block of the fruit-grower, the vintner, t grower of farm produce, the tea and coffee grower, and, fact, all such pursuits as aim at excellence of product. T little attention is paid by the producers as a body to the org nized extermination of pests; therefore, while one man mo energetic, and desirous of fighting the enemy is up and doin and trying by all available means to effect a clearance on h own land, others, too indolent, too selfish to help in the gen ral good, stand by with badly infested lands, and critici and condemn as useless what perhaps with their help an co-operation would be perfect success; but without it can the most be the temporary staying of the tide.

Both tea and coffee planters groan under this load "pest" quite as much as any other class of crop produce and though there are many who will not stir themselves look abroad for ways and means of combating the trouble, would worry much about applying a means ready to han providing things could hang together for a while longer, y there are many again who are glad of a hint to guide the in their progressive labours. Pests which assume moth for in certain seasons of their life span are one of the hardes classes to deal with, owing to their easy mode of progressi from estate to estate, and so on through districts. Yet, the experiments conducted by two French gentlemen amo the vineyards of Beaujolais in France, even they can destroyed in large numbers, sufficient to materially assist reducing the source of danger. It is, to some extent, the sa method adopted by the fruit-growers of Australia and Am rica; the placing of strong flaring lights among the orcha when the nights are darkest, thereby causing many hundre of these moths to be attracted to the flame and destroye That which may serve the vintner and the orchardist m well do, on probably slightly altered lines to meet the necessi serve the planter. The work done by these two Fren

experimentalists is embodied in a pamphlet, of which the following is a resumé :—

The authors of the pamphlet in July last, attempted the destruction of a pest which, for several years, had infested the vineyards of Beaujolais; many of the vintners had tried to eradicate it, but without satisfactory result, and the "Pyralid" moth bade fair to "gang its ain gait." Messrs. G. Gastine and V. Vermorel determined to try an experiment with illuminated traps, a proceeding which appears to have met with unhoped for success. The lamps used were served with Acetylene Gas, the burner, with a naked flame being fixed in the centre of a metal basin with a diameter of about 18 inches. This was partly filled with water covered with a film of petroleum, the burner projecting a few inches above the level of the water. The small generator was charged with 150 grammes (about 4¾ oz.) of Calcium Carbide, which quantity kept the light in action for six or seven hours: the flame being of a little over one "carcel."* The generator supported the basin and was fixed on a post at a convenient height. The lamps were lighted between 8-30 and 9 P M., and burned till daybreak. During the dusk it was found that few moths were captured. The big catches commenced after dark, when clouds of the moths were attracted by the brilliant light. Some were singed by the flame itself, but the greater number precipitated themselves directly into the basins. When the insects are very numerous, a greater proportion of oil should be used to ensure their capture. The trials commenced on the night of 13th—14th July, with two lamps. One basin was accidentally overturned: the other captured 4,650 of the moths, besides an assortment of other insects. On another night as many as twenty lamps were employed, a total of 64,000 moths being accounted for, giving an average of 3,200 for each lamp. The biggest catch in a single basin was 5,000. From the 13th to 31st July, 170,000 of the moths had been destroyed in this manner. The average proportion of the sexes was 42 per cent. females and 58 per cent. males."

Mr. E. E. Green, Ceylon Government Entomologist, writing on the above subject gives it as his opinion that "this method of catching noxious insects deserves a thorough trial, and would be particularly applicable in such cases as "tortrix"†, "nettle-grubs"‡, "red-slug"§, and other pests due to the catterpillars of moths. Whether it would be equally effective against helopeltis, "shot-hole borer," and other miscellaneous pests, can only be proved by separate experiment in each case. I have tried "he says" small oil lamps, without result upon either helopeltis or shot-hole borer. But insects that take no notice of a small light, may be readily attracted by a more powerful one. A special apparatus, with which I hope to conduct experiments against our various wingéd insect pests, is now being constructed for me."

The experiments on vine pests having resulted so satisfactorily, there is no reason to doubt that similar tactics applied to pests of tea and coffee plants, would be productive of material good. All it wants is for a few planters to take the idea up, and see if their good example will wake up the others whose unclean estates are always the thorn in the side of those of their neighbours who desire progress. Nothing in this form can be done thoroughly without co-operation; for the pest cleared off of one estate for a season has still to be re-conquered the next as a result of the neglected condition of perhaps only one of the neighbouring estates. What matter how careful the sheep farmer may be in clearing off every burr thistle from his lands, if the Summer winds sweep the flourishing crop of seeds from a thriftless neighbours' field on to his again, there to furnish another set of the pest to battle against. Still the Acetylene lamp seems to be worth a trial; and even if a thorough clearance cannot be made, a partial routing of the enemy may be accomplished, and that in itself must pay for the outlay in the improvement of the crop to come.

MORE ABOUT THE APPARATUS.

We had, says the *Ceylon Observer*, the pleasure of inspecting the simple apparatus which Mr. E. B. Creasy has constructed for Mr. E. E. Green, Government Entomologist, with a view to the destruction of tea blight and insect pests. To begin with the generating chamber itself: this, we saw, is a light tin vessel containing two chambers, in the inner one of which gas is generated through the contact of water with calcium carbide. The water remains in the outer chamber, but is so connected with the inner one—up which passes a series of spiral trays bearing the chemical required—that the production of gas is continuously going on. A tube on one side connects with a safety valve through which the gas, if over-produced, is allowed to escape. The chamber containing the gas in the centre of the generator rises automatically with the gas produced. On the other side from the safety valve, is a tube connecting with the inner chamber, through which the gas is borne off for consumption.

The whole generator weighs a very few pounds and can be conveyed about the estate by any ordinary cooly. The destructive apparatus itself consists of a tin basin soldered on to the end of an alavanga, a burner passing up through the basin-centre, attached to the end of a tube—which for a few inches passes down along the alavanga and then connects with a rubber tube leading from the generator. The basin contains water and a little kerosene oil on the top. When the burner is lit, a flame of about 50-candle power is produced, and though we were not able to see the apparatus working last night, a wet evening having been threatened, we were told by Mr. Creasy that flies and insects of various sorts have already proved their affection for the powerful light emitted by the acetylene flame, and fallen in quantities into the kerosene oil in the basin round it. This successful result is most noticeable on the darkest nights. The apparatus is extremely simple and for planters who find their bungalows dull of an evening, few more interesting excursions could be made than with cooly, generator, basin, and acetylene flame—to collect and kill their vile enemies, tea blight and insect pests.

TEA IN LONDON.

MORE PROMISING OUTLOOK.

The London Tea statistics to the end of November reveal a more satisfactory position of affairs for growers of Indian and Ceylon teas than has, perhaps, existed for many months past. For the past month the deliveries of Indian descriptions alone amounted to no less than 14,400,000 lbs., and this, following on the almost equally satisfactory deliveries for October, would go to show that the large clearances effected during the duty scare in the early months of the year have now passed into consumption, and that the trade has once more reverted to its normal condition as regards the quantity of duty-paid stocks held in the country. At the beginning of this year a very gloomy view was taken of the position, mainly owing to the heavy accumulation of stocks, which showed an increase as compared with the previous year of

* "Carcel" is the French unit of artificial illumination, and is equal to the light emitted by a standard lamp with a flame 40 mm. high and burning 42 grammes of colza oil an hour.

† *Capua coffearia*, Nietner.

‡ *Thosea cana*, Wlk.: *T. recta*, Hmpsn.: *Natada nararia*, Moore, etc.

§ *Heterusia cingala*, Moore.

no less than 14 million pounds of Indian and Ceylon teas. With the low prices, however, a remarkable stimulus has been given to consumption during the current year, and the deliveries of Indian kinds alone for the eleven months of this year show an increase of no less than 11½ million pounds. Ceylon deliveries during the same period also show expansion to the extent of over 3 million pounds, with the result that instead of having to face an excess stock of some 14½ million pounds, as at the beginning of this year, the total amount in warehouses at the 30th November was fully four million pounds short of the figures at the corresponding date last year. With the increasing demand, as evidenced by the large increase in the deliveries, and the diminishing stocks, the outlook for tea growers at the present moment would appear to be more promising than it has been at any time for nearly two years past, especially looking to the complete check which the low prices ruling in recent years has given to extensions of the area under cultivation.

MR. C. R. NEWTON AND THE NEW TEA FERMENT.

Mr. Bamber in "The Chemistry and Agriculture of Tea," says that the essential oil is considerably increased during the process of manufacture, Mr. Newton's contention is that during the process of the so-called fermentation of teas, which is really a process of oxidization, certain etherial flavouring substances are formed which give flavour and aroma to the tea, and that in many cases by the addition of a proper enzyme more of the cell contents are rendered soluble, thereby increasing the quality of the tea; undoubtedly, if a large excess of enzyme is added, or it is allowed to act for too long a time, there will be a loss of delicate flavour, through the over-oxidation and rendering insoluble of these delicate flavouring materials, the same as there would be by ordinary over-fermentation, but one can be guarded against as easily as the other, and it will, he anticipates, be found possible to give the light fermentation necessary to retain flavour, while at the same time maintaining the strength of the infusion.

The enzyme can be demonstrated in the tea leaf by crushing or cutting up a leaf and then adding a few drops of Tincture of Guaiacum (Guaiaci Resin. 1; Alcohol, 90 p.c. 5; digest seven days), when a blue colour will appear. It may be necessary in some cases to add a few drops of peroxide of hydrogen to intensify the reaction, or in extreme cases where there is a deficiency of enzyme and an excess of tannin to dissolve out some of the latter first with alcohol. If the pure article is required it can be obtained by dissolving out with water, the tannin is then absorbed with gelatin, and the enzyme precipitated by adding five volumes of alcohol.

The enzyme theory fully explains the process of green tea manufacture. and shows where we have gone wrong in India, and have often only produced teas that were green in name only, their colour being more often than not black. An oxidizing enzyme can only exert its colouring influence on the plant tannins when the cell walls are broken down, and air can gain access, therefore it is the essential factor of the manufacture of green teas that before any of the cells are broken all the enzymes shall be destroyed by heat. and as they perish at a temperature of about 170°F., it is only necessary to raise the leaf to that temperature, which can be done either by steaming it or in other ways.

There is no question, says Mr. Newton, of adding bacte or any of their products to the tea, but only an enzy extracted from living plants and which is analogous to t one already existing in the tea, and which, like it, is entire destroyed by the action of the heat during firing. Many the bacteria are highly beneficial and of great service to ma Should it have been found of use to employ them in t manufacture of tea, which it has not, he can see no objecti to it, as they can be easily divided as was done by Frankl with our "Secret Friends and Foes."

RIO COFFEE, 1900.

Before we touch upon the main subject of our prese remarks a few words should be said about Exchange, t influence of which upon the cost at which Brazilian coffee c be placed on consuming markets needs no explanation. T sterling value of Brazilian paper has risen 100 per ce In June, 1898, currency was quoted at 5¾d., its value June 30, 1901, was 11d.; in July 1900, it was injudicious pushed up by speculation to 14½d., but this fictitious ra could not be sustained, and a rapid decline naturally ensue The rate subsequently has oscillated continuously, but September, 1900, it has never fallen below 10d., the high rate during the current year of 1901 having been 13½ which was attained in May.

MOVEMENT IN 1900.

As an export centre for coffee Rio now yields preceden to Santos, which port has taken the lead for some years.

The movement in this article at the various shipping po during 1900 was as follows :—

PORTS.	Entries.	DEPARTURES.	
		To Foreign Ports.	Coastwis
	Bags.	Bags.	
Rio	2,846,539	2,671,143	223,140
Santos	6,518,168	5,849,114	2,962
Victoria	(Not stated.)	217,554	4,893
Bahia	(Not stated.)	186,658	...
Total ...	...	8,924,469	230,995
Grand total ...		9,155,464	

The local stocks on December 31, 1900, were reported be :—Rio, 218,632 bags; Santos, 1,246,078 bags; to 1,464,710 bags; while the total visible supply of the wo on that date was returned at 7,612,770 bags (477,810 tons

The value of the Rio coffee shipments during 1900 is stat at 6,201,313*l.*, and that of the Santos contribution 11,982,119*l.*, totalling 18,183,432*l.* The values of Victo and Bahia shipments have not been declared.

CROP, 1899-1900.

The statistics of the crop year, which ended on June 1900, record the following movement :-

PORT.	Entries. Bags.	Shipments. Bags.
Rio	... 3,531,147	3,503,583
Santos	... 5,711,751	5,742,503
Victoria ...	(Not specified.)	281,664
Bahia	(Not specified.)	174,721
Total ...		9,702,471

The Rio coffee exports during this season are valued at 5,473,335*l* and those from Santos at 9,066,266*l*., or together 14,539,601*l*.

The average price of each bag delivered, f.o.b., is given as 33s. 2d. at Rio and 31s. 9d. at Santos.

The local stocks on June 30, 1900, were returned as :—Rio, 151,747 bags ; Santos, 279,236 bags ; total 430.983 bags ; while the visible supply of the world was given as being at that time 343,000 tons (5,831,000 bags).

CROP, 1900-01.

The statistics of the last crop year, ended June 30, 1901. are :—

PORT.	Entries. Bags.	Shipments. Bags.
Rio	3,015,968	2,937,213
Santos	7,973,148	7,821,271
Victoria	(Not specified.)	207,735
Bahia	(Not specified.)	180,556
Total		11,146,775

The value of the Rio part of this crop is given as 5,077,792*l*., and that shipped from Santos is returned at 14,787,632*l*., the two ports thus totalling 19,865,424*l*.

The average value of each bag of Rio coffee shipped during this season is said to be 37s. 8d., and that of each Santos bag 37s. 10d., delivered f.o.b.

The local stocks on July 1, 1901, are put down officially as follows :—Rio, 162,055 bags ; Santos, 398,863 bags ; total 560,918 bags ; and the total visible supply of the world on the same date is stated as 405,000 tons (6,885,000 bags).

The heavy arrivals in July to September, 1899, produced the impression that the 1899-1900 crop would be exceptionally large and prices fell to the lowest level known up to that time, the price in New York being in September 5⅜c. (2 11/16d.) per lb., corresponding to 8 milreis per 32 lbs. at Rio for No. 7 grade. Opinion changed, however, and a reaction followed which sent prices up in the last three months of 1899, and the year 1900 opened with such apparently improved prospects that much speculative business was done at the comparatively high prices then ruling which were over 16 milreis per 32 lbs. in February.

At that time, however, the true position began to be known, that is that the crop then being delivered would prove no smaller but probably larger than the previous one, and that the succeeding crop for 1900-01 would be unusually abundant.

Prices then again fell, and continued on a downward course almost without reaction until in December the lowest figure of the year 1900 was reached, *viz*., 9$800 reis per 32 lbs. It is known that the heavy contracts entered into at the high quotations of the beginning of 1900 entailed disastrous results on many of the local merchants.

The year 1901 brought an aggravation of the misfortune, for prices have continued to drop, and since April they have scarcely been above 6$500 reis to 7 milreis per 32 lbs. This fall, however, was partly the consequence of the enhanced value of the currency, and prices on consuming markets did not again, during the season, quite touch the lowest level of any of the three preceding crop years, the lowest New York "spot" price recorded in this period being 6c. (3d.) per lb.

Since July 1, 1901, however, prices have continued on a diminishing scale, and any chance of an early recovery seems quite beyond the field of ordinary possibilities.

Consuming markets are well supplied and can act independently for a long time to come, while the crop now in course of delivery, being that for the season 1901-02, is confidently expected to surpass all record, no less than 12,000,000 bags being counted upon for shipment at Rio and Santos.

Coffee crop estimates, are, however, proverbially erratic. Of the early calculations of the Rio and Santos 1900-01 crop, one of the highest was that quoted in the report of this Consulate for 1899, which placed it at 9,250,000 bags, but even this, it will be remembered, was exceeded in the reality by more than 1,750,000 bags.

In any case it seems doubtful whether this crop will be equal to the last in weight, and quality generally, and, moreover, it appears likely that much of the fruit will remain unpicked both for want of the necessary working capital and by reason of the unremunerative results of marketing.

Perhaps nothing can be more instructive as to the position of coffee than a recapitulation of the prices, stocks, etc., quoted on shipping and consuming markets on the day on which this is written (August 30, 1901), in comparison with those which ruled on the same day last year. They are as follows :—

	Currency.		Quantity.	
	1901.	1900.	1901.	1900.
Rio and Santos—	Reis.	Reis.	Bags	Bags.
Prices per 10 kilos. on August 30	4$800	8$100	...	...
Entries, July 1 to August 30	...	...	3,308,192	2,108,152
Shipments, July 1 to August 30	...	...	2,581,233	1,674,568
Stocks on August 30 ...	...	...	1,316,897	918,128

OVER-PRODUCTION.

The calamitous condition into which the coffee industry has drifted is clearly attributable to the unnecessarily large production, a sequel of the very extensive planting which took place six years ago when prices were high, and credits for enterprise of all kinds extremely facile.

The world's consumption is now calculated at 14,500,000 bags per annum, and it was the custom to say that, to make up this quantity, 10,000,000 bags were required from Brazil. More recent calculations, however, favour the idea that no more than 8,500,000 to 9,000,000 bags are wanted from this country. But, however that may be, seeing that the world's production is 16,500,000 bags annually, and that the aggregate production of other countries has not expanded during the last 26 years, the excess in production in relation to consumption of 2,000,000 bags annually is attributed entirely to Brazil.

The realisation of this fact led to a project, strongly advocated at first in many quarters, aiming at the compulsory destruction of 20 per cent. of the yearly crops. Fortunately this anti-economic idea has now been generally condemned and more salutary methods of improving the situation are being earnestly ventilated.

COST OF PRODUCTION.

The cost of production, of course, varies according to the circumstances of each plantation, its situation, nature of soil, extension, yield per tree, etc.

Working expenses in São Paulo, for example, are considered to be, as a rule, 15 per cent. less than in Rio de Janeiro and Minas Geraes. Perhaps the average figure, including sacking and transit to shipping port, would be about 7 milreis per 32 lbs.

As the export value for the standard grade 7 is no more than this, and as the planter has still to pay the export duty of 9 to 11 per cent. *ad valorem*, it is evident that a considerable reduction in cost of production must be brought about if coffee cultivation is to continue as a paying industry.

To this end incessant claims have been made for reduction of export dues and transport tariffs, and they have not been left entirely unattended to.

The State of Minas Geraes, for example, has reduced its export tax from 11 to 9 per cent. *ad valorem*, and the freight tariffs on the Central, Leopoldina, and other railways have been reduced 25 per cent. for hulled, and 30 per cent. for unhulled coffee, while a maximum rate of 100 milreis per ton is to be charged irrespective of distance.

Field machinery and implements and all agricultural accessories also are now exempted from import duties, while favours have been extended to mortgagers to free them from foreclosure during the continuance of the crisis. Moreover, a more encouraging field for consumption in France has been opened by the reduction of the import duties into that country from 156 to 136 fr. per 100 kilos. All measures will, however, be ineffectual in warding off collapse in many cases, for the simple reason that many of the new estates have been acquired and developed by means of mortgage loans by persons who have not even the floating capital necessary for current working expenses, and who, during this period of restricted credit, will be quite unable to obtain the assistance necessary for this branch of expenditure.

Return of Exports of Coffee from Rio de Janeiro during the year 1900.

DESTINATION.	Quantity* Bags.	Total* Bags.
United States—		
New York	1,298,151	
Baltimore	289,429	
New Orleans	254,820	
Galveston	24,743	
		1,867,143
Europe, etc.—		
Hamburg	226,836	
Marseilles	79,339	
Havre	77,353	
Copenhagen	41,356	
Trieste	38,389	
Antwerp	32,805	
London	24,541	
Constantinople	20,161	
Southampton	17.127	
Smyrna	15,032	
Genoa	12,516	
Odessa	11,569	
Oran	10,350	
Salonica	6,500	
Algiers	5,675	
Philippeville	3,275	
Rotterdam	2,982	
Bordeaux	2,694	
Bremen	1,753	
Trebizond	902	
Samsoun	875	
Scio	625	
Lisbon	596	
Varna	475	
Barcelona	450	
Rhodes	375	
Dedeagatch	375	
Bougie	375	
Messina	250	
Piraeus	250	
Malta	250	
Naples	177	
Kerassund	125	
Braila	125	
Gibraltar	75	
Dakar	20	
Alexandria	20	
Malaga	10	
Cadiz	10	
		636,613
Other countries—		
Cape of Good Hope	82,880	
River Plate	76,346	
Valparaiso	2,119	
Talcahuano	1,498	
Punta Arenas	295	
Coquimbo	75	
Corral	50	
Antofagasta	40	
		163,303
Coastwise—		
Northern ports of Brazil ..	177,390	
Southern ports of Brazil ..	48,567	
		225,957
Grand total ...		2,893,016
Grand total, 1899 ...		3,504,708
Decrease in 1900 ...		611,692

* Bags of 60 kilos or 132 lbs. each.

Return showing Shipments of Coffee at Rio de Jane during the past five years.

YEAR.	Quantity. United States.	Europe	Cape of Good Hope.	River Plate and Pacific Ports.	Coast-wise.	Total
	Bags	Bags.	Bags.	Bags.	Bags.	Bags
1896 ..	1,724,498	718,484	121,525	82,919	137,532	2,784,9
1897 ..	2,454,613	1,221,074	150,676	74,368	166,003	4.066,7
1898 ..	2,149,902	902,169	118,772	89,679	180,644	3,441,1
1899 ..	2,336,886	719,721	129,240	90,321	228,540	3,504,7
1900 ..	1,647,999	639,015	84.580	81,735	205,661	2,658,9

Return showing extreme prices in cents per lb. for Coff grade 7, in New York, during the years 1898—1900.

MONTH.	1900. From	1900. To	1899. From	1899. To	1898. From	1898. To
	Cents.	Cents.	Cents.	Cents.	Cents.	Cent
January	$7\frac{1}{8}$	$8\frac{3}{8}$	$6\frac{1}{2}$	$6\frac{3}{4}$	$6\frac{1}{4}$	$6\frac{1}{2}$
February ..	$8\frac{3}{8}$	$8\frac{15}{16}$	$6\frac{1}{4}$	$6\frac{3}{4}$	$6\frac{1}{2}$	$6\frac{3}{8}$
March	$7\frac{3}{4}$	$8\frac{1}{2}$	$6\frac{1}{8}$	$6\frac{1}{4}$	$5\frac{1}{2}$	$6\frac{1}{4}$
April . ..	$7\frac{11}{16}$	$8\frac{3}{16}$	$6\frac{1}{8}$	$6\frac{1}{4}$	$5\frac{7}{8}$	7
May ...	$7\frac{1}{2}$	8	$6\frac{1}{4}$	$6\frac{1}{2}$	$6\frac{1}{4}$	7
June	$8\frac{5}{16}$	$8\frac{3}{4}$	$5\frac{7}{8}$	$6\frac{1}{4}$	$6\frac{1}{4}$	$6\frac{1}{2}$
July	$8\frac{15}{16}$	$9\frac{7}{8}$	$5\frac{3}{4}$	$6\frac{1}{8}$	6	$6\frac{1}{4}$
August	$8\frac{1}{2}$	$9\frac{3}{8}$	$5\frac{5}{8}$	$5\frac{3}{4}$	6	$6\frac{3}{8}$
September ..	$8\frac{1}{8}$	$8\frac{5}{8}$	$5\frac{1}{2}$	$5\frac{5}{8}$	6	$6\frac{3}{8}$
October	$8\frac{1}{8}$	$8\frac{1}{2}$	$5\frac{7}{16}$	$6\frac{1}{8}$	$5\frac{7}{8}$	$6\frac{1}{4}$
November ..	$7\frac{1}{8}$	$8\frac{1}{2}$	$6\frac{1}{8}$	7	$5\frac{7}{8}$	$6\frac{3}{8}$
December ..	$6\frac{3}{4}$	$7\frac{1}{2}$	$6\frac{3}{4}$	7	$6\frac{3}{8}$	7

THE FRENCH IMPORT TARIFF.

In the British Chamber of Commerce (Paris) Circular f last month it was stated that the Chamber had not been able ascertain what the intentions of the French Government a as far as the British Colonies are concerned, though they h reason to believe that the Colonial Office is in correspondenc with the colonies that would be affected by the applicati of the maximum tariff, and with the French Governme with a view to seeing what arrangement can be entered into

We are glad to note, however, that Mr. J. J. Marcel h sent more definite news to the *Ceylon Observer*. He stat

* Bags of 60 kilos. or 132 lbs. each.

that the French Law of 24th February, 1900, imposing increased duties on "Denrées Coloniales," which should come into force next February, will again be suspended for a year, so that the duties during that time will remain as they are now and there will be no increase of the present duty on Ceylon tea. A bill to this effect is in preparation and will shortly be laid on the table of the Chamber of Deputies. It would be more satisfactory to know that this French bogie had been entirely exorcised, but the above tidings are, as far as they go, encouraging.

NOTES.

Calcutta Tea Exports. The total exports of tea from Calcutta to the United Kingdom, from the 1st April to the 3rd December, amounted to 121,085,495 lbs.

Calendars. Messrs. W. E. Smith & Co. have favoured us with two pretty little celluloid calendars, the one in pocket tablet form, and the other a combined book marker, paper cutter and inch-measure, a very handy article.

Tea in New York. During October, says the *American Grocer*, 73,120 packages of tea were passed by the appraiser of this port, and only seventy-six packages rejected, of which seventy-two packages were Green tea and four packages Oolong.

Brazilian Tea Plantation. We learn from the *Brazilian Review* that a tea plantation of considerable extension exists near Ouro Preto which might easily, it is claimed, produce 2,000 kilos. of different qualities of tea if skilled labour could be obtained.

Annam Tea. Tea from the Protectorate of Annam is coming into favour at Paris, where it is preferred to the Indian article. Planters in Annam rejoice and hope in time to rule the Paris market, their tea enjoying a customs drawback from being of French colonial origin.

Brazilian Coffee. Coffee receipts at primary ports in Brazil continue very heavy. "Don't be alarmed by sensational cable reports of extensive damage to the Santos crop of next season," says the *American Grocer* to American grocers. "There will be plenty of coffee if it was half destroyed."

Pepper in New York. The stock of black pepper in New York on November 1, as reported by Messrs. J. W. Phyfe & Co., was 13,999 bags and 5,017 cases Singapore, a total of 19,016 packages, against 23,368 bags at same date in 1900; deliveries in October were 6,387 bags Singapore pepper, 6,833 bags Sumatra pepper.

White Pepper. London reports state that supplies and stocks of the white description are small on all sides; the fear has gained ground that a serious shortage will be established in the early spring, which, it is believed, will be responsible for an important rise in the value of the article. There is even a rumour of the formation of a Syndicate similar to the one which handled Black Pepper some little while ago, but this is only a rumour.

Travancore Teas in London. Messrs. George White & Co., in their report of November 21, say: South India has recently been sending some very useful invoices, especially from Travancore, which met with good competition, the produce of the latter district being appreciated because of its characteristic coloury liquor.

Calcutta Tea Sales. At the Calcutta tea auction on Friday, the 6th instant, 17,000 packages were offered, against 17,600 for the corresponding sale of last season. There was a good demand for Pekoe Souchong kinds, which were about 3 pies dearer, while tippy Assam Broken Orange Pekoes received more attention than has been the case for some weeks past. Good medium teas were, if anything, rather weaker. There was some demand for the Colonies, but Bombay buyers were quiet.

Indian Tea Prospects. The crop and season telegrams, for the week ending with the 30th November last, report heavy rainfall in Bengal and parts of Orissa; light and general showers in Madras, Mysore, North-West Provinces, and Bombay; no rain fell in other parts of the country. Prospects are a little better, and prices generally are falling or stationary. But in Baroda, Central India, and parts of the Punjab the outlook is still gloomy, and in Guzerat the situation remains unchanged.

Messrs. Hoe & Co.'s 1902 Pocket Diary. We have received from Messrs. Hoe & Co., Madras, a copy of their 1902 Pocket Diary, containing just about as much useful and every-day information as is possible to be compressed into a book of its class. Besides the year's Diary space, there is a complete ready reckoner in the form of conversion of rupees into sterling; table of interest; and table of wages rates; also lists of Government Institutions and Officers, Business Houses, Postal and other information, etc., and the ever-useful calendar. The price of this neat, handy, and compact little pocket book is ridiculously low, and Messrs. Hoe & Co. are to be complimented on their publication.

Coffee in London. The Scare over. We have all along urged, says the *Produce Markets' Review* of November 16, that it was too early to prophesy as to the next crop, and that rain, which mostly comes in November, would entirely alter the position, and would very likely lead to a second flowering, and add materially to the prospects of another good crop, even if 2,000,000 or 3,000,000 bags less than the present one. The terminal market at once responded to this information by falling 2s 6d, but, with slightly smaller receipts, a steadier tone prevailed, and quotations close only about 1s below those of last week, though about 3s from the highest point reached. For actual coffee there is still not much demand, and at the auctions, which have been only of small extent, prices have shown little change.

A British "ad valorem" Tea Duty. The *Ceylon Observer*, writing of the British *ad valorem* Tea Duty, says:—"The importance of any movement affecting the tea-industry may sometimes be gauged by the chances it has of success in effecting any proposed change. Few causes have started under more unhappy auspices than that of Mr. Shand, for an *ad valorem* duty on tea in the United Kingdom; for it dates from the refusal of Ceylon to put up with such a duty in Australia, and Sir Michael Hicks-

Beach will only draw his reply from the way the strong tide of Ceylon feeling set, as regards the Australian experiment. Mr. Shand has made out his case as soundly as possible. but we cannot regard the case as a sound one for the present. Low country teas have begun to triumph of late and need no relief." Mr. Shand's letter is given on another page.

Ceylon Tea at Odessa.

Mr. Consul-General C. S. Smith, in his report, states that the tea trade during the past year was very bad in South Russia on account of the universal scarcity of money and the bad harvest. "Ceylon and Indian teas are far stronger than Chinese tea, so that if consumers took to their use only half the quantity would be required. Though the consumer may not be aware of it, Indian and Ceylon teas are already largely used for mixing with China teas. It is likely that Indian and Ceylon teas will gradually make their way in the Russian market, but at present, as they are only required for mixing, only particular kinds find a market. Planters who wish to send tea to Russia would do well to employ a regular exporting house for the purpose, and no doubt would recognise that uniformity of quality is much to be desired."

Ceylon Tea Exports.

The total export of Black Tea from 1st January to 2nd December thisyear :—

		lbs.
To United Kingdom is		93,596,160
Against same period	1900	101,292,051
To all other countries	1901	36,235,876
Do. do.	1900	30,918,596
Total shipments to date	1901	129,7423,06
Do. do.	1900	132,210,647

So that Black Tea shipments to London during this year are 7.785,891 lbs. below, and to other countries 5,317,280 lbs. above, those to same date last year; while altogether they show a net decrease of 2,468,611 lbs. The shipments to the United Kingdom during the current month are estimated by the Chamber of Commerce at 10 million lbs. The total export of Green Tea up to the same date this year is 697,360 lbs. The total, on which bounty has been paid this year, up to 30th November is 1,420,468 lbs.

Indian Teas in London.

The *Produce Markets' Review*, of November 16, says :—There is an improvement in the demand, and prices, on the whole, have shown a somewhat firmer tendency. A considerable quantity was again withdrawn from the public sales, as holders evidently were not disposed to accept the lower prices established last week. A large quantity of the withdrawals has, however, since been sold, and, in most cases, at an advance on the bids made at the auctions the market closing with a stronger tendency. The lower qualities, although much dearer than in the early part of the year, are about equal in value to those of the past few seasons, and there appears to be every prospect that present prices will be well maintained. A shortage in the season's production is practically certain, the deficiency being generally placed at 10,000,000 lbs., but as there was a large surplus stock on the arrival of the new crop, there is apparently no reason for any material rise in prices. At the public sales 43,193 packages were offered compared with 55,379 last week, and 19,780 were withdrawn. In the latter a fairly active trade has been transacted privately at prices showing an improvement on those bid in the auctions, and up to the present 36,937 packages have been printed for next week.

LETTERS TO THE EDITOR.

BONE-MEAL AS MANURE—No. I.

Sir,—In your issue of November 30th giving an accou of a General Meeting of the South Mysore Planters' Assoc tion, Mr. Crawford, the President, remarked *inter alia* :

"Dr. Lehmann's remarks (in the course of his lectur about bone-meal as a manure are worth bearing in mi He practically said that this manure was not worth the mon expended on it and planters could obtain a far better res from lime (air-slaked lime for preference) applied in quantit of one ton per acre. He also doubted the benefit deriv from green manuring in the Malnad, *i.e.* planting legumino between the rows and digging the same in." I am inclin to believe that Dr. Lehmann was not so sweeping in h condemnation of bone-meal as a manure, as your extrac from this speech would lead one to believe, but that, like h reference to leguminosæ, he restricted his remarks to t Malnad. If so restricted, Dr. Lehmann's opinion coincid with that of Dr. J. A. Voelcker, Consulting Chemist to t Royal Agricultural Society of England, who, in his "Repo on the Improvement of Indian Agriculture," says : "No lime works beneficially in many ways ; it not only acts itse as a plant food, but it makes clay land permeable to moistu and enables it to absorb potash, ammonia and other sal whilst, not least of all, its presence is required in the proce of nitrification, by which means nitrogenous matters in t soil are made available for the plants' use. Speaking gen rally, lime is more plentifully distributed in Indian soils th in English, that is, deficiencies of it are not so frequent met with. A noticeable exception, however, which I ha found, is in the laterite soil of parts of Southern India, su as the coffee growing districts of Coorg and Mysore, where have reason to believe, a more abundant supply of lime wou be decidedly beneficial."

The soil, we see from the above, starts with a deficien as regards lime, and has, in all probability, suffered still mo from the use of ill-chosen chemical manures. Without suf cient lime in the soil the very best manures are useles This every farmer knows.

In my lecture on Bone-meal as a Manure delivered la March in the hall of the Triplicane Literary Society I show the difference in results from the use of various manures harvests on the Horn Estate near Hamburg in Germany the years '93-'94 and '94-'95.

	Rye	Grain. lbs.	Stra lb
Lime alone	...	1,649	4,(
Lime + 600 lbs. bone-meal	...	3,225	6,3
The increase on 1$\frac{4}{5}$ acres = ...	...	1,576	2,3

I may here add the results obtained by an addition of kai

1 ton lime + 600 lbs. bone-meal ...	...	3,225 lbs. rye.
Do. do. + 800 lbs. kainit =	...	4,580 „ „
Increase ...		1,255

Without farm yard manure or lime, the results were

	Grain. lbs.	Straw. lbs.	To l
	1,014	2,907	3,9
With lime	1,649	4,065	5,7
With lime and bone-meal	3,225	6,375	7,6

Speaking of phosphoric acid Dr. Voelcker says :—"On t other hand, the somewhat lower amount of phosphoric ac

found in the laterite soil of Mysore, together with the greater demands by the coffee plant upon the mineral ingredients of the soil, may be the reason that bones are in those parts used extensively by the planters and are considered necessary. The benefit of their application may lie also in the fact that they supply lime and nitrogen as well as phosphoric acid."

If then, the soil be deficient in lime and phosphoric acid, can one possibly say that, bone which contains roughly 31 per cent. of lime and 23 per cent of phosphoric acid, is not worth the money paid for it. Of course, it is to be presumed that the soil is not wanting in lime, or, all the manures on the market would be useless. With the great amount of potash, lime, and phosphoric acid in the ash constituents of coffee it is evident *the* manure for coffee (always pre-supposing a sufficiency of lime) must be kainit or sulphate of potash and bone-meal. To strengthen this, I give below a copy of a report I have just received from the Superintendent of the Empress Botanical Gardens, Poona.

SIRUVALLUR, Yours faithfully,
7th December, 1901. JOHN KENNY.

[Report from the Superintendent.]

Empress Botanical Gardens.
POONA, *5th December*, 1901.

JOHN KENNY, Esq.,
Madras.

DEAR SIR,—In reply to your favour of the 28th November I beg to say that the bone-dust sweepings you gave me for trial were given to oranges and coffee plants.

Two rows of oranges which did not bear well, owing to the damp due to a water channel running alongside, bore an excellent crop of oranges when an application of the bone manure, about 5 lbs. to each tree was given. They gave from 100 to 200 oranges, while, before the application, they did not give half as many.

I can say that my coffee trees have improved decidedly. They were pale yellow for some years. But since I used your manure they have become quite healthy and shining green. The berries have generally improved in size. The number of clusters on each branch and the number of berries in each cluster, show an increase of 30 per cent.

I may add that I have full confidence in the excellent qualities of bone manure. but am sorry I cannot give it a thorough trial in the Gardens.

BONE-MEAL AS MANURE—No. II.

SIR,—Allow me to add to his former report the following lines received from Mr. P. S. Kanetkar, Superintendent, Empress Botanical Gardens, Poona, one of the smartest and most painstaking former pupils of Mr. Mollison, the present Director-General of Agriculture for India.

He says :—"I forgot to inform you in my letter of the other day that I was one of those in charge of experiments with making Gul (raw sugar) from sugarcane manured with different manures at the Experimental farm, Manjri near Poona. The Gul got from the bone-manured plot was the best of all, golden-yellow in colour with sparkling crystals and as firm as could be desired. It kept dry in the monsoon, when Gul made from poudrette and oil-cake manures generally gets pasty from the damp."

JOHN KENNY.

SIRUVALLUR,
11th December, 1901.

GENERAL ARTICLES.

BOIS IMMORTEL AND "INCIDENTAL INCREMENT."

That trees and plants of all descriptions require and obtain food in excess of the nutriment such as manures, etc., given to the soil by the cultivators, is generally recognised; but the extent and nature of this excess, known usually as the "Incidental Increment," can at present only be surmised, including, as it does, material from widely different sources, such, for example, as rain-water, decaying vegetable matters, and the decayed bodies of animals, insects, etc.; to mention a few of the contributors to plant nourishment.

Professor Carmody, the Government Analyst in Trinidad, experimenting in this direction, has analysed the flowers of the Bois Immortel (*Erythrina umbrosa* or *E. velutina*, of the Natural Order *Leguminasæ*), a tree growing to a height of 60 feet, and used as a shade for cacao plants. This tree annually sheds a luxuriant profusion of flowers, which he finds contain a high percentage of nitrogen, and, decaying rapidly, afford valuable nutriment to the surface soil.

The nitrogen which has been taken from the subsoil by the Bois Immortel is given back, through the medium of the flowers, in a readily assimilable form, for the immediate nourishment of the cacao trees, which flourish in its shade.

Professor Carmody finds an average of 6 per cent. of nitrogen in the flowers, but this comparatively high percentage drops to 4 per cent. by the end of five days, when the flowers are picked and dried. In the natural order of things the flowers would decay and nourish the ground before the five days had expired.

The following figures show the relationship between the nitrogen-content of the cacao bean and the Immortel flowers :—

	Nitrogen per acre.
250 cacao trees = 500 lbs. cured cacao, containing 2½ per cent. of nitrogen	= 12½ lbs.
50 Immortel trees = 500 lbs dry flowers, containing 4 per cent. of nitrogen	= 20 ,,

The following figures show the rapid loss of nitrogen that occurs in the dried flowers as mentioned above :—

	Fresh flowers.	Two days old.	Five days old.
Nitrogen per cent. ...	6·32	5·16	4·14

It should be pointed out that this apparently highly suitable shade tree is not unique, there being other trees shedding a profusion of flowers (with possibly as high a nitrogen-content), and just as suitable as a shade for the cacao, and which, when cut down, yield saleable products, such as timber and bark.

GUTTA-PERCHA FROM A CHINESE TREE.

Specimens of a peculiar Chinese plant, known as "Tu-chung," were forwarded to Kew more than ten years ago for examination, with the statement that the tree is cultivated for its bark, which is a most valued medicine. The plant was named *Eucommia ulmoides* by Prof. D. Oliver, and the chief interest attaching to it was the presence in the tissues of an elastic gum, resembling caoutchouc or gutta-percha. If the bark be broken across this appears in the form of innumerable silvery threads, and in a later examination Prof. F. E Weiss found the yield from the dry bark to be about 3 per cent. Since these preliminary investigations further material has been obtained as well as living specimens of the plant, which are at present growing in several botanic gardens in Paris and at Kew, and with these a much more satisfactory examination has been possible (*Kew Bulletin*, Nos. 172–174, p. 89).

The order of the plant is difficult to decide owing to its peculiarities, and while Oliver and Baillon agree in placing it among the *Trochodendraceæ*, it is referred to *Hamamelidaceæ* by Solereder. Wherever it is placed according to its morphological characters, however, the allied plants do not yield rubber or gutta-percha. The elastic gum produced by the plant is found to be of the nature of gutta-percha rather than caoutchouc, and the vessels containing it are much more similar to the cells which yield true gutta-percha from *Dichopsis*, than to the laticiferous vessels of the common rubber-yielding trees. It occurs in every part of the plant except the wood and the outer parenchymatous layer of the young roots. Some preliminary experiments to ascertain the yield and quality

of the gutta have been made by MM. Dybowski and Frow on material obtained from living plants in Paris. The plant which they had at disposal was only very young, and although the bark was found to be full of laticiferous vessels it was not considered advisable to remove any branches for examination. The dried leaves yielded 2·25 per cent. of substance soluble in toluene, which, considering that the fresh leaves contained 70 per cent. of moisture, is not a high return. The fruits, however, gave a much better result, as when undried, containing 7·4 per cent. of moisture, they yielded over 27 per cent. of substance solube in toluene. The product obtained was of brown colour, and behaved exactly like gutta-percha. When immersed in hot water it softened, and could then be stretched out into thin sheets, like gold-beater's skin, or moulded, while on cooling it again became quite hard. As gutta-percha it was stated by experts to be of good quality.

The propagation of the plant from seeds is very uncertain, as, apart from the difficulty of obtaining supplies, germination is slow and irregular. One sowing gave a single seedling after the lapse of six weeks, a second after five months, and others later. Cuttings, however, are found to give much better results, as they will strike at any season and give vigorous plants, though spring, when the branches are still leafless, seems to be the most favourable time for taking them. The plant has proved to be very hardy, for at Kew a specimen obtained in 1897 from Paris has grown successfully in the open without protection, and in Paris two unprotected plants have survived exposure through two winters to as low a temperature as 18° or 19° F.

Eucommia ulmoides may therefore prove of value as a source of gutta-percha, and the Jardin Colonial is already making experiments with the plant in Annam, Tonkin, and North Africa.

ART OF PREPARING TEA FOR USE.

A CANADIAN METHOD.

It is singular, to say the least, that nothing, is ever done by tea dealers, in this country to educate or enlighten their customers in the proper manner of preparing their tea for use, to study the character of the water, or to preserve its aromatic properties after purchasing. Good tea, like good wine, can be kept intact for years with considerable advantage to the dealer and consumer alike, and there is no valid reason why consumers of tea should not be as particular and fastidious as drinkers of wine. But to obtain a good cup of tea, in the first place the consumer should purchase only the best tea, it requiring much less of the finer grades to make good tea than of the common kinds, and will prove the most economical in the end. In the proper preparation of tea for use the quality of the infusion is much affected also by the character of the water as well as by the method of making or drawing it. Tea being an infusion and not a decoction like coffee, it should be brewed, not stewed, the chief object being to extract as much of the theine or refreshing principle as possible and as little of the tannin or astringent property as can be at the same time without either boiling or overdrawing it. Many tea drinkers who imagine erroneously that a very dark-coloured liquor indicates strength, boil the leaves; while others again spoil the infusion by first putting the leaves in boiling water. Some again place the leaves in cold water and then put the vessel on the fire to boil, prolonged infusion being another serious mistake. All of these improper methods produce the same evil results, *viz.*, that of extracting an increased amount of the tannin, thereby destroying the true colour and flavour of the tea by imparting a blackish colour and giving a bitter or astringent taste to the liquor. When tea has been once boiled or overdrawn, the increased quantity of tannin extracted can be readily detected by the extreme dark colour of the liquor as well as by its bitterly astringent flavour. Another reprehensible practice of some tea makers is that of adding fresh leaves into the teapot with those that have been already once drawn, as it cannot add to either the strength or flavour of the tea by putting more leaves in the teapot after the first drawing, for the simple reason that the tea water will not extract the theine from the dry leaves of the fresh tea. Only fresh boiling water will do this effectually, the water once used only increases the amount of tannin extracted, thereby darkening the colour and destroying the flavour, and merely adds to the quantity of leaves already in the vessel without at all affecting the active principle, theine. So that if be required to increase the quantity or strength of the infusion already in the pot, some fresh tea leaves must be drawn in a separate vessel and the liquor poured in that already made. the proper preparation of tea for use, therefore, the object sho be to extract as little of the tannin as possible and as much of theine and volatile oil as can be extracted without permitting infusion to boil or overdraw. To best obtain these most desira results, put the requisite quantity of tea leaves in a covered ch or earthenware pot—all tin and metal vessels should be avoide and pour in freshly boiling water that has been boiling for at le three minutes, and then allow the vessel to stand where it keep hot, without boiling, for from eight to ten minutes bef serving, according to the variety of tea used. There will b sparkle and aroma about tea made from fresh boiling water in t manner that it will not receive from the flat, hot water that been boiled too long or repeatedly. In the stated time, while tea is drawing only the refreshing and exhilarating propertie the theine and volatile oil—are extracted from the leaves, a lon infusion only dissolving and extracting the astringent and d terious principle—tanic acid—which impairs digestion and inju the nervous system, for which causes alone all boiled or overdra tea should be avoided. In moderate strength it requires about teaspoonful of good tea to a half-pint of boiling water and ordinary half teacupful of leaves to every quart of boiling wa the latter making a fairly strong infusion for five persons. Ch and Japan teas require from eight to ten minutes to draw thorou ly, the former requiring but little milk and sugar while Ja teas are more palatable without the addition of either. In Ceylon, and Java teas generally should not be allowed to d more than from five to seven minutes at the outside after the b ing water has been poured on, as prolonged infusion makes flavour of these varieties particularly mawkish and bitter, while addition of an extra quantity of both milk and sugar greatly proves their drinking qualities.—JOSEPH M. WALSH, in the *Ca dian Grocer*.

A TEA SWEETENER.

An article in the *Kew Bulletin* states that Mr. Cecil Gosli H. B. M. Consul at Asuncion, Paraguay, has sent to Kew s leaves of a plant which has lately been discovered in Paraguay Dr. Bertoni, an Italian botanist, and director of the Agricultu College there. This plant, which has probably been known to Indians for a hundred years or more, and whose secret has, as usu been so faithfully guarded by them, grows in the Highlands Amambai and near the source of the river Monday, not be found, it is said, further south than this. It is a modest sh growing side by side with the weeds and luxuriant grasses of t district, and only attains a height of a few inches. The leaves small and the flowers still more diminutive, and the Indians cal Caá-êhê, meaning sweet herb, because of its sweetness, a few lea being sufficient to sweeten a strong cup of tea or coffee, giv also a pleasant aromatic flavour. Its discoverer does not, howe believe that the Caá-êhê bears any relation to the saccharine p perties of sugar; and the experts at Kew have not succeeded identifying it with any plant in the Kew Herbarium. The K organ remarks that there is no doubt that the plant possesses v strongly the power of stimulating the sensation of sweetness, for smallest piece of a leaf causes a persistent sweetness in the mou

AN *AD VALOREM* DUTY FOR TEA IN THE UNITED KINGDOM.

Mr. C. Shand has addressed the following letter to the Hon. the Chancellor of the Exchequer :—

As the period is approaching when the programme of the Natio Ways and Means will be under your consideration, I have again honour of soliciting your attention to the question of the Imp Duty on Tea, which falls so inequitably on the cheap descriptio which are chiefly consumed by the bread-winning classes. In event of the War in South Africa being prolonged, and the exig cies of the Public Service precluding the possibility of y reducing the Duty, however desirous you may be of doing so venture to suggest that the injustice of its incidence would redressed by your substituting an equivalent *ad valorem* duty the place of the present rateable one. As the principle of *ad valo* duties is, as I think you will admit, the basis of all equitable taxati

whenever it can be applied, and is the one adopted in nearly every civilised country when it is desired to make those articles of imported and exported merchandise, which vary greatly in quality and value, contribute to Revenue. There is, I think, nothing unreasonable in my suggestion, especially as there would be neither difficulty nor trouble in assessing the value and levying the duty. You are aware that practically all the Tea imported into the United Kingdom is sold by the Importers (chiefly by auction) in bond, and that the duty is paid by the buyers when they wish to take delivery of their purchases. In their entries at the Custom House the buyers would assess the value at the prices they paid for the Tea, and calculate the duty to which it was liable. The Custom House clerks would check the valuation by simply inspecting the duty-payers' "bought-notes" or contracts. Thus little more trouble is involved in levying an *ad valorem* duty than in collecting the rateable one. I invite you kindly to compare the facility and simplicity of this method with the trouble entailed in levying the duty on Sugar, Tobacco, Spirits and other dutiable goods. The adoption of the suggestion will be doubtlessly opposed by all those who believe that expediency and not justice is the predominant principle that directs your actions.

RUBBER PLANTING IN BURMAH.

The Secretary of the Planters' Association of Ceylon has placed the official correspondence on this subject at the disposal of the Press. The chief letters are the following :—

THE HON'BLE THE COLONIAL SECRETARY, Colombo.

SIR,—I have the honour to enclose copies (under separate cover by post) of a memorial to the Secretary of State for the Colonies from the Planters' Association and others (in triplicate) duly signed on the subject of the experimental cultivation of Pará Rubber in Burmah with a view to prevent a continuance of Government competition with private enterprise. In asking that the said memorial may be forwarded by an early mail to London for submission to His Majesty's Government, I would add that it is trusted that His Excellency the Governor will be graciously pleased to commend the matter to favourable consideration.

Requesting an acknowledgment.

I am, Sir, your obedient servant,
(Signed) A. PHILIP,
Secretary to the Planters' Association of Ceylon.

KANDY, *September 5th*, 1901.

THE SECRETARY TO THE PLANTERS' ASSOCIATION OF CEYLON, Kandy.

SIR,—Referring to your letter of 5th September last, forwarding a memorial to the Secretary of State for the Colonies from the Planters' Association of Ceylon on the subject of the experimental cultivation of Pará Rubber in Burmah by the Government of India, I am directed to inform you that His Excellency the Governor has received a despatch from the Secretary of State intimating that although Mr. Secretary Chamberlain does not think that he would be justified in objecting, in the interests of Ceylon, to any encouragement which the Indian Government may think it wise to give to the development of a rubber industry in India, he submitted the memorial together with a copy of His Excellency the Governor's despatch forwarding it to the Secretary of State for India.

2. A reply has been received from the Indian Office stating that the Government of India have undertaken the experimental cultivation of rubber producing trees in Burmah with a view to developing the resources of that country and to the ultimate encouragement of private enterprise there, and that there does not appear to Lord George Hamilton to be any sufficient ground for making a representation to the Government of India on the subject.

I am, Sir, your obedient servant,
(Signed) A. G. CLAYTON,
for *Colonial Secretary.*

Colonial Secretary's Office,
COLOMBO, *December 4th*, 1901.

Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant the appointment of "Purveyors to Her Majesty The Queen and Empress of India" from the year 1837 until the time of her death, have now had the honour of being appointed by Royal Warrant "Purveyors to The King."

THE COFFEE TRADE.

In *La Geographie* (Paris) M. Lecombe gives figures showing his estimate of the annual coffee output from 1896 to 1900, inclusive, as follows: Total for the world, 864,000,000 kilograms, of which the Western Hemisphere furnished 747,000,000 kilograms, and Brazil alone 568,000,000 kilograms. From this it is reasoned that the price of coffee depends almost entirely upon the Brazilian output. This writer states that the annual consumption of coffee, on an average, is greatest in Denmark, 5·87 kilograms per inhabitant, and least in Russsia, five one-hundredths of a kilogram for each of its people. The averages of annual consumption for a number of other countries which are not coffee producers, for each individual resident thereof, are stated to be as follows, in kilograms: Norway, 4·63; Sweden, 4; United States, 3·95; Belgium, 3·85; Germany, 2·53; France, 1·82; Austria-Hungary, 1; Italy, 0·42; and England, 0·39. For some reason Holland, one of the greatest coffee-consuming countries, is not mentioned in this article: Comparative tables show that the consumption of coffee is increasing rapidly from year to year, but not to a greater degree than coffee production.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

Exchange.—Extremes during the week ending October 25th were $11\frac{5}{8}$d.—$11\frac{29}{32}$d. for 90 d/s Bank paper and $11\frac{11}{16}$d.—$11\frac{15}{16}$d, for private. The average Bank 90 d/s counter-drawing rate for the week comes out at $11\frac{3}{4}$d., the corresponding sight rate being $11\frac{11}{16}$d. against $11\frac{3}{4}$d. the average sight rate of the *Camara Syndical.*

Coffee.—Entries at Rio and Santos during the week ending October 25th were again large, being 522,102 bags as compared with 478,658 bags for the preceding week and 385,028 bags for the corres ponding week last year; the aggregate entries for the same periods were 7,517,362 and 5,087,275 respectively.

Embarques (shipments) were also very large, 520,735 bags against 414,646 the previous week and 250,970 the corresponding date last year.

Sales show a decrease of 44,000 bags on last week's figure, or 231,000 bags against 275,000 and 267,000 last year.

Stocks continue to increase and are now 1,973,420 bags or 57,024 bags larger than last week's and 470,432 bags more than that of last year same period.

CANADIAN TEA TROUBLES.

The following appears in the New York Tea, Coffee, and Sugar *Journal*, which quotes the Montreal *Herald* as its authority :

It will cost more to satisfy Canada's thirst during the next twelve months than it did during the year just past. This increase in expenditure for beverages will not be due to the fact that more alcoholic stuff is to be consumed—some people say that is never done to the limit—but because the price of tea has advanced and is still going up. The tea men all say when asked as to the condition of the tea market, 'Prices are firm.' This means teas have advanced from a cent-and-a-half to two-and-a-half cents a pound. An increase like this looks like a very small affair, but most men would find it very embarrassing to settle the increase for the whole of Canada. Last year the Dominion brewed twenty million pounds of tea. There will be as much consumed this year. Now an increase of two cents a pound in the price amounts to four hundred thousand dollars on a year's supply. General shortage in tea crops of India, Ceylon, Japan, and reductions in the production in China are the causes of the scarcity of tea, which will be more severely felt in London than elsewhere, as London is the greatest of tea towns. Half the crop of the world finds its way into the capital of England in the course of the year, and from there is distributed all over the world. In Japan this year a shortage of a million pounds in the crop is anticipated. Prices have already advanced there. India and Ceylon are suffering from over-production. The plantations of these two countries were extended so rapidly during the last few years that they produced more tea than the world wanted. With cheap labour and favourable climate

and soil, the planters were able to put a fine quality of green tea on the market so cheaply that China could not compete, and Chinese growers were driven from the market. This is shown by the export figures of Foo Chou, the port from which all the China greens come from. Last year 5.000,000 were sent from this port. So far this year, and the exporting season is almost over, 92,000 pounds only have been shipped. The Japanese teas are of higher quality, and were not affected to the same extent by the Indian and Ceylon invasion. The planters of these two countries, in spite of a splendid crop and the driving of China from the market, did not make money. So this year, before the planting period, they combined to curtail production. The area devoted to tea cultivation was materially reduced. Then the unexpected happened. This year's crop has been largely a failure. The reduced area given up to tea did not produce more than half a cup. Now the world's tea supply is away below what it should be. Montreal is the great tea town of Canada, and conditions all over the country can be judged pretty well by those here. Last year tea was very cheap, and everyone loaded up at the beginning of the season with enough to last a year. This year, with prices up, the trade will probably buy in smaller quantities, and watch for a break in the market. The quality of tea sold is likely to be inferior. Candians have fallen into the habit of buying teas at a special price. There are 25c. teas, 30c., 40c., and 50c., which are favourites with housekeepers, and they will not change their prices to accommodate any fluctuation in price in Japan. The wholesaler and the retailer are not going to sacrifice their profits, so a poorer quality of tea will be put up in the 25c., 30c., 40c., and 50c. packages this year. And everyone will be happy.

PRODUCE AND PLANTING.

Indian tea seems to be making some progress in France, if we may judge by the following paragraph, which is taken from the Sunday edition of the New York Herald, published in Paris on the 10th instant: "On Friday, from four to seven o'clock, an enjoyable reception was given at the Indian Tea Rooms, Faubourg Saint-Honore. Parisian society was fully represented, and the band of the Concerts Lamoureux added an additional charm by the perfect rendering of choice selections from their repertory. Among those present were: Comtesse de Montebello, Comtesse de Boisgelin, Comtesse du Bouzed, Marquise de Bryas, Comtesse Guchelu, Comtesse de Fontenaille, Comtesse Bobrinsky, Baronne de Nitray, Mme. Le Flaguais and a party of friends, and MM. Bernard and Labaye."

In the matter of the private sale of tea, some of the local Grocers' Associations do not seem disposed to accept the view of the Federation. At a meeting of the Northern Council of Grocers' Associations, held at Manchester, the Honorary Secretary announced that the Federation Secretary had forwarded a circular in regard to the private tea auctions. It was suggested in the communication that members of Associations should write forthwith to the firms with whom they were doing business, protesting against the secret tea auctions, and asking if they (the firms) supported these sales. Councillor R. B. Robinson thought it was not their business to approach the tea firms so long as the firms conducted their business on legitimate lines. It was going beyond their province to interfere in the way suggested in the circular. No action was taken on the matter. At a meeting of the Oxford Grocers' Association, the President remarked that he should not trouble whether the tea firms supported private tea auctions or not. He should buy where he could get his goods cheapest. At a meeting of the Dukinfield Association a member said the suggestion of the Federation was preposterous. It would be child's-play to ask a tea firm how they got their teas, and if he did it he should expect to be quickly told to go to the devil. He did not see how it affected them. His opinion was that it only affected the large firms. He moved that the matter should pass as read, and the motion was unanimously agreed to.

"Mr. William Mackenzie, Ceylon tea commissioner, was in Toronto a few days last week," says the *Canadian Grocer* of November 8. "After calling on the wholesale trade he was much impressed with the progress that was being made with Ceylon greens. He said they were making equally good progress in the United States."—*H. and C. Mail.*

DISTRICT ASSOCIATIONS.

WYNAAD.

Proceedings of a General Meeting held at Meppadi Cl Wednesday, 4th Desember, 1901. PRESENT:—Messrs. A bott, Atzenwiler, Behr, Carver, Day, Lance, Mackinl Mackenzie, Nicolls, Powell. Taylor, Trollope, Winterbotha Waddington, and G. Romilly (*Honorary Secretary*). M H. Atzenwiler (*in the chair*).

1. Proceedings of last meeting were taken as read.

2. **Tea Cess.**—The Honorary Secretary stated that all the T proprietors in the district had now contributed towards the Fore Market Fund. A petition to the Viceroy praying for the impo tion of an export tax on Indian tea to provide funds to be appl in promoting the consumption of such tea in countries outside United Kingdom, was signed by all the Tea proprietors present.

3. **Coffee Cess.**—Read correspondence between the Chairm U. P. A. S. I. and the Honorary Secretary. Read U. P. A. S Circulars Nos. 95, 97, 100.—Recorded.

4. **Tea theft.**—Read correspondence with the Inspector-Gene of Police. Mr. Waddington stated that energetic proceedings w at last being taken by the Police on his complaint of 12th Octob

5. **Mr. de Niceville's visit.**—Read U. P. A. S. I. Circular No. The Honorary Secretary was instructed to write and arrange itinerary for Mr. de Niceville in the Wynaad.

6. **H. M. the King's Coronation.**—Read U. P. A. S. I. Circul Nos. 98, 99, 101. It was resolved that in the opinion of this As ciation it was unnecesary to present an address, but that sanction should be accorded for our representation at the Coro tion ceremony, Mr. Hodgson's offer should be accepted.

7. **Annual Meeting.**—It was resolved to hold the Annual Meeti to pass the report and accounts for the current year on Wednesd the 8th January, 1902. The Honorary Secretary gave notice th he should then resign and not offer himself for re-election.

8. The following papers were laid on the table:—

U. P. A. S. I. Circular No. 92. French Import Tariff.
94. Assam Labour Trouble.
Indian Tea Association circulars.
Proceedings of Kanan Devan a
Coorg Planters' Associations.
Indian Gardening and Planting.
Planting Opinion.

A vote of thanks to the chair terminated the proceedings.

(Signed) H. ATZENWILER,
Chairman.
(,,) G. ROMILLY,
Honorary Secreta

SHEVAROY.

Proceedings of the quarterly General Meeting of the S. P. A held in the Victoria Rooms, on Monday, the 2nd Decembe 1901, at 1 p.m. PRESENT:—Messrs. W. J. Lechler, Larg Rev. J. M. Kempff, Messrs. Travers-Drapes, C. G. Lechle C. Rahm, W. Rahm, R. Gompertz, *Honorary Secretary.*

Read letter from the Hon'ble Mr. Acworth forwarded wit Secretary's Circular No. 98/01 proposing that the tea, coffee an indigo industries should be invited to unite in purchasing suitable casket and presenting a loyal address to the King-Emper on the occasion of his coronation.

Read also Secretary's Circulars Nos. 99/01 of 27th November an 101/01 of 30th November the first asking District Associations they would elect Mr. Hodgson to represent the U P. A. S. at the coronation; and the second forwarding a letter from th Chairman saying that he foresaw difficulties in carrying ou

Mr. Acworth's proposal as each industry would probably wish to elect its own representative. Forwarding also an alternative suggestion by Mr. Hodgson that the U. P. A. S. I. should subscribe £5[illegible] and that a subscription of Rs.1,000 should be raised among S. I. Planters with which a suitable casket might be purchased. to be presented by a planter selected by the District Associations.

Resolved that this Association thinks that the S. I. Planters could not have a better man than Mr. Hodgson to represent them at the coronation of His Majesty the King-Emperor and that he should be formally requested to do so.

Resolved that in the opinion of this Association the U. P. A. S. I. should present its own casket and address and that they are consequently in favour of Mr. Hodgson's proposal.

Read letter from Messrs. Willcocks & Co. asking for delivery instructions for the samples of manure promised.

Resolved that they be requested to deliver them free at Madras to any firm they may prefer, with instructions to advise the Honorary Secretary, S. P. A. (on their arrival in Madras). who will pay the rail charge from there on.

Read Circular No. 82 from the Secretary, I. T. A., inviting orders for Mr. H. Mann's pamphlet on the Tea Soils of Assam and Tea Manuring.

Resolved that two copies be ordered.

The Chairman's motion *re* the Proposed Coffee Cess was then put. *viz.*,

That the scheme suggested in para. 3 of the Chairman's letter of the 18th October be adopted; and that, if carried by a majority of at least ⅔ of all the coffee planters who vote on it, in all the District Associations, the Chairman be authorized to take immediate steps to carry it out as far as may be possible with reference to the present season's crop; during curers to exempt those who inform him that they have already subscribed, since the last Conference, to the extent of their voluntary subscriptions.

For.		*Against.*
7		
1 (by proxy.)	Total ...	1
Total ... 8		

Carried by 8 to 1.

The following letters were read and recorded :—

Tahsildar's letter dated 1st November, 1901, stating that he has received no orders to hasten despatch of Camp day's notice.

Circular No. 91/01 from Secretary, U. P. A. S. I., dated 4th November, 1901, forwarding letter to the effect that reduced freight will be tried on coffee on Madras Railway for 12 months.

Circular No. 92/01 from Secretary, U. P. A. S. I., dated 5th November, 1901, stating that Bengal Chamber of Commerce thinks that as the matter of French import duties is receiving the careful attention of His Majesty's Government, a memorial at present would be superfluous.

Circular No 93/01 from Secretary, U. P. A S. I., dated 6th November, 1901, stating that Mr. deNiceville will visit South India early in January and will call on Secretary who will prepare itinerary, if necessary information be furnished.

Circular No. 94/01 from Secretary, U. P. A. S. I., dated 6th November, 1901, forwarding copy of letters from Indian Tea Association to Chairman, thanking S. I. Planters for their sympathy with their brethren in Assam.

Circular No. 95/01 from Secretary, U. P. A. S. I., forwarding correspondence between Secretary, U. C. G. Co, and Chairman, regarding latter's circular of 18th October.

Circular No. 96/01 from Secretary, U. P. A. S. I., stating that London Committee have drawn up a memorial to Viceroy about the Cess on Tea

Circular No. 97/01 from Secretary, U. P. A. S. I., forwarding copy of letter from the Secretary of the U. C. G. Co. to Chairman.

A number of books and papers received during the month were laid on the table.

ROBT. GOMPERTZ,
Honorary Secretary, S. P. A.

MARKET REPORT.

[*Per Mail advices of 22nd November* 1901.]

COFFEE.

The London Commercial Record says:—Public sales have again been held on only one occasion since our last, and the supplies offered have been very meagre. East India met with a fair demand and sold at full prices to some advance. Dumont Santos realised fully valuations. Transactions in other descriptions call for no comment. In the market for "futures" there have been fluctuations, reports of copious rains depressed prices, although subsequent cables said the moisture had come too late to materially benefit the crops. Yesterday March delivery Santos sold at 36s 9d to 36s 6d, May at 37s 7½d to 37s 4½d, and September at 38s 6d.

Auction supplies to-day embraced:—41 half-bales Mocha, 477 bags Costa Rica, 47 bags Mexican, 40 bags Salvador, 18 bags New Granada, 116 bags Ecuador, 698 bags Nyassaland, 5 bags Jamaica, 46 bags Nicaragua, 41 bags Colombian, 200 bags washed Rio, and 35 bags washed Santos. The sales were of small importance; they went off well and values remained unchanged.

London ...	... Santos ...	March delivery	... 36s 6d.
New York	... No. 7 Rio...	,,	... 6·70 cents.
Hamburg...	... Santos ...	,,	... 36¼ pf.
Havre ..	... Santos ...	,,	... 45½ francs.

Imports, Deliveries and Stock of Coffee in London are as follows :—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	12,267	15,936	42,382	33,208
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	17,619	14,590	27,036	17,310

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[w. 1-10-98—t.f o.]

The preceding figures exhibit—	Tons.
In the Imports an increase this year of ..	9,174
Home Consumption an increase of	3,029
Export an increase of	9,726
Stock a decrease of	3,669

Tuesday's auctions passed off as under :—

CEYLON.—*Plantation.*—3 casks 3 barrels 1 bag sold, smalls 51s, middling 87s 6d, bold 107s.

EAST INDIA.—Of 357 bags catalogued 200 bags *Coorg* sold, low middling grayish 55s, peaberry 71s.

GUATEMALA.—84 bags half sold, smalls 42s, bold 66s 6d, peaberry 56s.

COLOMBIAN.—14 bags sold, damaged bulked, bold common dark greenish 56s 6d.

BRAZIL.—Of 395 bags washed Dumont Santos 105 bags sold, common medium grayish 39s, extra bold 49s 6d. Of 2,767 bags unwashed Dumont Santos, quay terms, rather more than one-half sold, fair to good bright greenish slightly foxy smalls 36s to 37s, medium 38s 6d to 39s 6d, bold 41s, peaberry 44s. 358 bags washed Rio and 588 bags Bahia were bought in.

Brazil futures strong. Receipts—Rio 15,000, Santos 42,000. Exchange 11 31/32d. March 37s, May 38s, July 38s 3d, September 39s, December 36s 3d. New York opens 10/15 points higher.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99. Bags.
Rio ...	3,059,000	1,417,000	1,845,000	1,534,000
Santos ...	5,972,000	4,614,000	4,013,000	3,230,000
Total ...	9,031,000	6,031,000	5,858,000	4,764,000
Crop ...	—	10,900,000	8,971,000	8,772,000

Rio Exchange 11 31/32d, previous day 11 7/8d.

HAVRE, *November* 21.—Good average Santos November opened quiet at 44¾f and closed steady at 44¼f., December opened at 45f. and closed at 44½f., March opened at 46f. and closed at 45½f., May opened at 46¾f. and closed at 46¼f., September opened at 47¾f. and closed at 47¼f.

HAMBURG, *November* 21.—Good average Santos November opened quiet at 35½pf. and closed steady at 34¾pf., December opened at 35½pf. and closed at 35pf., March opened at 36¾pf. and closed at 36¼pf., May opened at 37½pf. and closed at 37pf., September opened at 38½pf. and closed at 38pf.

NEW YORK, *November* 21.—Closing prices of No. 7 Rio were as follow :—

	Nov.	Dec.	Jan.	Feb.	Mar.
November 21...	6·45	6·45	6·50	6·60	6·70
November 20...	6·50	6·50	6·60	6·70	6·80

East India sold in Public Sale since 14th November, 1901.

Mark.	District.	Size 1		Size 2.		P.B.		T.	
Matheson's Polli Betta ...	Coorg ...	220	not sold	161	53/	67	70/	45	45/
,, Woshully ...	,,	157	,,	140	55/	60	71/		

TEA.

INDIAN.—The quantity brought to auction was again moderate, the total for the week being 40,500 packages, compared with 41,000 packages in the previous period, and 39,000 packages last year.

Quality has been of a very useful description, with a limited offering of really high-class tea. The continued determination of importers to keep the weekly sales within reasonable limits has had a beneficial effect and caused a steady to harder tone throughout, excepting perhaps for commonest, which have scarcely maintained their position. With clean Pekoe Souchongs obtainable at about 5¼d per lb., there has been rather more general buying in these, but the anxiety to purchase manifested when the same class was fully ½d per lb. dearer has disappeared; the spurt was evanescent, had the temptation to realise been less strongly demonstrated it might have had a longer life. A little more attention has been directed to medium and fine, the fall below these tending to this and many of the better kinds have been beneficially affected, particularly in the case of fine Assam and Dooars Broken Pekoes, though Pekoes between 7d and 9d per lb. have met a disappointing enquiry and look very cheap. Some very fair Darjeelings for the time of year have been shown and received improved support, the best comparati prices being paid for export.

Present conditions are rather favourable to the good high grades, and as the best of the Ceylon crop has probably been de with for the time being, if common consuming kinds keep abo their current easy level, a firmer market may result for those abo them. In this connection, however, it is to be remembered that t coming Budget may later prove a disturbing factor, as the tra will doubtless be disposed to "hedge" a little by holding some l tea in stock, probabilities being altogether in favour of the Du not being decreased whatever may happen in the opposite directio

South India has recently been sending some very useful invoic especially from Travancore, which met with good competition, t produce of the latter district being appreciated because of characteristic coloury liquor.

For 31,800 packages on Estate Account 7¾d per lb. was secure contrasted with 7d per lb. for 32,800 packages, and 8¼d per lb. f 36,100 packages in the two preceding seasons.

CEYLON.—Catalogues comprised 19,600 packages opposed to 17,2 packages on the 12th instant, and 19,400 a twelve month ago.

Demand continues strong for price, a fractional advance bei occasionally paid for Pekoe Souchongs, few of which could bought under 5¾d per lb. There was also good biddings for choice and stand-out lots, but medium attracted diminished attention a in many instances went in favour of buyers. These descriptio are now to be purchased on such a basis as must cause them to freely into consumption, and they should therefore shortly bene by the low range established, especially in view of immedia smaller shipments from the Island. A pleasing future was t increased support afforded from the continent and other outsi quarters to flavoury Pekoes and Orange Pekoes.

The average is 7 5/8d per lb. On the 14th instant it was 7¾d p lb. and 7½d per pound at this time in 1900.

Telegrams from Colombo advise from that the 1st to 15th insta 3¼ million lbs. had been sent to the United Kingdom, and that t estimate for the current month had been reduced to 7¾ million lb whereas the actual quantity exported in November, 1900, w about 9½ million lbs.

JAVA.—Only 107 packages of direct import passed the hamm without quotable alteration in value.

Deliveries.—Clearances of all tea (on which duty has been pai from the London warehouses, as per official returns are, *viz.*:—

From 1st to 19th November, 1901 ...	...	12,092,027 lbs.
Do. do. 1900 ...	...	11,747,973 ,,

During the week the following have been printed for sale b public auction :—

	Sold. Pkgs.	Withdrawn. Pkgs.	Total offere Pkgs.
India	30,428	10,024	40,452
Ceylon	16,250	3,343	19,593
Java	104	465	569
Total ...	46,782	13,832	60,614

Also 264 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated November 22nd, 1901, says :—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE

	Indian. Pkgs.	Ceylon. Pkgs.	Jav Pkg
1901-1902	689,925	574,102	33,0
1900-1901	711,360	621,412	26,6

41,536 *pkgs.* INDIAN
20,444 ,, CEYLON
601 ,, JAVA
} Total 62,581 packages were offered in public auctio this week.

Particulars of the distribution of Tea exports direct from Calcut to places outside the United Kingdom are given below from 1 January to the end of September.

Australasia shows a slight falling off, but there is a marke increase in the quantity sent to Indian ports, the bulk of which doubtless for Persia and the neighbouring parts of Asia; Turke also shows a slight increase. The Russian market is mainly su plied from London, but the increase referred to in the table belo serves to indicate the progress which British-grown tea is makin in that country.

It is remarkable that the total re-exports of *Indian* tea from t United Kingdom should have risen from 6,100,000 lbs. for the fir

nine months of 1900 to 9,645,000 lbs. in the corresponding period this year, various European markets now becoming important consumers of both Indian and Ceylon tea, the re-exports of the *latter* kind from Great Britain having advanced from 10¼ million lbs. to 13¼ millions during the same period.

INDIAN.—Another week of moderate offerings has had the effect of further steadying the market. Competition was more general, and all grades showed firmness, although no actual rise can be quoted. In spite of the efforts of the Regulating Committee, next week's offerings will again be somewhat heavy.

The official wire gives exports to U.K. for first half of November as 11,630,000 lbs. (including 1,370,000 lbs from Chittagong), against 9,950,000 lbs. same period 1900; making the total from 1st April to date 106,881,800 lbs., against 115,300,000 lbs. to same date last year. It must be borne in mind that the tea from Chittagong would, if sent from Calcutta, have probably left India considerably later, and that doubtless much of the large quantity recently shipped is caused by greatly accelerated despatch from the gardens.

Week's av. of New Season's tea sold on Garden Account 1901, 32,191 pkgs., av. 7·71d. 1900, 32,146 pkgs., av. 6·83d.

New Season's tea sold on Garden Account 1st June to date 1901, 506,103 pkgs., av. 8·18d. 1900, 574,915 pkgs., av. 7·82d.

CEYLON.—The slightly improved tone noticed last week was further accentuated, competition being more pronounced with a tendency to higher prices, especially for the lower grades, which were here and there slightly dearer Medium teas were occasionally irregularly cheaper. The export demand is becoming a very important factor in the market, and teas suitable for this Trade are generally well supported, and meet with increasing attention from shippers. Private telegraphic advice gives exports to U.K. for first half of November as 3,250,000 lbs., against 4,700,000 lbs. 1900, and estimates the total for the month as 7,750,000 lbs., against 9,250,000 lbs. last November. Average for week 7·63d., against 7·44d. same week, 1900.

Ceylon tea sold on Garden Account 1st January to date, 1,021,018 pkgs., av. 6·81d. 1900, 1,104,552 pkgs., av. 7·20d.

JAVA.—Of the few Javas brought forward, only 107 packages were of direct import.

COCOA.

The auctions on Tuesday were singularly quiet, only about 180 bags selling out of 1,390 bags catalogued. 74 bags Trinidad sold at 68s for middling red. Of 31 bags Grenada an odd lot sold at 64s. 20 bags Jamaica realised 58s to 62s 6d for fair to good. Of 690 bags Guayaquil about 70 bags sold—Caraquez at 66s. 218 bags African retired. Of 346 bags Ceylon a few bags sold at 54s 6d for brown and 41s 6d per cwt. for smalls. Private transactions embrace—100 bags Trinidad at 60s to 65s for weathered, and 68s to 72s for good to fine, 100 bags Grenada at 60s to 64s 6d, 100 bags Haiti at 53s, 40 bags African at 62s 6d for fine, 100 bags Ceylon at 61s for fair Estate, and some lots of Guayaquil at 63s to 66s for Caraquez, 66s to 71s for late Arriba, and 78s per cwt. for Summer ditto.

PEPPER.

BLACK.—The market is quiet and only small transactions are reported. Singapore on the spot has been done at 6d, and for arrival at 6$\frac{7}{32}$d to 6¼d January-March shipments.

The shipments of Black Pepper for the first half of November compare as follows:—

		1901.		1900.	
U.K.—Singapore	*nil*	30	*nil*	30	
„ Penang	30		30		
Continent		130		40	
U. S.		30		220	
Total tons ...		190		290	

At auction on Wednesday, of 140 bags Singapore catalogued 40 bags sold privately, the remainder being bought in at 6d. 56 bags light shelly Penang character sold at 5½d to 5¾d. 177 bags Aleppy bought in at 6d per lb, and 200 bags Lampong at same price.

WHITE is dearer and in demand; about 500 bags have been sold on the spot at 9$\frac{5}{16}$d for fair Singapore, at 9$\frac{3}{16}$d to 9$\frac{5}{16}$d for fair Siam, and at 8$\frac{13}{16}$d for fair Penang. For arrival about 100 tons have changed hands, *viz.*, Singapore January-March (s.) at 9½d to 9$\frac{9}{16}$d, Siam October-December at 9$\frac{3}{16}$d, and Penang January-March at 9$\frac{1}{32}$d to 9$\frac{3}{16}$d per lb.

The shipments of White Pepper for the first half of November compare as follows:—

		1901.		1900.	
U. K.—Singapore	110	140	130	200	
„ Penang	30		70		
Continent		70		100	
U. S.		...		...	
Total tons ...		210		300	

At public sale on the 20th instant, 50 bags Singapore sold—good 9$\frac{7}{8}$d, fair 9¾d per lb.

To-day Black Pepper was firm but not much business done. White firm and dearer. Penang spot sold at 8¼d to 8$\frac{5}{16}$d; 40 tons January-March shipment sold at 9¼d.

GINGER.

Firm, but less active than at the beginning of last week. At the spice auctions 76 cases *Cochin* were offered and bought in, medium cut at 75s. to 80s., and bold cut at 100s. Of 477 bags 180 sold, rough rather wormy *Calicut* at 45s. 6d., and fine bold bought in at 55s. *Japan*, partly limed, 54 bags offered and sold at 41s. Of 37 barrels *Jamaica* only 3 sold, middling washed at 60s.

COCHIN.—Auction supplies consisted of 76 cases 477 bags, of which 181 bags medium and small, very rough and lean limed Calicut, sold at 45s 6d per cwt. Privately little business has been done this week, but values are again higher, 52s to 52s 6d per cwt. changing hands for medium and small washed rough Cochin.

JAPAN firm, 54 bags rather lean dull limed selling at 44s per cwt.

JAMAICA very quiet. 37 barrels offered and 3 barrels sold at 60s per cwt. for good washed.

CINCHONA.

At auction on Tuesday the small supply of 1,782 packages was offered, the bulk of which again consisted of Calisaya. There was a good demand, principally for the United States, and everything was practically sold at the previous auction rates, the average unit being 1$\frac{5}{8}$d, against 1$\frac{3}{8}$d at the last Amsterdam auction.

The following table shows the quantities of bark offered and sold:—

	Packages offered.	Packages sold.
Calisaya cinchona (95 withdrawn) ...	1,007	912
East Indian cinchona	399	328
West Coast African cinchona ...	198	198
Ceylon cinchona	175	146
Cuprea cinchona	3	...
	1,782	1,584

The following figures show the approximate quantities of bark purchased by the principal buyers:—

	Lbs.
The American and Italian factories	90,574
The Imperial quinine factory	35,482
Messrs. Howards & Sons	27,496
The Paris factory	15,900
The Brunswick factory	2,620
The Mannheim and Amsterdam factories	1,160
Druggists, etc.	37,471
Total quantity sold ...	210,703
Bought in or withdrawn ...	34,498
Total quantity offered ...	245,201

The following prices were paid:—

WEST COAST AFRICAN.—Fair quill, 6$\frac{3}{8}$d to 6$\frac{7}{8}$d; broken quill and chips, 6$\frac{3}{8}$d to 7$\frac{1}{8}$d per lb.

SOUTH AMERICAN.—Bolivian cultivated Calisaya, 6¾d to 8$\frac{7}{8}$d and rich, 9¼d to 10d per lb.

CEYLON.—Officinalis, renewed chips and shavings, 5⅓d to 6d; renewed Ledgeriana chips, 4¾d; Succirubra stem chips, 3¾d; and renewed, 6d.

EAST INDIAN.—Ledgeriana, stem chips, 4$\frac{5}{8}$d; hybrid, 4½d; and renewed, 3¼d. Succirubra, stem chips and shavings, 3¼d to 3$\frac{5}{8}$d; branch, 2¼d to 3¾d; fair to good root, 3⅛d to 4$\frac{5}{8}$d; renewed stem chips and shavings, 3⅛d to 3$\frac{7}{8}$d. per lb.

The shipments from Java for the first half of November amount to 365,000 Amsterdam lbs., against 535,000 Amsterdam lbs. last year. In the drug-auction 94 serons Crown bark offered, but nothing sold publicly, a bid of 6¾d being refused for fair bright Huanoco quill, 7d being wanted. For fair Loxa 1s 6d was rejected, 1s 7d being the price. From another catalogue 4 serons sound Huanoca sold at 6½d, and damaged at 6d per lb.

QUININE.

The market remains quiet, and though prices have advanced, little business is passing. B. and S. and or Brunswick spot quoted at 1s. 1⅜d., December delivery 1s. 1½d, March 1s. 1¾d., and May 1s. 2d.

The small shipments of bark from Java for the first half of November have imparted a steadier feeling to this market, but as there are few sellers at present prices, little business has been done. Good German sulphate in bulk has sold at from 1s. 1⅜d. to 1s. 1¼d. for December, 1s. 1½d. to 1s. 1¾d. for March, and 1s. 1⅞d. for May. The market closes quiet, with sellers at 1s. 1¼d. for prompt.

CARDAMOMS.

In fair demand at steady rates, fine being slightly dearer. following prices were paid :—Ceylon-Mysores : Medium round smooth, well bleached, picked, 3s. 1d.; medium to bold palish, 5d. to 2s. 7d.; small and medium ditto, 1s. 10d to 2s. 2d ; sm palish, 1s. 5d. to 1s. 9d.; medium to bold dull, 1s. 9d. (subje medium splits. 1s. 8d.; small splits, 1s. 5d.; brown splits pickings, 1s. 4d. to 1s. 5d.; small dull, 1s 3d. Mangalore charac small to medium brownish. 1s. 8d to 1s. 10d. per lb. Se brought unchanged rates, selling readily at from 2s. 2d. to 2s. per lb.

(AVERAGE FOR ALL INDIA 7·71d., NOVEMBER 22nd.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fannings, Du and Various	
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Pric
Neilgherry ...	**139**	**7·17**												
Prospect ...	47	7½	17	8	30	7¼	...	...	...	...	...	..	..	...
Seaforth ...	92	7	30	6¾ 9½	22	6½	15	8¼	25	6¼	...	...	...	...
Travancore ...	**945**	**7·19**												
Glenmore ...	150½c	6	...	...	75½c	5½	71½c	6½	...	...	2½c	4	2½c	3¾
Ladrum ...	143	6¾	66	7 8½	50	5½ 5¾	...	...	5	5	...	...	22	...
Merchiston ...	53 p	6½	16	6¾	22	6	7	8	...	...	5	5½	3½	5¼
Patanaveram ...	3	6	...	...	3	6	...	...	...	...	...	...	...	...
Poonmudi T Co B ...	57 p	6¾	17	8 8¼	26	6½	...	...	9	5¾	1	5¼	4½c	5½
S I T Co Kud Ka ...	151	6½	53	5¾ 6½	...	...	55	7 7¼	29	5½	...	...	14	7¼
Stagbrook ...	183 p	6¾	118 p	6¼ 9½	42	6			19	5¼	..	...	4	4¼
Sth Trav Co Ven ...	125 p	7	...	...	45	6½	49	7½ 8¼	21	5¾	...	...	10½c	5½
T T E Co Kolie K ...	80	7¼	...	...	20	6¾	40	8¼	20	5¾	...	...	...	...
Wynaad ...	**319**	**7·19**												
Chulika ...	85 p	7½	47½c	8½	28	7¼	...	...	6	5½	...	...	4½c	6¼
Kanambyle & Cher.	63 p	8¼	10 p	1 1½	22	7¼	19 p	8½	12	5½	...	...	...	...
Mootoomalla ...	23 p	6	...	...	...	...	11½c	7½	12	5¼	...	...	...	...
Wynaad T Co Per ...	148 p	6¾	...	...	43	6½	79½c	70 8¼	18	5¾	8	5½	...	...

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PLANTING OPINION.

A WEEKLY JOURNAL.

WRITTEN BY PLANTERS FOR PLANTERS.

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SEASON REPORTS.

TO OUR SEASON REPORTERS.

Please post your next reports to reach Madras on Friday, the 3rd proximo. Season reports should be sent direct to the Printers, Messrs. Higginbotham & Co.

Munzerabad.

December 16th.— *Weather*—The late showers have left us, but left their trace in a very forward spike, and a small sprinkling of blossom, and also an unusual growth of weed. *Works*—Gathering is still in progress on several estates, a few have finished, and weeding and pruning are thereon being attended to. *Health*—on this side of Hassan, good. *Labour*—The paddy crop is now diverting many coolies, causing the labour-supply to be short.

Coorg.

Polli Betta, *18th December.*—*Weather*—Fine and chill for a few days It is quite cloudy to-day and may rain perhaps, the times are so much out of joint. Coffee looking fine. Gathering is still in progress, but crops are very small. Prospects for next season are very good. Paddy is being reaped in parts. *General Health*—Fair. *Labour*—as usual, very plentiful. *Interesting item*—Proposal to hold combined Volunteer Camp next year at Mysore.

NOTICE.

In consequence of the **Christmas Holidays** there will be no issue of the paper next week.

The Editor avails himself of this opportunity to wish all readers

A Very Happy Christmas

AND

A Prosperous New Year.

MATÉ AS IT IS TAKEN.

THAT maté is made from the Paraguayan tea, called yerba (herb) the majority of intelligent folk know, but the manner in which maté is drunk is a sealed book to but a very few. Maté is known and used among all classes of South Americans; though more especially by the middle and poorer classes in the cities, as maté taking is of late years losing ground somewhat among the more wealthy, whose tastes have become converted from good old maté amargo to the numberless high sounding beverages constantly introduced among them by the foreigner. But in the houses of the middle-class folk, and on the great Pampas that stretch and roll away west and south, peopled by almost every nationality under the sun, where hospitality is never absent, be it "ranchito" of adobe, or "Estancia" of the latest architecture, there maté holds full and absolute sway. The traveller about to set off for a journey will take maté with whomsoever may be present, until his horse arrives; or until he reluctantly arises and goes out to look to the final cinching up of his "rejada" before mounting. Even then probably he will be able to take just one more from the hand of the hostess as a farewell, brought out to him so that he may have his proper share while on the premises. The gaucho, the farm labourer, the dairyman, as they come in from their labours, go to the fire, and take maté; as you arrive at a ranch, and the news passes that someone is coming towards the place, the little kettle standing on the side of the hob, is pushed up against the hot coals, to be ready for maté. You are travelling; the day is hot perhaps—or it is cold—what matter which? any way you are tired, and so are your horses; you pull up by the seemingly never ending and uninteresting track, loosen the cinches, secure the animals, then while one with a handful of small sticks gathered near makes a fire, your companion produces the little kettle hanging just under the jaw of the "cargero" horse, and half filling it from a leather water-bag carried on the same useful animal, proceeds to heat it for maté. Fifteen minutes later, two remarkably refreshed men will cinch up and start off once more, the taste of maté in their mouths and less hunger and thirst in their stomachs. Maté is a great help to the traveller and the worker of the pampa. It is sustaining, while being of medicinal value. Maté is frequently used for indigestion, and kindred ailments, and taken on first rising, as indeed is a general custom, acts in precisely the same manner as hot water recommended to sufferers from dyspepsia.

The correct method of taking maté is not as we drink tea or coffee, from the cup, but is to take it somewhat after the style of cider with a straw. The yerba—a greenish yellow collection of finely and coarsely powdered leaf and sticks—is placed in the maté (a little chatty shaped gourd) and the "bombilla" inserted; this is a hollow spoon, or rather a tube having a perforated bulb on one end—in the shape of a spoon. The bulb end is pushed into the yerba to the bottom of the maté cup, then cold or luke-warm water is poured on to the yerba, and drawn out by sucking through the bombilla. This is repeated perhaps twice to draw all dust or fine powder off, and then the tea is ready. One person conducts the operation, and his or her duty lies in filling the little maté (the term maté applies equally to the cup used, and the actual prepared tea) with boiling water, and handing it in turn from right to left in the circle to whatever visitors may be present. The drinker sucks the whole lot up, fr quently being engaged in excited conversation all the tim much to the annoyance of the next man who is awaiting h turn, and so it passes on from one to the other. Even ma drinking among the gauchos demands that etiquette shall observed. To take your maté so that the last draw sha bring up the remaining liquid with a quick business lik rattle, is correct; even a short quick draw after, to mak sure, is permitted; but to draw with a rattling sou for the third time, is to become uncomfortably aware that many as are there present are inwardly compassionating th poor "estranjero" for his execrable manners. Anothe flagrant breach of etiquette is to wipe the mouthpiece of th bombilla before using it. The temptation in many cases almost irresistible; but, if you yielded to it, the man who ha taken it before you would consider your action a positiv insult to himself. The reader may judge for himself where the yearning to give it just one good wipe comes in, when h reflects that the older men almost invariably chew the filthi est of tobacco, and the majority go in for a wash more throug necessity than inclination about once in six months. An yet maté is agreeable, nay enjoyable to take. It fills u many a weary hour as shivering crouched in a soddene poncho with the rain beating down on him the traveller strive to keep alight his fire, and patiently waits for dawn: keeps the gaucho more contented while he waits for the pot "puchero" to cook, or the "assada" to roast over the coal when he knows he ought to be away after the flock whic "will" wander when the wind is fresh, or the rain is drivin Round the fire at night it helps conversation wonderfully between the dances in the rancho on Saturday nights, it handed round, and eagerly taken; the nurse in the sick roo finds it a sort of companion; and wherever on the Pampa a man's home is, there also is his maté, and his yerba ba Tea to us is a promoter of sociability; maté to them is tha and more besides; it is a companion and friend, and a confi dent in time of trouble, for as he draws and draws the warm grateful beverage slowly through the bombilla his trouble seem to lighten, and he thinks more clearly.

Tea or coffee could never quite usurp the place held b maté in the everyday life of the man of the pampa; the latte is known best, being extensively used by all lovers of goo eating in the towns; but tea as yet is a "something th English use." Tea does occasionally find its way into th ranchos, but it is taken with sugar only, and then throug the bombilla, instead of as a drink in cup and saucer. Ma is used in tea form sometimes, *viz.* with milk and sugar an infused; but that is only in place of morning coffee; then th gaucho or the labourer, takes it in a soup plate, and soak his hard-as-iron "galletta" (biscuit-bread) in it; or else it sometimes taken "dulce" (sweet) by putting a teaspoon sugar into the maté each time of serving; but that is onl a luxury, as is maté con leche (with milk) and only indulge in by women and children as a rule, when taking maté witho the company of men. Maté sells in Buenos Aires and th Provinces for about 1/1 per kilo., and is consequently with the reach of the poorest classes; so that it has become th national beverage, and the gaucho as he twangs on his guit the monotonous song of his life and the familiar objects arou him will sing "give me my mares and my flock that I ma always have a fat 'assada' and a maté, and I will be f ever happy."

UNITED STATES TEA STANDARDS.

Although Ceylon men like to buck about their Teas as the finest that the world can produce, they are not quite so happy when they find the American Customs authorities fixing a standard to fit Ceylon's own estimate of its teas. According to the *Times of Ceylon,* the following is a statement of the position.

AMERICAN GOVERNMENT STANDARD FOR INDIAN AND CEYLON TEAS.

	Value in London.	
	Indian.	Ceylon.
Well made, good bold Pekoe Souchong leaf; clean, ordinary plain liquor	5¾d.	6-6¼d.

AMERICAN GOVERNMENT STANDARD FOR CHINA TEAS.

Small fairly even (leaf broken Pekoe Souchong character) common liquor	—

Messrs. Forbes and Walker, in reporting on the standards, say :—"The standard for Indian and Ceylon teas is certainly a high one as regards the appearance of the leaf, and the fact cannot be questioned that a large quantity of Ceylon tea is exported annually, having a good marketable leaf, (though inferior to this) and drawing a liquor of equal quality, which should, in all fairness, be permitted to pass into America, but which would fail to do so if the standard of leaf is strictly enforced."

"The China standard, as regards liquor, is distinctly *inferior* to the other. The leaf is of a broken Pekoe Souchong nature, but in this respect is not inferior to that of India and Ceylon."

Our contemporary appears to think that this is not right, and that the Planting Associations and Chamber of Commerce should move. We are disposed to think that the more freely the American Customs admit Chinese rubbish, and shut out any but real *teas* from India and Ceylon, the sooner the last two will score a decisive victory over the first in the land of the Stars and Stripes.

CONTRA MAERCKER.

The efficiency of Phosphoric Acid in Bone-meal from the Experiments with Manures conducted by Professor Dr. Maercker *on the Experimented Farm at Halle, A. S.*

[Published by the German Union of Bone-meal Manufacturers. Translated by John Kenny.]

Almost a year has gone by since we found ourselves compelled, for the first time, to take up a position, in a publication of any size, with reference to the experiments in Bone-meal Manure carried out on the Experimental Farm at Halle by Dr. Maercker at the instance of a number of bone-meal manufacturers. We were forced to this on learning that Professor Maercker, by literary and other means, was endeavouring to prepare the way for the opinion that the utility of bone-meal as a manure has till now been far too highly prized—and he based this opinion on the experiments referred to above. To us this was a bolt from the blue. Professor Maereker had certainly no grounds to go upon for this remarkable behaviour, for the experiments on which he could base his decision, experiments on which he sent us a report on the 6th February, 1893, gave him no cause, but, on the contrary, stood in complete opposition to his later *dicta*.

Since Dr. Maercker has not been satisfied to spread his unfavourable reports in the narrow circle of his official acquaintance but has gone out of his way to spread as widely as possible renewed and more better attacks, we feel ourselves compelled to publish an epitome of the report of Professor Maercker on the manurial experiments referred to above. The contents of that report, vouched for, as correct, by a notary public, must convince every unprejudiced person how one-sided has been the manner in which Dr. Maercker went to work to destroy the opinion so long held and supported by practical experience that in bone-meal the farmer finds an excellent means of manuring.

That publication brought us letters from all sides agreeing with our view and laying particular stress on the actual use of the meal. One thing, however, that we might have expected, did not occur. Though we placed before the authorities on the subject an analysis of the very experiments made by the Doctor in the years 1891-92, no authoritative reply was made to the gentlemen who conducted the experiments. Instead of this, however, a treatise of Maercker's on the efficacy of bone-meal phosphoric acid appeared first in the *Deutsch. landw. Presse* and later on in pamphlet form. In this work, which quickly flooded the agricultural newspaper literature in the form of more or less apt extracts, Professor Maercker declined to enter upon a critique of our work, dismissing it with the following words :—"Since the interests of the bone-meal industry have been harmed by my experiments, parts of which have been included in the 'Annual Report of the Experimental Farm at Halle' and from that found their way into the literature of the country, I can well understand that the bone-meal manufacturers have been annoyed and given vent to their feelings in speech and writing. I have naturally not the slightest intention to enter into a discussion of statements that have their origin in these none too praiseworthy feelings." But immediately succeeding these statements come his experiments in a form quite new, with an addition of new figures from the first year's experiments, and of these only such as are meant to illustrate the inefficiency of the manure.

We consider it our duty to throw light on these publications. We should gladly have done so before this, but important changes in our industry took up all our time.

Before entering upon the consideration of the latest pronouncements of Maercker on bone-meal, it is perhaps advisable, in a few words, to throw some light upon the course of the development of the manurial experiments in question, as, owing to the small number of copies printed last year, few of our readers are acquainted with the process of Maercker's experiments.

Let Professor Maercker first speak for himself. In the *Magdeburg News* of the 9th May, 1894, he says :—"In the year 1891 representatives of the bone-meal manufacturers entered into negotiation with the author (Professor Maercker) to start trials at the Experimental Farm at Halle, A.S., to ascertain if bone-meal produced so trifling an effect on plant life as people were led to conclude from the experiments of Professor Wagner at Darmstadt, and the outcome of these negotiations was that the Union of Bone-meal manufacturers agreed to allow a considerable sum for the purpose. This was carried out with the express approval of the Directors of our Agricultural Central Union. The author willingly entered upon the task of solving the question, for he had great sympathy with the bone-meal industry which, from idigenous materials of little worth, produced an article of great value. He could conscientiously say he started the experiments without any sort of prejudice."

(*To be continued.*)

NOTES ABOUT COCOA, CHOCOLATE, ETC.

Probably little is known by planters in India about the preparation of the article known as "Cocoa" as sold upon the English market. The word "Cocoa" is a corruption of the Spanish word "Cacao," and had its origin in European markets. It is used to denote preparations of the Cacao bean in powder, sweetened or unsweetened. Such powders are seldom prepared in the countries where Cacao grows, the article known as chocolate being almost exclusively used in preference, except by Europeans who have become accustomed to the preparations of their own countries, for whom a certain quantity is imported. The word "Chocolate" is of Mexican origin, and covers preparations from the Cacao bean which solidify on cooling into cakes or bricks or other moulded forms. We have, therefore, two names which cover preparations made from Cacao beans, produced by the tree known as *Theobroma Cacao*, L.

Chocolate is made from the Cacao bean roasted and ground to a paste, which hardens on cooling. This may be made sweetened or unsweetened, and as much as 40 to 60 per cent. of sugar is added when made into confectionery, but less when intended to be used for making a beverage. The paste may be made either by hand on a flat piece of freestone, or it may be ground in mills constructed for the purpose. The chief hardening ingredient is the fatty matter the beans contain known as Cocoa fat and used largely in medical dispensaries.

Cocoa.—This is the name given to a product of the Cacao bean, the preparation of which is commenced in the same way as the manufacture of chocolate; in fact, Cocoa is nothing more and nothing less than "Chocolate" with the Cacao fat taken out, which prevents its solidifying into cakes.

The manufacture of "Cacao" or "Cocoa" Powder is an easy matter if provided with a proper press for the purpose. All operations in connection with Cacao preparations have, however, to be carried out at a temperature not less than 85 degrees Fahr. to keep the fat melted. Even at this temperature the fat will harden, but the manipulation generally increases the temperature sufficiently to keep the fat fluid. When the roasted bean has been ground into a fine fluid pasty mass, the fat may be taken out by placing it in thin layers in linen cloths, and placing these in tiers in a suitable press. For this work it is better that the temperature should be as high as 90 degrees Fahr., or over, as the melted fat will flow the more freely. The fat comes away readily, but contains Cacao red, the colouring matter of the bean, and some small portions of the solid matters of the paste. If the fat be at once filtered through animal charcoal in a water oven, it will on cooling be perfectly white and clean. The residue which remains behind in the cloths—or the "press cakes"—should now be removed. These are easily broken under slight pressure and may be rubbed through a fine guaze sieve, the resultant powder being the "Cocoa Powder" of commerce. This may be mixed with finely-powdered sugar, if desired, to 40 per cent. or 50 per cent. Brown Sugar is better for the purpose than white, as the latter alters the colour out of market form. These powders are subjected by some makers to excessive adulteration by the addition of starches and other cheaper material. In some cases alkalies are added for the purpose of saponifying any fat remaining in the powders. When so treated, the ring of froth seen round the edge of the breakfast cup, is nothing less than a soap froth formed by the union of the Cacao fat and the alkali employed, and the appearance of small globules of fat on the surface when prepared for consumption is considerable evidence of purity.

In a recent experiment in Trinidad Cacao beans were prepared with the following results, although our press and mill are by no means perfect for the purpose :—

From each pound of ground material or Cacao paste, 24 per cent. of fatty material was extracted by pressure, leaving 76 per cent. of dry powder.

Treating the same material by the Soxtlet process, 36·6 per cent. of fat was obtained, leaving 63·4 per cent. of powder.

The latter was probably not the whole fat content of the Cacao as it requires to be much more finely ground than is necessary for Chocolate or Cacao making to make sure of the extraction of the entire amount of fat.

The process adopted, however, showed the Cacao Powder or Cocoa Powder to contain 12·6 per cent. of Cacao fat, but this was not sufficient to render the beverage unpalatable greasy, and it makes an excellent cup for the breakfast table.

U. P. A. S. I. SECTION.

(UNDER THE CONTROL OF THE SECRETARY, U. P. A. S. I.

South Indian Green Teas.

Extract from proceedings of General Meeting of the India Tea Association (Calcutta) held December 3rd, 1901, Calcutta.

The Committee considered a report by their experts upon certain samples of green tea which had been submitted by Mr. Drummond Deane, of Stagbrook Tea Estate, Peermaad Travancore, in response to Circular No. 61 of 9th September. The report was to the effect that the samples were good types of green teas, which would be useful to show to Managers who required standards. They were, however, decidedly superior to most of the teas which had been previously examined, and were probably too good to fix as standards for a blend. If such teas could be easily made, the success of the industry was certain.

This report was noted by the Committee with much satisfaction ; and they decided to forward copies of it to Mr. Deane for information. A circular was also to be addressed to the members of the Association, giving the views of the expert upon the samples, and stating that the latter were available for the guidance of Managers.

In writing to the London Committee the foregoing facts were to be stated, and the question of blending green teas in Calcutta—which was raised in the Circular No. 61 of 9th September—was to be dealt with. The difficulty of carrying through any definite scheme of this description was the uncertainty in regard to funds. And the London Committee were to be asked if they had any proposals to advance which might be calculated to surmount this difficulty. Looking to the fact that special machinery was required for the manufacture of green tea, it was, the Committee thought, unlikely that Proprietors would care to engage in it unless the bounty could be definitely promised to them during the interval which must necessarily elapse before a good demand at remunerative prices could be created.

NOTES.

Cinchona. The auction to be held in Amsterdam on December 12 would consist of 7,551 bales and 275 cases, weighing 701,880 kilos., of Java bark. A supplementary catalogue was to be published.

German Quinine. The exports of "quinine, quinine-preparations, etc.," from Germany during the eight months ended August amounted to :—

	1901	1900	1899
Kilos.	136,900	120,800	150,900

Comparing Coffees. The Associação Commercial of Santos is exhibiting samples of coffee produced in various countries. These samples were sent to the State Government by the Brazilian Consuls in Havre and New York.

Proposed Coffee Bank. A bill was laid before the Bazilian Chamber of Deputies asking for the concession of a bank denominated "Banco de Cambio e Café." The transaction which the bank pretends to undertake will, says the *Brazilian Review*, consist in buying Coffee from the commissarios and ensaccadores in competition with exporters.

Alfalfa—six Tons per Acre. On a plantation near Campinas made in theexperiments have been culture of Alfalfa (Lucerne). Between September 1900, and, March, 1901, six crops were taken off, aggregating about six tons per acre. The *Brazilian Review* states that the Alfalfa is sold in S. Paulo at from 150$ to 200$ per ton.

A five-pointed Tea Leaf. A remarkable tea leaf has been brought under our notice to-day by the courtesy of a Colombo gentleman, says the *Colombo Observer* of the 13th instant. The leaf, which was brought in a basket of leaf in the Agras, is extraordinarily malformed and consists of five distinctly formed leaves all joined together on one stem. One wonders how such a freak occurred and one also wonders how it came to be in a basket of tea! Alas!—has some one returned to coarse plucking?

Calcutta Tea Market. Messrs. Andrew Yule & Co. reported on the 6th instant :—17,183 packages were offered, of which 16,130 were sold and 1,053 withdrawn or registered. Leaf teas under six annas were well competed for at an advance of about three pies, other grades being fairly steady at previous rates, Assams receiving rather more attention. The average price of Sale No. 24 works out 5 annas 6 pies per lb., against 4 annas 9 pies last year.

Brazil's Railway Transport. The Committee of Agriculture of S. João de Itatinga, in São Paulo State, bitterly complains of the unsatisfactory manner in which the transportation service is carried out by the Sorocabana and Ituana Railway. "We are but in the middle of the crop," says the Committee, "and already the different stations on that line are unable to receive further shipments; the depôts are crammed with coffee, which is left there to rot and perish." The Committee lodged a complaint with the Secretary of Agriculture and it is to be hoped that he will take energetic measures to ensure a better traffic.

London Tea Market. Weekly special telegram, dated 12th instant from Messrs. Gow, Wilson & Stanton to Colombo reports that the competition for Ceylon tea is general and well-distributed and that the market for medium liquoring Pekoes and Broken Pekoes is weak, while that for teas for price is dearer. The price of fair liquoring Ceylon Pekoe Souchong is 6d and the average price of Ceylon tea sold on garden account this week was 7½d (both same as last week). The average of the corresponding week last year was 7⅜d. Reuter reports that fine qualities of Ceylon tea are irregular, others firm. Fair Pekoe Souchongs are quoted at 6d and the average for the week is 7½d (both same as last week). 22,000 packages of Ceylon tea were offered for sale and 19,000 were disposed of; while of the 49,000 packages of Indian tea offered, 44,000 found purchasers, at an average of 7⅝d per lb. (⅛d higher than last week).

Bacteria in Plants. A recent Bulletin from the United States Department of Agriculture, is devoted to a paper, by Dr. Erwin F. Smith, on the cultural characters of Pseudomonas Hyacinthi, P. Campestris, P. Phaseoli, and P. Stewarti—four one-flagellate, yellow bacteria parasitic on plants. The first is the cause of a serious disease of Hyacinths; the second of a widely-distributed and destructive disease of Cabbages, known as brown-rot; the third of a disease of Beans, and the fourth is believed to be the cause of a serious disease of Sweet Corn. The bulletin also contains occasional references to Bacillus amylovorus, B. coli, and other bacterial organisms, which were used for comparison. The work described is of a purely technical nature, but will be valuable to those in experiment stations and elsewhere who are engaged in investigating the bacterial diseases of plants.

Effects of British Competition on Japan Tea. From a report supplied by Mr. Philip, Secretary of the Ceylon Thirty Committee, to the Press, it appears, says the *Englishman*, that exports of Japan tea will this year be the shortest on record for fifteen years. The reason for this is stated to be that the cost of production in Japan has steadily increased from year to year for the last decade, and the value of tea in America and Canada at points of distribution has not increased in proportion. This has led to a withdrawal of enterprise in the Japan tea industry to other more paying directions. The news disseminated by the Thirty Committee should prove encouraging to Indian and Ceylon planters as showing that rival tea producers are feeling the pinch of bad times and becoming disheartened. As other conntries reduce their production in the way noted, there will be the more room for the British-grown article.

Ginger in London. Ginger, which was the article "par excellence" for bull operations, has lost for the moment all interest except to those who, as holders of large quantities, are naturally keenly watching the movements of the article. An unbroken rise in value of about 50 per cent. is an abnormal event, and would, in our opinion, fully explain a sudden stop in the advance. Pur-

chasers of stocks naturally wish to realise their profits, and, to interpret their action as an indication of weakness, appears to be totally unjustifiable. But such is the character of the Ginger market ; at the least sign of a stop in the advance, a general desire to realise and to get out of one's holding prevails, with the result that a decline is sometimes created when, owing to the position of the article, a further rise ought to be possible. It is, we presume, the large precentage of outside speculators which is responsible for this element of weakness.

Coffee in London. Although one or two telegrams have been received which profess to confirm the previous reports of damage to the growing Santos crop, they have, says the *Produce Markets' Review* of 23rd November, hardly had any effect upon prices, which have fluctuated only to the extent of 1s, and close slightly under those of last week. Some small reduction in the daily receipts has been made the most of by speculators for a rise, but seeing that 9,000,000 bags have already been received and that there are still seven months to run of the present crop year, it is only natural to expect a decided falling off unless the estimates are to be still further increased. The demand continues very quiet, and with such a poor selection as there is offering, and with an uncertain position with regard to the Brazil market, an improvement can hardly be expected before the turn of the year. The few lots brought to auction have sold at fair prices, Colombian in particular being rather dearer. Mocha has been offered more freely, but holders are firm and prices generally dearer.

New Rubber. A new source of supply for rubber has been found out by M. Deiss, a French scientist at Saigon. The forests inland in that quarter abound with lianas—creeping and twining plants which grow to a large size. These lianas yield rubber out of the juice from cuttings in the bark (the usual mode of gathering) but not in paying quantities. The fact that the bark, apart from the juice, holds rubber, had long been known; but nothing had been done to turn this knowledge to profitable account. M. Deiss was struck by this, and sought for means to get at the stores of rubber in the bark. It is said that he has met with success. The bark is treated chemically, and undergoes sundry processes, including treatment by currents of hot and cold water alternately. The result is said to be the extraction of rubber of the best quality, which soon thickens and hardens. It took repeated experiments to show the right way to go to work. The outcome is that a syndicate of capitalists in France has undertaken to start, in Cochin China and Tonquin, works for turning out rubber from bark on the new system.

Vanilla in the Seychelles. A Seychelles correspondent writes us, under date of November 7, that the bulk of the vanilla-crop was being shipped that week per the mail steamer, s.s. *Melbourne*. Altogether she carries 21,267 kilos., 12,386 kilos. of which is for Marseilles and 8,881 kilos. for London. It is expected that the total output of vanilla from Seychelles for 1901 will equal 70,000 kilos. The prospects for next year are by no means good, and it is estimated that the exports during 1902 will not exceed 40,000 kilos. However, a great deal depends on the weather during the next three or four weeks. The exports from Ta during 1900 amounted to 162,636. lbs. (32,132*l.*), agai 130,113 lbs. (33,701*l.*) in 1899, and 92,137 lbs. (20,468*l.*) 1898. The exports from Mauritius during 1900 amoun to 4,552 kilos. (169,821r.), against 3,709 kilos. (133,94 in 1899 an increase in production and in value over 189 743 kilos. and 25,875r. respectively. Of the above quant 4,417 kilos. were shipped to the United Kingdom, agai 3,237 kilos. in 1899, while to France there was a falling of 353 kilos. in 1900.

Rubber in Zanzibar. Rubber is not at present cultiva to any great extent in the Zanzi islands, but it arrives here in considerable quantities on way to Europe, and from the frequency with which rub forests are reported to have been recently discovered in va ous districts on the mainland it appears possible that trade will still further develop in the near future. In Z zibar itself there is very little rubber, except what is gro for experimental purposes, but in the island of Pemba, es cially in the forests at its northern end, the creeper known *Landolphia Kirkii* grows fairly freely. It is found o scattered areas, in some places growing thickly, whilst others it is only occasionally met with or is altogether abse It does not attain to a very large size, but grows to a co siderable length, and the latex is clean and white. W respect to the rubber trees that have been planted expe mentally in the Government plantations. The Assam rubb *Ficus elastica*, is possibly the most vigorous, but the Cent American variety, *Castilloa elastica*, shows excellent prom and appears to be well suited to the climate ; of the oth the Pará and Ceará rubber trees grow rapidly, either fr seed or cuttings, but their yield has so far been small. T so-called guttapercha tree appears to be of doubtful econon value as the latex obtained from it loses its plastic charac after a few months and becomes friable.

Indian Teas in London. The better demand continues, sa the *Produce Markets' Review* November 23, and there was more animation in the biddi at the public sales. The lower qualities are firmer, a consequently there is not much to be obtained at the pric prevailing in the previous week. Importers show a fi attitude by withdrawing their teas from the auctions, but what way this is to improve the position it is difficult understand, as a large portion, at any rate, must come und the hammer later on. Supplies will probably for some ti prove ample to meet any reasonable increase in the consum tion and, it would appear, therefore, practically certain th holders are not likely to benefit, at present at any rate, refusing to accept the reasonable bids made by the trad For the medium teas the market is steady with an improv demand, the only change of importance in values being the tippy sorts with a poor infusion, which have sold irregular but on the whole easier prices. The finer descri tions are meeting with a less active demand and partly this account and the less desirable quality of many of t growths prices have been in favour of buyers. The pub sales comprised 46,470 packages, of which 30,422 were so at the time they were offered in auction, and of the 10,0 withdrawn a fair quantity has been sold at quite public s rates.

Nitrogen in Leguminosæ.

A few months ago it was noticed that a set of young plants of Cedar *(Cedrela odorata)* which had been planted in proximity to a large saman, were far in advance of others planted in the opened out of the range of its influence. This occurence was pointed out as an illustration of the accumulation of fertilizing elements by the *Leguminosæ,* in a paper prepared by one of the staff of the Imperial Department of Agriculture, Barbados, as showing how this class of plants are able to accumulate nitrogen by the aid of the bacteria present in the root nodules. At the time it was pointed out that the growth of the young cedars under the saman was not proved to be due solely to the supply of nitrogen, but might be due in some measure to the shade afforded by the long spreading branches. It was therefore determined to test this by destroying the tree *in situ*, thus depriving the plants of shade. The tree died rapidly after being "ringed" at the base of the stem, but the cedar plants not only did not suffer from want of shade, but appear to be growing more vigorously than at first, and have now distanced the remainder in a remarkable manner. The tallest young tree near the saman is 14 feet in height and the average of a dozen is over 10 feet. While the average of the remainder of the plot some 50 trees is only some 5 feet. There is therefore the strongest evidence that a large amount of nitrogen was accumulated by the saman tree *(Pithecolobium saman)* and that it was readily available to plants put out in the root area of the tree, but not beyond this point. The manurial value of the flowers, which would fall beyond the root area, has not been shown.

GENERAL ARTICLES.

INDIAN TEA ASSOCIATION (LONDON).

The following correspondence, which has taken place between the Association and the Colonial Office, will be read with interest :—

INDIAN TEA ASSOCIATION (LONDON),
14, St. Mary Axe, E.C.,
November 14, 1901.

To the Right Honourable the Secretary of State for the Colonies.

SIR,—I have the honour to invite your attention to the information received in this country with reference to the Australian Commonwealth Tariff Bill recently introduced at the House of Representatives.

My Committee understands that it is proposed to levy a duty of 2d. per lb. *plus* 20 per cent. *ad valorem*, in place of the fixed duties hitherto levied on all tea imported into Australia.

The effect of this change would be very detrimental to British-grown tea, whether from India or Ceylon, and would greatly tend to check a growing trade that has come into existence in recent years, to the mutual benefit both of the producing and the consuming countries.

My Committee is of opinion that an *ad valorem* duty must operate to the prejudice of the good teas of India and Ceylon, and stimulate a trade in the poorer growths of China, Java, and Japan, whereas a fixed duty would have the opposite effect, and rather encourage the trade in the better teas produced in British India.

Another very serious objection to putting an *ad valorem* duty on tea is that it is almost impossible to fix the value fairly; tea is an article which requires very highly skilled experts to determine its value, and in many cases these experts differ in their opinions as to the value; moreover the varying demand for teas of different grades causes a continual fluctuation of prices, which practically make a correct valuation of tea for duty impossible.

This threatened change in the fiscal policy would therefore be detrimental to the interests of India and Ceylon, and my Committee hopes that you will be good enough to use your influence to prevent this injury to British-grown teas.

I have the honour to be, Sir,
Your most obedient servant,
(Signed) ERNEST TYE,
Secretary.

COLONIAL OFFICE,
Downing Street, S W.,
November 23, 1901.

SIR,—I am directed by Mr. Secretary Chamberlain to acknowledge the receipt of your letter of the 14th instant respecting the duty levied under the New Australian tariff on tea imported into Australia, and in reply to request that you will inform the Indian Tea Association that similar representations on the subject have already been received from the Bengal Chamber of Commerce, and telegraphed to the Governor-General of Australia for the consideration of his Ministers.

2. The attention of the Association has doubtless been called to a Melbourne telegram which appeared in the *Times* of the 15th instant, stating that the composite duty on tea has been abolished in favour of a fixed duty, which is 3d. per lb. for tea in bulk and 4d. for tea in packets.

I am, Sir,
Your obedient servant,
(Signed) C. P. LUCAS.

INDIA-RUBBER IN NATAL.

ITS CULTIVATION AND PRODUCTION.

Mr. Anthony Wilkinson writes in the Natal *Agricultural Journal* :—

Some years ago I tried an experiment of planting an acre of "Manihot Glaziovii," or the Ceara rubber tree of South America. Mr. Medley Wood, curator of the Durban Botanic Gardens, was kind enough to furnish me with roots and cuttings of Ceara trees from trees he had growing in the Gardens, and wished me to try an experiment on a larger scale. I planted an acre of Manihot with Coffee plants between. The rubber trees grew well and seeded abundantly, and at four years old, when the trees got a good size, four to five inches in diameter, on scoring the bark to extract the rubber, although the rubber was of good quality and very elastic, the collecting or getting it was slow and costly. Accordingly, I came to the conclusion that the experiment would not pay, unless the trees could be tapped, and the juice collected in quantity, as is done in South America, and further, that Natal was not sufficiently tropical to make a good flow of sap. Coming to those conclusions, I cut the trees down, but still the trees come up again from the seeds every year, and grow luxuriantly five or six feet high in the first year, showing the climate to be suitable to their growth. Among my coffee I have a self-sown Ceara only three years old, and over 20 feet high. The red sandy soil of the coast such as that of the Berea, Durban, would be the most suitable. The seeds left to nature do not come up for a year or two. By some, filing is recommended, but this is a tedious process; tapping them with a small hammer until they crack serves as well, and is much quicker. The plan adopted to collect the rubber, with the Ceara rubber trees, is to strip off the thin outer bark, which is like brown paper, and expose the green bark. This inner bark is then scored across with a knife at an angle, and the milky juice or sap then exudes and dries on in an hour or two, and can be peeled off and wound up in balls, but the process is so slow with the coolie women employed at 6d a day, that I found it would cost about 5s per lb. for the labour of collecting, and the product

Messrs. Crosse & Blackwell, Ltd., who held by Special Warrant the appointment of "Purveyors to Her Majesty The Queen and Empress of India" from the year 1837 until the time of her death, have now had the honour of being appointed by Royal Warrant "Purveyors to The King."

would be worth only about 2s per lb. Now it strikes me very forcibly that if a cheaper way of extracting the rubber were adopted it would pay well. The rubber is there of good quality, but the question is how to get it out. My idea is this: To plant the trees in rows, 12 or more feet apart, like large hedges, and at two or three years old, when large enough, in the Spring or early Summer, when the sap was rising, to slash off the small branches and leaves, and crush them in a small steam sugar-mill, and let the juice run into a tank of water. The residue of branches and leaves would then be put into a hydraulic press, with steam outside, and pressed as long as the sap would flow. The rubber juice would coagulate in the water, and could be raked out and squeezed by hand into balls and dried By this method the trees would be pollared and dwarfed, and could be trimmed and cut once or twice a year, as found advisable. It would be necessary to keep the land well ploughed and scarified between the rows, for all would depend on the cultivation received. The rows, if in hilly land, would require to be run on the level, so as to cultivate cheaply with horses or mules. There are several other plants which would give good rubber if treated in this manner and well cultivated. The Beaumantia, a white flowering creeper of the order "Apocynaceæ," the Borneo rubber creeper, grows well here in Natal, and I have no doubt many native plants would be found to produce good rubber. If this plan of extracting rubber from the plant were found to answer, it would revolutionise the rubber trade in a few years, and rubber could be grown to any extent, like sugar. Moreover the supply of rubber, owing to the destruction of the trees, is decreasing, whilst the demand for the article, which is now being applied to so many different purposes, is steadily increasing, and therefore there is no fear of the market being over-stocked. India-rubber being so valuable an article, worth £200 to £300 a ton, there is a large margin for profit. For an energetic young man wanting something to do and to try a new industry, I would recommend it, but remember the old American sage's saying: "Be sure you are right; so go ahead." I feel pretty sure there is money in it.

COFFEE IN THE UNITED STATES.

Referring to the October Coffee Movement, of which a report appears in next column, the *American Grocer* remarks :—

It is a rule in Wall street that speculators should go with the tide rather than be influenced by facts, whether statistical or otherwise. That rule may be good for coffee speculators. At any rate, the market has been moving upward at a lively pace. Reports of crop damage continue, but when it is for the interest of "bulls" to create a higher market, it is certain that the worst possible phase will be put on the reports. With a half crop in Brazil in 1902-03, there will still be a total supply 4,000,000 to 5,000 bags ahead of a year's requirements.

Coffee advanced to $7\frac{1}{4}$c for No. 7 Rio, then reacted under reports that the drouth had been broken. Reports from Brazil vary, some claiming that the damage is not as great as reported, and that a 11,000,000 bag crop is certain. It is a bright man that can forecast a crop at blossoming time.

Naturally, the spot demand is affected by the speculation, and prices fluctuate more than for months past. The market closed with No. 7 Rio at $6\frac{3}{4}$c; No. 3 Rio, 9c; No. 5 Santos, 8c; No. 4 Santos, $8\frac{1}{2}$c.

P.S.—On Tuesday the market had a weak tendency, and prices old off slightly. Options clossed at a loss of 35 to 40 points.

THE ART OF SINGING.

BY SIMS REEVES.

"Remedies for the Throat."

"All kinds of lozenges for the voice are to be avoided; some do harm, others have no effect, and none do good. Sugar and water, or a little glycerine, gives relief when the throat is inclined to be dry; this applies to persons whose throats are affected by the weather. About a third of a teaspoonful of Condy's Fluid in a tumbler of water, if used as a gargle every morning, will clear the throat and brace up the uvula, which, in some singers, is so long that it interrupts the pure emission of the voice, and introduces a grating undertone, while it also tends to make a tremolo on the upper notes."—*The Idler*, February, 1900.

BRAZILIAN NOTES.

(From the *Brazilian Review.*)

RIO, *5th November*, 1901.—Extremes during the week end November 1st were $11\frac{3}{4}$d.—$11\frac{7}{8}$d. for 90d/s Bank paper and $11\frac{13}{16}$d $11\frac{15}{16}$d for private.

The average Bank 90d/s counter-drawing rate for the week cor out at $11\frac{49}{64}$d., the corresponding sight rate being $11\frac{45}{64}$d. agai $11\frac{49}{64}$d. the average sight rate of the *Camara Syndical.*

Coffee.—The total entries by the different S. Paulo Railways the crop to November 1st were as follows:—

	Past Jundiahy.	Per Sorocabana and others.	Total at S. Paulo.	Total at Santos.	Remain at S. Pau
1901/1902	4,407,451	910,796	5,318,247	5,266,949	51,29
1900/1901	3,285,761	727,500	4,013,261	4,047,808	*nil.*

Entries at Rio and Santos during the week ending November were 473,405 bags against 522,102 for the previous week a 242,393 for the corresponding period last year. Aggregate entr for the crop to date total 7,990,767 bags as compared with 5,329,6 for last crop.

Shipments (embarques) were 474.207 bags as compared w 520,735 the preceding week and 204,241 same date last year, whi sales figure at 176,000, 231,000 and 222,000 for the correspondi dates.

Stocks continue to increase being now 2,000,627 bags agai 1,973,420 last week and 1,558,281 last year.

OCTOBER COFFEE MOVEMENT IN THE U. S.

The present spuculative activity in coffee, accompanied by repo of heavy damage to the next crop, lends unusual interest to t statistical position of the article. The main features of t statement are the remarkable increase in deliveries; a lar increase in visible supply; heavy receipts at Rio and Santos; high prices; extensive trading in options.

In studying the figures presented, it will be well to keep in mi that new plantations are coming into bearing in Mexico, Cent America, and other countries, as well as in the San Paulo distr of Brazil; and these may offset a shortage in the Brazilian crop- natural result of two or three years of excessive bearing. The p sent visible supply is over 72 per cent. of the average annu deliveries for the past two years.

The following statement shows the September movement a general position of the article:

		Bags.	Bags.
Stocks, October 1, 1901—			
United States ...	...	1,611,585	
Europe ...	...	3,985,611—	5,597,196
Receipts during October—			
United States ...	...	982,469	
Europe ...	...	1,038,047—	2,020,516
Total supply, November 1	...	...	7,617,712
Less Stocks, November 1, 1901—			
United States ...	...	1,883,652	
Europe ...	...	4,023,013—	5,856,665
Deliveries, October—			
United States ...	...	760,402	
Europe ...	...	1,000,645—	1,761,047
Deliveries, October, 1900—			
United States ..	...	501,051	
Europe ...	...	839,008—	1,340,059
Increase as compared with October, 1900		...	420,988
Deliveries, September ..	...	...	1,398,401
Deliveries, August ...	...	...	1,21,4681
Deliveries, July ...	...	...	1,136,572
Total deliveries, four months		...	5,512,501
Total deliveries, four months, 1900		...	4,457,923
Increase 1901 over 1900		...	1,054,578

The above shows a gain of 23·6 per cent. in four months' deliver —an increase far beyond any legitimate advance in consumptio It is probably due to withdrawals of stock from licensed warehou

to further a "bull" speculation and to heavier invisible stocks, as 5½@6-cent coffee was a very attractive proposition.

The visible supply of the world on November 1 compares with previous periods, as follows:

	Bags.
November 1, 1901	10,576,665
October 1, 1901	9,821,196
Increase one month	755,469
August 1, 1901	5,817,759
Lowest in five years, June, 1896	2,444,949

During the trade year 1895-96, coffee sold on the spot in February, 1896, at 13 cents; in August, 1895, at 16¼ cents. The total Brazil crop that year was 5,746,000 bags, or less than one-half this year's production, while the visible supply on November 1 of this year is nearly five times more. It is evident that it will require a sweeping crop failure to warrant a rise in coffee to the level of 1895-96.

Receipts at Rio and Santos, July to October were 7,890,000 bags, against 5,274,000 bags for same time in 1900-01. During the four preceding seasons, an average of 51 per cent. of the crop came to Rio and Santos during the first four months. If this proposition holds good this year, it means total receipts exceeding 15.000,000 bags. If 60 per cent. of the crop has reached those ports, it means total receipts of 13,150,000 bags.

The sales on the Exchange during October reached 1,546,750 bags. The lowest price was 4·90 cents for October options; the highest, 7·55 cents for September. No. 7 Rio spot ranged from 5⅝ cents up to 7 cents. against 8⅛@8½ cents for same month last year.

In the United States, the deliveries in October consisted of 635,966 bags Brazil, or 83·6 per cent. of the total; all other sorts, 124,436 bags. This shows the preponderating influence of Brazil coffee on the market, fully two-thirds of which is Santos.

If the 1901-02 Brazil crop does not exceed 7,000,000 bags, there will be over 20,0000,000 bags to meet requirements of less than 16,000,000 bags. Speculation, however, oft-times ignores facts, and carries itself along on sentiment; and it may do so with the present movement.—*American Grocer.*

TEA DUTY REPEAL ASSOCIATION.

IN THE UNITED STATES.

A united effort is being made by leading grocery jobbers to secure the removal of the duty on tea. Mr. G. Waldo Smith is President of the organization; E. H. Sayre, of R.C. Williams & Co., E. D. Depew, of E. Depew & Co., and D. Schmidt, of J. H. Mohlman & Co., are Vice-Presidents; George F. Kerr, Secretary.

The follong cricular letter has been issued:

We, the undersigned, wholesale grocers, jobbers, and importers of tea, believing that the present war tax law, levying a tax of 10 cents a pound (about 75 to 80 per cent.) on tea is unjust and oppressive, hereby express our hearty approval of and co-operation with the movement inaugurated by the Tea Duty Repeal Association to bring about the repeal of this tax law through which the enormous sum of over $8,000,000 is collected annually from the tea trade. The purpose of the tax having been fulfilled (that of raising funds with which to aid in carrying on the Spanish-American war), we believe that the merchant and the consumer ought not longer to have to bear this unnecessary burden.

[This is signed by 46 jobbers.]

It is claimed by the officers of the Association that the duty has injured the tea trade in every conceivable way. It has reduced profits has cut down the sale of fine tea so that the business is tending almost exclusively toward the lower grades, and has increased the risk of bad debts by the amount of the duty without any compensating advantage. The Association invites the hearty co-operation of all interested to aid in removing the duty, which, they claim, at present is entirely unnecessary owing to the large surplus in the United States Treasury.

"The duty law," say the officers, "was passed by Congress as a war measure exclusively, and had no connection with the general tariff law. Its prompt removal, therefore, is a logical consequence of peace with Spain, and should not burden us a moment longer. We believe that our business will be interrupted every winter by discussion of repeal until the duty is removed, and therefore advocate putting an end to the trouble at once."

BRAZILIAN COFFEE.

CROPS AND PROSPECTS.

The "bulls" in coffee got the "bears" on the run on Thursday last, says the *American Grocer* of the 13th ultimo. Closing prices were 50 points higher than at the opening. Spot quotations advanced nearly as much. The trading in options that day reached 159,000 bags. This rise was engineered on further reliable reports of damage to the next crop. Cable advices from E. Johnston & Co. were as follows: "From information carefully gathered in all districts, Rio flowering is practically a failure. In some districts, owing to want of funds, low prices, labourers, and farmers abandoning lands. From appearances at present. new Rio crop estimated at about 2,500,000 bags maximum. Owing to trees in very bad condition. further flowering unlikely. In Santos, trees are exhausted from old crop and damage to new crop serious owing to drouth. It has rained a little recently, but not sufficient to be beneficial. Drouth continues. Unless there is conntinued rain very soon, the new Santos crop is estimated at about 4,500,000 bags.

With the next Brazil crop only 7,000,000 bags, there will be a total world's supply for that year of fully 20,000,000 bags to meet requirements of less than 16,000,000 bags. The great visible supply will offset a big shortage in crops and prevent an extreme rise in prices.

In commenting on E. Johnston & Co.'s estimate, one critic says: "It must not be forgotten that this same firm estimated the previous crop (1900-1901) at 8,500,000 to 9,000,000 bags, when it turned out 11,000,000 bags, and estimated the current Santos crop at 7,500,000 bags as late as August, while there is hardly any doubt that the current Santos crop is 9,500,000 bags or probably 10,000,000 bags. With 2,000,000 bags or more in Rio and Santos and consuming markets heavily supplied, all crop news must be taken with a grain of allowance, the more so, seeing that some of the most conservative houses have been estimating too low—even as much as 2,000,000 to 3,000,000 bags less than the outturn in the past six years."

RUBBER AND THE STATE IN BRAZIL.

The *Bulletin de la Société d'Etudes Coloniales* (Brussels) recently published the results of an official inquiry made under the direction of the Belgian ministry of foreign affairs as to the official measures taken in Brazil to foster its greater rubber industry. It was found that the general government of the republic has passed no laws relating to the industry. It is not regulated at all except so far as the legislature of the several states have adopted measures. Seventeen of the twenty states produce rubber, the climate being unfavourable to rubber culture only in the three southern states of Rio Grande do Sul, Santa Catharina, and Paraná. Most of the small Atlanic coast states in the rubber zone, though producing more or less caoutchouc, have made no attempt. as yet, to conserve their rubber resources or to encourage or regulate its production. These states include Rio de Janeiro, Minas Geraes, Espirito Santo, Parahyba Rio Grande do Norte, Sergipe. and Ceará. Most of the rubber states make the product contribute to the finances by imposing a tax on rubber exports, but the states above mentioned have not given even this attention to the industry except Minas Geraes, which collects an export duty of 4 per cent. *ad valorem*. In these seven states the first comer may harvest the crop wherever he may find it on the public domain.

On the other hand, the state of Pará from which by far the largest shipments are made, encourages the planting of caoutchouc by offering a premium of 1,000,000 reis, or over $500 for every 2,000 trees that are properly planted. This law, which has been in force only four years, is already stimulating the development of rubber plantations and its wisdom is being conclusively demonstrated. This large state, which embraces all the lower part of the Amazon and some of its mightiest tributaries, will not have to rely, in the coming years, upon supplies that grow wild in the forests; in fact, no source of rubber so freely tapped as that in Pará can be relied upon indefinitely to yield an unfailing supply. The days of exhaustion will come just as they have overtaken the rubber vines of West Africa, which have all been killed for many miles inland.

from the coast. The only way to supply the future demand will be to increase the quantity, and that can be done only by rubber planting, which, in a few decades, will revolutionize the business. The world now depends almost solely upon the wild sources of supply, but there will be a great deal of plantation rubber in the market before the century now beginning is very far advanced.

The State of São Paulo also offers a handsome premium for the development of rubber plantations, and both these states impose a comparatively heavy tax upon the exports of rubber with the wise intention of devoting a considerable part of the receipts to the conservation and encouragement of the industry. Matto Grosso, under the law of 1898, offers special facilities for the acquirement of a fixed quantity of rubber lands by those who discover them in the vast part of the public domain that is still unexplored. Amazonas and Bahia are not yet offering special inducements for rubber planting, but the land laws, adopted by these states in 1897, facilitate private ownership in rubber forests and this is a long step toward establishing the industry on a stable basis.

All these improvements in the status of the rubber industry of Brazil have been made within the past four years. They encourage the belief that this great source of wealth will come, more and more, to be managed scientifically in the interest of Brazil and of the world and to the great advantage of the investors of capital.

THE WYNAAD TEA COMPANY, LIMITED.

The following is from the Report of the Directors to be presented at the Seventh Annual Meeting of Shareholders, that was to be held at No. 7, Mincing Lane, at the Office of the Company, on Monday, the 2nd instant.

The Directors regret to have to report the loss of their esteemed colleague. Mr. Donald Andrew, who died in February, 1901. They thoroughly appreciated his valuable services during the short time he was in office. The vacancy created on the Board by his death has not yet been filled. The past season has only partially fulfilled the expectations of a year ago. The crops have very nearly reached the earlier estimates of both tea and coffee, but prices have proved extremely disappointing, and account for a deficiency in the year's results of about £1,900. The coffee crop, estimated roughly at 40 tons, has yielded about 36 tons, which sold for only £40 per ton against an average of £70 per ton in the four previous seasons. The tea crop, estimated at about 150,000 lbs., has reached 146,750 lbs., and was sold for an average of 5½d per lb. against 7½d per lb. the year before. The pepper crop, estimated at 18 tons, has actually turned out 20 tons, and has realised £187 over the estimate. The net proceeds of the three crops amount to £5,134 12s 5d, against an expenditure in India of £3,716 10s 2d. The Directors have again transferred a large proportion of the revenue from tea to capital account, representing the 410 acres not yet in full bearing. The result is consequently a loss of £1,290 14s 0d, carried to the debit of profit and loss, whilst £1,640 0s 9d have been debited to capital account. The tea and coffee trades have passed through a s crises during the past eighteen months, but both are now healthier condition, and are gradually returning to a more n state. The over-supply of tea from Ceylon and Assam is fi fresh outlets, whilst crops are reported to be somewhat sm more attention is being paid to the production of a better ar and prices have recovered fully 1d per lb. from the recent lo level. Prices of coffee have recovered considerably during the three months, and although the present Rio and Santos crops the largest on record, the reports about the Brazil crops of 1 1903 are extremely unfavourable, and point to a much higher l of prices for next year. The estimates for the current season based upon a tea crop of 190,000 lbs, a coffee crop of 20 tons, a pepper crop of 20 tons, and with the strictest economy in wor the estates, without sacrificing efficient cultivation, the Direc hope for better results. In making provision for the current ye up-keep, the Directors have found it necessary to issue the bal of the debentures—*viz.*, £2,000. and they have shown their c dence in the undertaking by subscibing for them in conjunc with Messrs. R. & J. Henderson.

PRODUCE AND PLANTING.

The tariff which has been thrust upon the trading commu of Australia may be good for a few colonial industries, but occasioning many pessimistic forebodings. As regards the dut produce its effect will be felt in other parts of the Empire, Indian and Ceylon tea-planters have already made representat with a view of getting the operation of the new duties postpo until they have had time to submit their views. Some cor pondence between the Indian Tea Association (London) and Colonial Office will be found in another column. In the meant the decision of the Australian Government, announced a fo tn since, to abolish some of the composite duties of the Federa ta by which tea becomes dutiable at 3d. and 4d. a pound inst 2d. and a 20 per cent. *ad valorem* duty, has gratified those handle the product in the Australian colony, and it may ser soothe the feelings of producers in India and Ceylon. Acco. to the regulations made under the provisions of the Fed Customs Act, tea which does not comply with the follow standard of strength and purity is to be deemed unfit for hu use: "The analysis to be made on the tea dried at a tempera of 212°F., and then powdered and totally exhausted with boi distilled water. Total aqueous tea extract, not less than 30 per c Total ash, not more than 8 per cent. Soluble ash, not less t 3 per cent."

As tea-growers are aware, the present American tax on te 10 cents a pound, and this was imposed as a Spanish-Ameri War measure. An organised attempt is now being made to ef its repeal as no longer necessary. A large number of the l wholesale grocers in the United States, who are of course dea

Agents for LEA & PERRINS' WORCESTERSHIRE SAUCE.

CROSSE & BLACKWELL'S, LTD.

By Special Warrant Purveyors to His Majesty The King.

CELEBRATED OILMAN'S STORES.

[w. 1-10-98—t.f.o.]

in, and some of them importers of tea, have organised for the purpose of fighting for the removal of the tax. The organisation has styled itself the Tea Duty Repeal Association, and the following letter has been prepared, bearing important signatures, and sent out to the trade in general: "We, the undersigned, wholesale grocers, jobbers, and importers of tea, believing that the present war tax law, levying a tax of ten cents a pound (about 75 to 80 per cent.) on tea is unjust and oppressive, hereby express our hearty approval of and co-operation with the movement inaugurated by the Tea Duty Repeal Association to bring about the repeal of this tax law through which the enormous sum of over $8,000,000 is collected annually from the tea trade. The purpose of the tax having been fulfilled (that of raising funds with which to aid in carrying on the Spanish-American War) we believe that the merchant and the consumer ought not longer to have to bear this unnecessary burden." The letter then continues as follows: "We beg to inform you that we have organised the Tea Duty Repeal Association, comprising wholesale grocers and importers of tea, to take such action as may be necessary toward the removal of the present duty on tea. The duty has injured our tea departments in every conceivable way. It has reduced profits and cut down the sale of fine tea, so that the business is tending almost exclusively toward the lower grades, and has increased the risk of bad debts by the amount of the duty without any compensating advantage. We think the result will be the falling off in consumption in favour of coffee, to the general injury of the trade. As your interest in the article is identical with ours we invite your hearty co-operation and aid in removing the duty, which at present is entirely unnecessary, owing to the large surplus in the United States Treasury. The duty law was passed by Congress as a war measure exclusively, and had no connection with the general tariff law. Its prompt removal, therefore, is a logical consequence of peace with Spain, and should not burden us a moment longer. We believe that our business will be interrupted every Winter by discussion of repeal until the duty is removed, and therefore advocate putting an end to the trouble at once."

Major Sykes, who was, as is well known, engaged from 1897 to the beginning of this year on a mission arranged for the purpose of obtaining information with a view to the development of commerce between British India and the wild regions of Eastern Persia, read a paper before the Royal Geographical Society on Monday night. After describing the country and the efforts made to open up trade, Major Sykes pointed out that it remained for the tea-planters to take advantage of a route by which the sea is avoided, and as the indigo used in Persia is grown in Sind, both of these staple export should profit by the new route, while in a lesser degree there will be a demand for many sorts of British goods.

The Mexicans grow coffee, but they do not drink much of it, and as for tea, the rural Mexican scarcely knows what it is. They have their own fermented drinks, and very deadly they are. There are three beverages which in Mexico supersede wine in the taste of the common people, and convert thousands of fine men and women into wrecks. These are pulque, mescal, and aguardiente. Pulque is the favourite drink of the respectable class who are not satisfied with ordinary wine. It is regarded as an exquisite luxury. The Mexican writers generally glorify this concoction It is peculiar to the country, being the product of a magnificent plant of the aloe tribe, the Agave Mexicana, which is amazing in its sugary richness. A far more deadly drink is the famous mescal, another fermented extract of the amaryllidæ or aloe tribe of plants. For the rural Mexican this mescal is the most precious of all qotations. It is distilled from a very different species of the aloe—very different the ordinary pulque-producing agave. The mescal plant is a kind of century flowering giant cactus; that is to say, it shoots out a magnificent spike of bloom only after an interval of many years. —*H. & C. Mail.*

PERFECT DIGESTION

is the high road to health and can best be obtained by a regular use of the world-renowned extract of roots and barks known as

SEIGEL'S SYRUP

Mr. George Bath, Trefusis Villa, Windmill Road, New Brompton, Kent, writing on March 9th, 1901, says: "For twenty years I suffered all the horrors of chronic indigestion—fierce racking pains in the head, an awful sense of sinking in the stomach, fulness at the chest, sleeplessness, and extreme nervous depression. But now, thanks to Seigel's Syrup, I am in good health again, indeed I seem to be getting younger every day. Seigel's Syrup has added years of happiness to my life."

MARKET REPORT.

[*Per Mail advices of 29th November* 1901.]

COFFEE.

The London Commercial Record says:—With hardly any fresh arrivals the supplies at auction have been on a still smaller scale than during recent weeks, and the transactions in Costa Rica and Central American descriptions are too small to call for especial remark. There was a good demand for unwashed Santos which sold at full prices. Business in the market for "futures" has been on a reduced scale, and after falling 1s 6d on large receipts prices recovered and close rather dearer for the week. Yesterday's business was done in Santos December delivery at 36s 1½d to 36s, May at 37s 9d to 37s 7½d, and September at 39s to 38s 9d per cwt.

To-day the sales went off with fair demand at full rates. Supplies comprised 1,377 bags East India, 87 half-bales Mocha, 816 bags Costa Rica, 82 bags Mexican, and 59 bags Guatemala.

London ...	Santos ...	March delivery ...	37s 0d.
New York ...	No. 7 Rio...	,, ...	6·85 cents.
Hamburg...	Santos ...	,, ...	30¾ pf.
Havre ...	Santos ...	,, ...	45¾ francs.

Imports, Deliveries and Stock of Coffee in London are as follows:—

	Stock.		Imports.	
	1901.	1900.	1901.	1900.
Tons ...	11,949	15,580	42,659	33,536
	Home Consumption.		Export.	
	1901.	1900.	1901.	1900.
Tons ...	17,924	15,019	27,325	17,569

The preceding figures exhibit—

	Tons.
In the Imports an increase this year of	9,123
Home Consumption an increase of	2,905
Export an increase of	9,756
Stock a decrease of	3,631

Public sales on Tuesday went off as follows:—

COSTA RICA.—Of 156 bags offered 70 bags sold, low middling 53s, fair bold grayish 72s.

COLOMBIAN.—332 bags catalogued, and 230 bags sold, smalls 44s 6d to 46s, low middling to middling 51s 6d to 54s, good middling mottled pale 61s 6d to 65s, bold 70s 6d to 73s, peaberry 57s 6d to 60s 6d.

GUATEMALA.—132 bags withdrawn.

SALVADOR.—50 bags bought in.

BRAZIL.—Of 2,251 bags unwashed Dumont Santos, quay terms, 1,200 bags sold, smalls 36s to 37s, medium 38s to 39s, bold to extra bold 42s to 44s, peaberry 38s 6d to 41s 6d. 250 bags Santos bought in.

Receipts in Rio and Santos.

Since July 1	1901-2. Bags.	1900-1. Bags	1899-00. Bags.	1898-99. Bags.
Rio ...	3,177,000	1,456,000	1,919,000	1,573,000
Santos ...	6,209,000	4,784,000	4,148,000	3,322,000
Total ...	9,386,000	6,240,000	6,067,000	4,895,000
Crop ...	—	10,900,000	8,971,000	8,772,000

Rio Exchange 12d, previous day 11 3/32d.

HAVRE, *November* 28.—Good average Santos November opened quiet at 44½f. and closed quiet at 44½f., December opened at 44¾f. and closed at 44¾f., March opened at 45¾f. and closed at 45¾f., May opened at 46⅛f. and closed at 46½f., September opened at 47½f. and closed at 47½f.

HAMBURG, *November* 28.—Good average Santos November opened quiet at 35½pf. and closed steady at 35½pf., December opened at 35½pf. and closed at 35⅝pf., March opened at 36¾pf. and closed at 36¾pf., May opened at 37½pf. and closed at 37½pf., September opened at 38¾pf. and closed at 38½pf.

NEW YORK, *November* 27.—Closing prices of No. 7 Rio were as follow:—

	Nov.	Dec.	Jan.	Feb.	Mar.
November 27...	6·55	6·55	6·65	6·75	6·85
November 26...	6·45	6·45	6·55	6·65	6·75

TEA.

INDIAN.—Offerings were heavier, the total for the week been 48,800 packages, contrasted with 40,500 the previou and 46,900 in 1900.

There is no appreciable change to note in values, wh generally be quoted firm, with an occasional irregularit close in buyers' favour. Common to useful and fine to fi tinued to meet with the best enquiry, ordinary medium des barely maintaining their recent level, and there is no impr to report in the position of this class of Pekoe, which has an abnormally low basis for some time. Creamy Broke with tip sell freely.

Mail advices from Calcutta point to a total export to th Kingdom of about 152 million lbs., or a little more t generally estimated earlier in the season. October show covery in yield, and diminshed shipments to outside ports by the higher scale for common tea, has also tended to probable figures. The return to a more normal market w ever, doubtless have the effect of again diverting greate from London.

The usual, though none the less unfortunate, consequen spasmodic rise in common tea, which took place about the last month, has, we learn, been apparent in some sample manufacture seen in Calcutta, and this adds force to our in this connection in our earlier issues, when we urged gr to be induced by the improving situation to alter the s finer plucking, which was having such a beneficial effect.

For 38,300 packages on Estate Account 7⅝d per lb. was against 7⅛d per lb. for 36,600 packages and 8¼d per lb. f packages in the two preceding seasons.

The amount catalogued in November reached:—

1901.	1900.	1899.
184,100 pkgs.	182,300 pkgs.	205,700 pk

making 655,000 packages of the present crop brought to sal instant, opposed to 733,000 packages in the same months o

CEYLON.—A somewhat reduced quantity was placed b trade, *viz.*, 16,600 packages *versus* 19,600 packages on the before, and 19,200 packages a year since.

The principal demand was again for the lower grade were mostly a shade dearer, sweet Pekoe Souchongs bringi lb. Medium leafy sorts did not alter much in value, and a portion of suitable lots was taken for foreign quarters. Pekoes with coloury liquor were in request, but otherw went rather easier, while fine and finest attracted less a prices ruling unevenly and on the whole lower, partly owi falling off in quality of late arrivals.

The average is slightly over 7¾d per lb. On the 21st was 7⅝d per lb., and 7½d per lb. in 1900.

Totals for the month were:—

1901.	1900.	18
65,900 pkgs.	78,000 pkgs.	96,10
(Avge. 7¾d per lb.)	(Avge. 7⅜d per lb.)	(Avge. 8

JAVA.—About 1,200 packages of direct import passed th and met with good support, last quotations being fully m The undermentioned were printed in November:—

1901.	1900.	189
4,400 pkgs.	4,700 pkgs.	4,800 p
(Avge. 6¾d per lb.)	(Avge. 6½d per lb.)	(Avge. 7

Deliveries.—Clearances of all tea (on which duty has from the London warehouses, as per official returns are, v

From 1st to 26th November, 1901	16,498,
Do. do. 1900	16,471,

During the week the following have been printed f public auction:—

	Sold. Pkgs.	Withdrawn. Pkgs.	To
India	36,970	11,869	
Ceylon	14,419	2,149	
Java	1,150	66	
Total ...	52,539	14,084	

Also 74 packages from second hands.

Messrs. Gow, Wilson & Stanton's Indian, Ceylon and Java Tea Report, dated November 29th, 1901, says :—

QUANTITY BROUGHT TO AUCTION IN LONDON FROM 1ST JUNE TO DATE.

	Indian. Pkgs.	Ceylon. Pkgs.	Java. Pkgs.
1901-1902	... 738,931	591,001	34,298
1900-1901	... 758,974	641,809	27,167

49,006 *pkgs.* INDIAN
6,899 „ CEYLON
1,216 „ JAVA
} Total 67,121 packages were offered in public auction this week.

There has been considerable progress in the quantity of Indian nd Ceylon tea taken in North America during the last nine onths, as compared with the same period of 1900, the increase mounting to nearly 40%. Re-exports from this country have also aterially increased.

It is noteworthy that 1,276,868 lbs. of *all* tea were sent from merica to this country between 1st January and 27th November, ut there is reason to believe that much of this was China tea, hile a portion of the tea sent from Ceylon to China may possibly ave been for the Russian market, although the majority has oubtless gone to America.

	1901.	1900.	1899.	1898.
ndian ...	4,389,878	3,108,973	3,948,766	3,483,670
eylon ...	9,721,503	6,826,535	5,684,276	6,252,801
Total lbs. ...	14,111,381	9,935,508	9,633,042	9,736,471

	1897.	1896.	1895.
ndian ...	3,909,248	2,524,529	2,412,755
eylon ...	4,555,501	3,038,465	3,008,180
Total lbs. ...	8,464,749	5,562,994	5,420,935

INDIAN AND CEYLON TEA TAKEN IN UNITED STATES AND CANADA FROM 1ST JANUARY TO 30TH SEPTEMEBR.

INDIAN TEA.

	1901.	1900.	1899.	1898.
e-exports from U. K.	2,195,489	1,275,734	1,546,936	1,462,286
ranshipments *viâ* U. K.	557,173	566,241	210,556	855,307
irect exports *viâ* China	573,410	418,793	472,093	385,811
irect exports from Calcutta	1,063,806	848,205	1,719,181	780,266
Total lbs. ...	4,389,878	3,108,973	3,948,766	3,483,670

	1897.	1896.	1895.
e-exports from U. K.	1,324,539	897,534	1,272,111
ranshipments *viâ* U. K.	2,304,420	1,526,995	1,110,644
irect exports *viâ* China	280,289	100,000	30,000
irect exports from Calcutta	*nil.*	*nil.*	*nil.*
Total lbs. ...	3,909,248	2,524,529	2,412,755

CEYLON TEA.

	1901.	1900.	1899.	1898.
e-exports from U. K.	3,721,508	2,408,820	2,434,180	2,653,755
ranshipments *viâ* U. K.	1,903,462	427,439	469,169	1,141,238
rect exports *viâ* China	*2,228,626	931,371	935,946	852,173
rect exports from Colombo	1,867,907	3,058,905	1,844,981	1,605,635
Total lbs. ...	9,721,503	6,826,535	5,684,276	6,252,801

	1897.	1896.	1895.
e-exports from U.K.	2,581,965	1,963,264	2,015,990
anshipments *viâ* U.K.	1,504,068	856,549	720,589
ect exports *viâ* China	469,468	218,652	235,601
rect exports from Colombo	*nil.*	*nil.*	*nil.*
Total lbs. ...	4,555,501	3,038,465	3,008,180

INDIAN.—The week's auctions were somewhat heavy, comprising over 49,006 packages. The market was steady on Monday, but at the later sales in the week was less pronounced, and competition hardly as keen. ... generally showed practically no change on those ruling last week. Teas for price continued steady, although there was some little irregularity noticeable in medium grades, especially Broken Pekoes.

Week's av. of New Season's tea sold on Garden Account 1901, 38,381 pkgs., av. 7·58d. 1900, 36,883 pkgs., av. 7·03d.

New Season's tea sold on Garden Account 1st June to date 1901, 544,484 pkgs., av. 8·13d. 1900, 511,798 pkgs., av. 7·77d.

CEYLON.—With a moderate auction demand was good, and prices remained very firm, the tendency being, if anything, towards a rather dearer market. Teas for price were particularly steady, medium teas being less irregular than has lately been the case. 29,710 packages are printed for sale next week. Average for week 7·76d., against 7·59d. same week, 1900.

Ceylon tea sold on Garden Account 1st January to date, 1,037,303 pkgs., av. 6·82d. 1900, 1,123,494 pkgs., av. 7·21d.

JAVA.—The 1,200 packages brought forward were all of direct import. The teas, on the whole, sold with fair competition at generally steady prices. An invoice from "Goalpara" of 108 packages realized an average of $9\frac{3}{4}$d. per lb.

Bank Rate 4 per cent. Exchange on London three months' sight:—Calcutta $1/4\frac{7}{32}$. Colombo $1/4\frac{1}{4}$.

COCOA.

No auctions were held on Tuesday last. Privately business has been restricted, but no material alteration in values can be noted, except in the case of Guayaquil, which is easier; transactions include 100 bags Trinidad at 69s to 73s, 150 bags Ceylon at 59s up to 75s, according to quality, and about 500 bags Guayaquil—Machala at 64s per cwt.

PEPPER.

BLACK.—The market has been firm this week in all positions. On the spot sales of fair Singapore have been made at 6d to $6\frac{1}{16}$d, and January-March shipment at $6\frac{5}{16}$d, closing buyers at the price. In all about 100 tons sold.

At public auction on Wednesday 240 bags good heavy brown Alleppy, slightly mixed with stones, retired at $6\frac{1}{8}$d per lb.

WHITE has met an active demand and is dearer. About 250 to 300 tons have changed hands—up to $9\frac{7}{8}$d paid for Singapore January-March shipment, and $9\frac{7}{16}$d for Penang same shipment. On the spot the former description sold at $9\frac{1}{2}$d to $9\frac{5}{8}$d for fair to good fair, and Penang at 9d per lb.

GINGER.

COCHIN.—The market continues rather quiet, and for ordinary sorts holders have accepted a slight reduction on the best price obtainable, although good plump washed and cut kinds maintain the recent advance. At auction 8 cases 445 bags were offered, of which 162 bags sold:—plump small and medium dullish washed, wormy, 45s to 46s; bold cut limed retired at £6 per cwt. Privately a few sales have been made in medium and small washed rough at 52s per cwt.

JAPAN.—35 bags limed bought in at 45s per cwt., but subsequently partly sold at 44s; the quality was rather below standard.

JAMAICA.—84 barrels offered, and 10 baerels sold at 46s per cwt. for low middling brownish washed.

NICARAGUA.—8 bags hard dull rough realised 40s per cwt.

Quieter. At the spice auctions *Cochin*, 8 cases bold selected cut were bought in at 100s., and of 445 bags, 162 sold, washed, rough, slightly wormy, at 45s to 45s 6d. *Japan*, 35 bags limed offered, and 20 sold after the sales at 44s. *Nicaragua*, 8 bags fair offered and sold at 40s, and of 84 barrels *Jamaica* 10 sold; ordinary dullish at 46s, being cheaper.

AFRICA.—Forty-five shillings per cwt. is now asked for the small remaining stocks on the spot, although 40s per cwt. would be taken for some to arrive.

QUININE.

Very firm, and prices are rising, but business done is moderate. B. and S. and/or Brunswick spot quoted 1s $1\frac{1}{2}$d; December delivery, 1s $1\frac{1}{2}$d; March, 1s $1\frac{7}{8}$d; and May, 1s $2\frac{1}{8}$d.

Last week the market closed quiet with small sales of December delivery at 1s $1\frac{1}{4}$d, and March at 1s $1\frac{3}{4}$d per oz., but this week a slightly firmer feeling has been apparent with few sellers, the general desire being to wait the announcement of the bark shipments from Java for the month. If these should prove moderate,

Possibly some port... have gone to Russia, in which ...d large.

as is expected, it is quite possible values will improve. May delivery has sold in small quantites at 1s 2d. Market closes firm.

INDIA-RUBBER.

Small forced purchases by speculators covering their cheap sales caused prices to advance 1d per lb., and though the receipts at Pará continue very large—2,850 tons this month, against 2,200 tons last year—prices there are also higher.

There have been considerable sales of hard fine, spot and forward up to 3s 7¼d, soft ditto, spot 3s 5½d, forward 3s 5¼d, closing sellers ¼d below. Old import hard fine at 3s 7½d to 3s entrefine at 2d per lb. less.

Negroheads scarce and in demand. Scrappy middl 6½d to 2s 8d, Cameta 2s 1½d to 2s 2d, Island buyers 1s

There have been large sales of Peruvian, fine at 3s 7 2s 6d to 2s 7¾d; ball, fair to good 2s 5d to 2s 6d. mixe 2s 3d to 2s 4½d; slab in great demand and fair trade at 2

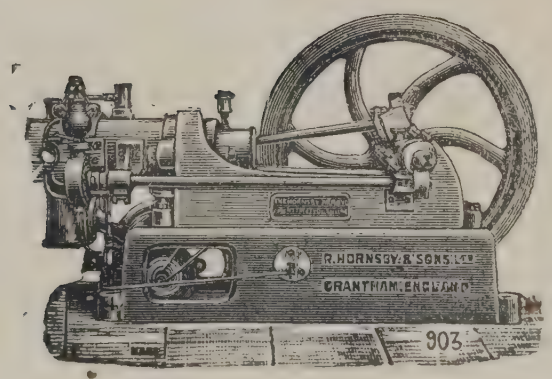
Sales of Mollendo, fine up to 3s 5d, entrefine 3s 3 5½d to 2s 6½d per lb.

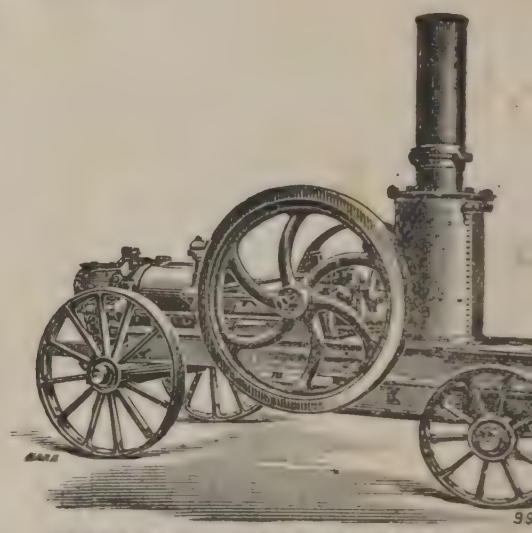
(AVERAGE FOR ALL INDIA 7·58d., NOVEMBER 29th.)

GARDEN.	Total.	Average.	Broken Org. Pek. or Flowery Pekoe.		Pekoe and Unassorted.		Broken Pekoe.		Pekoe Souchong.		Broken and Souchong.		Fa a
	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Quantity	Price.	Qua
Neilgherry ...	214	6·76											
New Hope ...	169 p	6½	50	7½ 8½	56	6	...	...	47	5½	5 p	5 6	
Terramiah ...	45½c	8¼	29½c	8¾	16½c	7¼	...	...	...	...	...	..	
Travancore ...	1018	7·25											
Glenmary ...	127 c	6¾	52	6½	...	...	30	7½	25	5¾	...	...	2
Invercauld ...	96 p	6½	26 p	6¾ 7½	32	6 6¼	16½c	7 7½	18	5¾	1½c	5¾	
Kan Dev H Co G ...	223 p	7	41½c	7¼	78½c	6½	55½c	8	24	5¾	...	...	2
„ Munaar ...	164 p	8½	41 p	8¾ 11	50	7½	47½c	11	26	6¾	...	...	
„ Peraivurrai ...	127	7¼	30	7¼	31	6¾	22	8¾	30	6½	...	...	1
„ Sevenmallay ...	91	7¾	...	...	29	7½	22	9¼	40	7	...	...	
„ „ ...	74	7¼	22	8	...	..	...	...	30	6½	..	...	2
T T E Co Kolie K...	66 p	7½	...	...	20	6½	35	8	...	...	...	...	1
„ Pambar ...	50	6¾	25	6¼	...	...	16	8¼	4	5½	...	...	
Wynaad ...													
Kanambyle & Cher	64 p	8¼	13	1 1¾	23	6¼	26	7¼	2	5¾	..	...	

HORNSBY-AKROYD OIL ENGINES.

SOLE AGENTS IN SOUTHERN INDIA
MASSEY & Co.





REVISED PRICE LIST OF HORIZONTAL FIXED ENGINES.

(Single Cylinder.)—Subject to Revision without Notice.

ACTUAL OR BRAKE H. P.		1½	2½	3½	5	6½	8	9½	12½	16	20	25	32
Price without Water Vessel ...	Rs.	1370	1580	1825	2185	2375	2815	3040	3745	4330	5035	6080	7600
Extra for Water Vessel	„	45	50	60	75	85	100	120	180	200	260	370	460
Extra for Standard connections to Water Vessel ...		35	40	45	50	53	55	60	100	100	150	200	240
Extra for Foundation Bolts		7	8	12	15	15	17	17	40	50	60	60	70
Extra for Exhaust Piping about 5 ft. to Silencer and 9 ft. to atmosphere		27	35	43	55	60	65	65	56,970	90	110	130	150
Extra for Pulley of list size		12	13	20	27	32	38	38	4,419		70	100	150
Extra for Self-Starter with Hand Pump ...		...	...	...	...	...	...	...	1,150			600	600
									52,539			14,0[illegible]	

In Stock 3½, 6½, and 8 B. H. P. Engines. ages from second hands.

Full Particulars and List of the Principal Users of these Engi